

STRATEGIES OF VALENCE CHANGE IN KARITIANA

LUCIANA STORTO & IVAN ROCHA

Universidade de São Paulo

1. Introduction

A quick overview of Karitiana syntax is given in section II in order to introduce the reader to the main typological characteristics of the language. Section III presents the paradigms of valence change systematically collected by Rocha for 113 common intransitive verbs and 18 intransitive ones with experiencer subjects and oblique complements. These findings are discussed and some inaccurate claims made in the literature on Karitiana verbal syntax and semantics are corrected based on the discussion. Section IV introduces the paradigms of transitive verbs. Section V discusses the behaviour of ditransitive verbs and compares them with transitive ones. A discussion in section VI concludes that, with respect to operations of valence change, Karitiana verbs can be divided into two major classes.

2. Overview of the language

Karitiana is a head-final language, as most Tupian languages clearly are, displaying postpositions, possessor-possessed word order, OV nominalized clauses and embedded clause-subordinator word order without exception. In matrix clauses, however, that pattern changes because the inflected verb in transitive sentences must be in second position (Storto, 1999) and the default word order of a declarative transitive sentence is SVO. Subjects of intransitive verbs pattern as objects, the default word order of a declarative intransitive sentence being VS. The preverbal position in matrix declaratives has been shown by Storto to be associated with *wh*-movement and focused constituents, whether they are arguments or adjuncts. OVS is the word order when the object is focused in a declarative sentence, and intransitive sentences with a focused subject are SV. Apart from associating the preverbal left-periphery with *wh*-movement and focus, the language also marks focus of objects with special verb morphology. The prefix marking the object focus construction, *a-*, is used in declarative sentences when a non-quantified object is moved to a preverbal position.

Storto (2008, 2010) shows that clefts and copular sentences are also typically SVO, the copula taking nominalized clauses as complements (O). Tenseless clauses, including nominalized complements of copular verbs and embedded clauses in general, have bare verb roots in clause final position. When the object of a non-finite clause is extracted—for instance, in relatives or in clausal complements of clefts—the verb is prefixed by *ti-*, an object focus morpheme different than the one used in declaratives.

Assertative sentences are used as affirmative answers to polar questions (Landin, 1984), but not exclusively, being also used at the beginning or end of narratives, as well as to express strong opinions (Storto, 2002). Everett (2006) describes these sentences as verb focus sentences in which the verb has moved to the left-periphery. However, it is not clear whether this movement is different from the usual movement undergone by the verb in all tensed sentences.

Verbs inflect for agreement and tense in matrix clauses (Storto, 1999). Agreement is prefixal and reflects the features of the absolutive argument—the object of a transitive verb or the subject of an intransitive verb. Third person agreement is null in declarative and assertative sentences but it is *i-* in imperative and matrix non-declaratives. Landin (1984) and C. Everett (2006) differ from Storto in this point and consider that Karitiana is an SVO

language without agreement (with cliticized pronouns). In both analyses, nonetheless, one can say that person morphology on the verb reflects the features of the absolutive argument. This morphosyntactic characteristic of the language is very useful in identifying verb valence. Ditransitive verbs have a theme as their indirect object and a goal as their direct object. Agreement on the verb reflects the features of the goal, as expected by the pattern just described.

3. Intransitive verbs

Intransitive verbs comprise the largest verb class in Karitiana. Table 1 lists the 113 verbs tested by Rocha that select a single argument.

Table 1

| <i>Number</i> | <i>Intransitive root</i> | <i>Translation</i> |
|---------------|--------------------------|------------------------------------------------------------|
| 1 | (a)so'y | 'to have sexual intercourse' |
| 2 | 'a | 'to do, to make' |
| 3 | 'edn | 'to become pregnant' |
| 4 | 'ok | 'to be lazy,' 'to disturb' |
| 5 | 'ywydn | 'to disappear' |
| 6 | ahy | 'to drink' |
| 7 | aka | copula ('to be, to stay'); see <i>ki</i> for plural copula |
| 8 | aky | 'to blow up' |
| 9 | ambo | 'to lie down,' 'to climb,' 'to go to sleep' |
| 10 | amy | 'to dress' |
| 11 | andyj | 'to smile' |
| 12 | angat | 'to lift' |
| 13 | anin | 'to light up' |
| 14 | boryt | 'to go out' |
| 15 | boryt | 'to be born' (used for plants) |
| 16 | botit | 'to abandon' |
| 17 | by'a | 'to do, to make' |
| 18 | dibmin | 'to feel sick,' 'to get worse' |
| 19 | engy | 'to vomit' |
| 20 | geryt | 'to bleed' |
| 21 | haadn | 'to talk' |
| 22 | haap | 'to become day' (to dawn) |
| 23 | hadn okoki | 'to stop talking' |
| 24 | hej | 'to go away,' 'to leave,' 'to abandon' |
| 25 | heredn (dn/n) | 'to show up' |
| 26 | hibmin | 'to grill' |
| 27 | hip | 'to cook' |
| 28 | hop | 'to break' (one object in many pieces) |
| 29 | hop hop | 'to break' (one or more objects in many pieces) |
| 30 | hy'yt | 'to get old' |
| 31 | hydny n sara'it | 'to stink' |
| 32 | hyrygnim | 'to choke' |
| 33 | hỹryj | 'to sing' |
| 34 | hyryp | 'to cry' |
| 35 | hyt | 'to smell good' |

| | | |
|----|------------|-----------------------------------------|
| 36 | hywa | ‘to shine’ |
| 37 | indo | ‘to get ready, to become finished’ |
| 38 | je’yn | ‘to snore’ |
| 39 | jygng | ‘to stay’ |
| 40 | kaj | ‘to dream’ |
| 41 | karan | ‘to transform, to turn into’ |
| 42 | ke’on | ‘to cool, to get cold’ |
| 43 | kerep | ‘to raise, to adopt’ |
| 44 | kerep | ‘to grow up’ |
| 45 | ki | plural copula (‘to be, to stay’) |
| 46 | kĩkin | ‘to cry’ |
| 47 | kirigng | ‘to frighten’ |
| 48 | kyrysir | ‘to yellow’ |
| 49 | kysep | ‘to jump on’ |
| 50 | kyyt | ‘to spill’ |
| 51 | man | ‘to marry’ (a woman speaking) |
| 52 | moĵ | ‘to become night’ |
| 53 | moĵ tyĵ | ‘to become afternoon’ |
| 54 | nam | ‘to rot’ |
| 55 | neng | ‘to lie down’ |
| 56 | non | ‘to become crooked’ |
| 57 | nyryĵ | ‘to wake up’ |
| 58 | õgon | ‘to thicken’ |
| 59 | ohit | ‘to fish’ |
| 60 | oky | ‘to die, to put down’ |
| 61 | ongowot | ‘to get sad’ |
| 62 | opi’owop | ‘to get deaf’ |
| 63 | opipydn | ‘to get hungry’ |
| 64 | osoposiik | ‘to brush’ (hair) |
| 65 | otidn | ‘to hurt’ |
| 66 | otidn | ‘to burn’ (combust) |
| 67 | owi | ‘to die’ (plural) |
| 68 | pa’it | ‘to fight, to argue’ |
| 69 | pakõrong | ‘to toughen,’ ‘to thicken the skin’ |
| 70 | pakybm | ‘to sweat’ |
| 71 | pikowogng | ‘to slide’ |
| 72 | pipogon(a) | ‘to clear’ |
| 73 | pipop | ‘to burn’ (wood, etc.) |
| 74 | pok | ‘to dye’ |
| 75 | pom | ‘to kiss’ |
| 76 | pon | ‘to shoot,’ ‘to hunt’ |
| 77 | poom | ‘to play’ |
| 78 | pop | ‘to put out’ (fire) |
| 79 | pot | ‘to break, to split’ (an object in two) |
| 80 | potpot | ‘to boil’ |
| 81 | py’ej | ‘to study, to read, to write’ |
| 82 | py’ÿwyt | ‘to faint’ |
| 83 | pyhĩriwa | ‘to aim, to target’ |

| | | |
|-----|--------------|--------------------------------------------|
| 84 | pyke | ‘to fetch’ |
| 85 | pyki | ‘to fetch’ |
| 86 | pymyn | ‘to be busy’ |
| 87 | pyndak | ‘to process with a horizontal mortar’ |
| 88 | pyt’y | ‘to eat’ |
| 89 | pyyk | ‘to end, to finish’ |
| 90 | sara’it | ‘to get tired’ |
| 91 | se’adn | ‘to be/become beautiful,’ ‘to be good’ |
| 92 | se’ak | ‘to be thirsty’ |
| 93 | se’y | ‘to drink’ |
| 94 | sembok | ‘to wet’ |
| 95 | seng | ‘to crouch’ |
| 96 | signg | ‘to win’ |
| 97 | siik | ‘to brush’ |
| 98 | sikirip | ‘to go crazy’ |
| 99 | so | ‘to stay’ |
| 100 | som | ‘to ripen’ |
| 101 | sooj | ‘to marry’ (a man speaking) |
| 102 | syk | ‘to get sour’ |
| 103 | syypowop | ‘to blind’ |
| 104 | taktagng | ‘to swim’ |
| 105 | tam | ‘to fly’ |
| 106 | tarak | ‘to walk’ |
| 107 | tat | ‘to go,’ ‘to leave’ |
| 108 | tej | ‘to pull’ (a bow before shooting an arrow) |
| 109 | tepyk | ‘to dive’ |
| 110 | terekteregng | ‘to dance’ |
| 111 | timtim(a) | ‘to cough’ |
| 112 | yryt | ‘to arrive,’ ‘to come,’ to bring’ |
| 113 | yt | ‘to be born’ |

The single argument of an intransitive verb is its subject in its intransitive use (1), and its object whenever it is transitivized through the addition of the causative verb prefix *m-* (3). A comparison between (3) and (4) shows that the default order of a causativized assertative sentence is VOS:¹

(01) pyrotamyn John
 ∅-pyr-otam-<y>n John
 3-ASSERT-arrive-NFUT John
 “John arrived”

(02) *pyraotamyn John
 ∅-pyr-a-otam-<y>n John
 3-ASSERT-PASS-arrive-NFUT John

¹ The assertative mood marker has three allomorphs: *py-* is used before consonant initial stems that do not have initial stress; *pyr-* is used before vowel initial stems, and *pyry-* is used before consonant-initial stems with initial stress. The nonfuture tense suffix used with assertative sentences is -<y>n.

(03) pyrybotamyn Ivan John
 ø-pyry-mb-otam-<y>n Ivan John
 3-ASSERT-CAUS-arrive-NFUT Ivan John
 “John made Ivan arrive”

(04) pyrybotamyn John Ivan
 ø-pyry-mb-otam-<y>n John Ivan
 3-ASSERT-CAUS-arrive-NFUT John Ivan
 “Ivan made John arrive”

Intransitive verbs cannot be passivized (2) unless they are first causativized (5):

(05) pyrambotamyn Ivan
 ø-pyr-a-mb-otam-<y>n Ivan
 3-ASSERT-PASS-CAUS-arrive-NFUT Ivan
 “[someone] made Ivan arrive”

Declarative sentences with intransitive verbs behave in the same way (6), except that their default word order is SVO when causativized (9). A passive prefix added to an intransitive verb root is ungrammatical (8), and their co-occurrence is only possible if the verb has been first causativized (7):²

(06) atykiri naotam John
 atykiri ø-na-otam-ø John
 then 3-DECL-chegar-NFUT John
 “then John arrived”

(07) naambotam òwã
 ø-na-a-mb-otam-ø òwã
 3-DECL-PASS-CAUS-arrive-NFUT child
 “[someone] made the child arrive”

(08) *naaotam òwã
 ø-na-a-otam-ø òwã
 3-DECL-PASS-arrive-NFUT child

(09) John nakambotam Ivan
 John ø-naka-m-otam-ø Ivan
 John 3-DECL-CAUS-arrive-NFUT Ivan
 “John made Ivan arrive”

Copular sentences in Karitiana can have a noun, an adjective, or a verb as the head of the complement of the copula (Storto, 1999). Everett (2006) noted that the verbs allowed in the complement of a copula must be semantically intransitive. Storto (2008) points out that these

² The declarative mood morpheme has two allomorphs and one augment: the allomorph *na-* is used when the person agreement is null (third person), and the allomorph *ta-* is used when the person agreement is not null (first and second persons). The augment *-ka* is used after the mood prefix whenever the stem is stress-initial. The nonfuture tense suffix used in declaratives is *-t* after vowel-final verbs and null after consonant-final verbs (note that *y* stands for a high central vowel in the orthography).

verbs, in fact, must be syntactically intransitive (10), because some of the verbs allowed as complements of a copula are semantically transitive but syntactically intransitive, namely the class of intransitives that have an experiencer subject and an oblique object, as the verb ‘to see’ in (14). This analysis is confirmed when one tries to use a transitive verb as the complement of a copula and the construction becomes ungrammatical (12). In (12), the transitive tested verb is derived by causativization, but we will see in sections IV and V that all underived transitives and ditransitive roots are ungrammatical in the complement of a copular sentence. The only way to use a transitive verb as the complement of a copular verb is by first passivizing it (13):

- (10) John naakat iotam
 John \emptyset -na-aka-t i-otam- \emptyset
 John 3-DECL-COP-NFUT NMZ-arrive-ABS.AGR.
 “John arrived”
- (11) *John naakat iaotam
 John \emptyset -na-aka-t i-a-otam- \emptyset
 John 3-DECL-COP-NFUT NMZ-PASS-arrive-ABS.AGR.
- (12) *John naakat imbotam
 John \emptyset -na-aka-t i-mb-otam- \emptyset
 John 3-DECL-COP-NFUT NMZ-CAUS-arrive-ABS.AGR.
- (13) John naakat iambotam
 John \emptyset -na-aka-t i-a-mb-otam- \emptyset
 John 3-DECL-COP-NFUT NMZ-PASS-CAUS-arrive-ABS.AGR.
 “[someone] made John arrive”
- (14) *õwã* naakat iso’oot pikomty
õwã \emptyset -na-aka-t i-so’oot- \emptyset pikom-ty
 child 3-DECL-COP-NFUT NMZ-see-ABS.AGR. monkey-OBL
 “the child saw the monkey”

Below is a list of the 18 verbs tested by Rocha inside the class of intransitives that have experiencer subjects and oblique objects. Semantically, they seem to be a separate class from regular intransitives because their subject arguments can be described as being psychologically affected: *a’ak* ‘to be sexually attracted,’ *hõroj* ‘to lie,’ *kãrã* ‘to be jealous,’ *koro’op pasap* ‘to miss,’ *opihok* ‘to hear,’ *opiso* ‘to listen’ (literally, ‘to be ear aware’), *paket* ‘to be disgusted,’ *pasadn* ‘to love,’ *pi* ‘to fear,’ *pypyty* ‘to be proficient,’ *pyso* ‘to take’ (literally, ‘to be hand aware’), *pytim okokit* ‘to feel nausea,’ *pyting* ‘to want,’ *so’oot* ‘to see,’ *so’oot hãraj* ‘to like’ (literally, ‘to see well’), *so’oot sara’it* ‘to hate’ (literally, ‘to see badly’), *sondyp* ‘to know,’ and *tirira* ‘to tremble.’

The object of these verbs is often mentioned when they are used, but it is not obligatory. It refers to the entity or event responsible for creating the psychological state—that is, in the case of seeing, the object or scene that has been seen; in the case of being jealous, the entity or event that has made the subject jealous, and so on. The object is marked by the oblique postposition *-ty*, which is the same one used for the indirect argument of a ditransitive verb. The morphological composition of these verbs clearly shows, in some cases, that the denotation of the verb involves an experiencer subject: for instance, *opiso* is formed by the morphemes *opi* ‘ear’ and *so*, and *pyso* is formed by the morphemes *py* ‘hand’ and *so*.

The meaning of the morpheme *so* in these compounds seems to be ‘be aware’ or ‘feel’—that is, to be in a psychological state of awareness through the use of the ear or the hand. Similarly, to be sexually attracted, to lie, to be jealous, to know, to love, etc., are verbs that can be described as involving a certain psychological state of the subject. At least some of these verbs are formed by the use of that same morpheme *so* described above: *so’oot* ‘to see,’ *sondyp* ‘to know.’ Although these verbs are semantically transitive in the way just described, they are syntactically intransitive:

- (15) *pyso’ootyn (pikomty) õwã*
 Ø-py-so’oot-<y>n (pikom-ty) õwã
 3-ASSERT-see-NFUT (monkey-OBL) child
 “the child saw the monkey”
- (16) **pyraso’ootyn õwã (boetety)*
 Ø-pyr-a-so’oot-<y>n õwã (boet-<e>ty)
 3-ASSERT-PASS-see-NFUT child (necklace-OBL)
- (17) *ypymso’ootyn õwã pikomty*
 y-py-m-so’oot-<y>n õwã pikom-ty
 1-ASSERT-CAUS-see-NFUT child monkey-OBL
 “the child made me see the monkey” / “the child showed me the monkey”
- (18) *ypyramso’ootyn boetety*
 y-pyr-a-m-so’oot-<y>n boet-<e>ty
 1-ASSERT-PASS-CAUS-see-NFUT necklace-OBL
 “[somebody] made me see necklace”
- The paradigm above exhibits the same distribution shown for the intransitive verb ‘to arrive’: the psychological verb *so’oot* ‘to see’ in (15) may causativize—(17) and (19),—never passivizes—(16) and (21)—unless it is first causativized—(18) and (20)—and occurs as the head of the nominalized complement of a copula (14).
- (19) *John namso’oot õwã pikomty*
 John Ø-na-m-so’oot-Ø õwã pikom-ty
 John 3-DECL-CAUS-see-NFUT child monkey-OBL
 “John made the child see the monkey”
- (20) *naamso’oot boetety Claudio*
 Ø-na-a-m-so’oot-Ø boet-<e>ty Claudio
 3-DECL-PASS-CAUS-see-NFUT necklace-OBL Claudio
 “[somebody] made Claudio see necklace”
- (21) **naaso’oot boetety*
 Ø-na-a-so’oot-Ø boet-<e>-ty
 3-DECL-PASS-see-NFUT necklace-OBL

The copula construction allows the verb ‘to see’ as the head of its nominalized clausal complement—(14), repeated here as (22)—because this verb is syntactically intransitive in the same way that the verb ‘to arrive’ is intransitive. In (24), the causativized version of the verb cannot occur in the complement of a copula because complements headed by transitive

verbs are not allowed in this position, as seen in (12). If you passivize it, it is ungrammatical (23) unless it is first causativized (25).

- (22) *ōwā naakat iso'oot pikomty*
ōwā *∅-na-aka-t* *i-so'oot-∅* *pikom-ty*
 child 3-DECL-COP-NFUT NMZ-see-ABS.AGR. monkey-OBL
 “the child saw the monkey”
- (23) **ōwā naakat iaso'oot (pikomty)*
ōwā *∅-na-aka-t* *i-a-so'oot-∅* (pikom-ty)
 child 3-DECL-COP-NFUT NMZ-PASS-see-ABS.AGR. (monkey-OBL)
- (24) **ōwā naakat imso'oot (pikomty)*
ōwā *∅-na-aka-t* *i-m-so'oot-∅* (pikom-ty)
 child 3-DECL-COP-NFUT NMZ-CAUS-see-ABS.AGR. (monkey-OBL)
- (25) *ōwā naakat iamso'oot (pikomty)*
ōwā *∅-na-aka-t* *i-a-m-so'oot-∅* (pikom-ty)
 child 3-DECL-COP-NFUT NMZ-PASS-CAUS-see-ABS.AGR. (monkey-OBL)
 “[somebody] made the child see the monkey”

In terms of word order, the patterns are the same as those seen above for the verb ‘to arrive’; the default order is VS:

- (26) **Claudio naso'oot (boetety)*
Claudio *∅-na-so'oot-∅* (boet-<e>ty)
Claudio 3-DECL-see-NFUT (necklace-OBL)
- (27) *atykiri naso'oot Claudio (boetety)*
atykiri *∅-na-so'oot-∅* *Claudio* (boet-<e>ty)
 then 3-DECL-see-NFUT *Claudio* (necklace-OBL)
 “then Claudio saw” (the necklace)

Everett (2006: 244) considers these psychological intransitives with oblique objects to be ditransitive because, when causativized, they have three arguments. We consider his analysis incorrect, because ditransitive verbs do not have to be causativized to behave in this way. In fact, ditransitive verbs cannot be causativized and behave with respect to valence change in the same way as transitives (see sections V and VI). Semantically, the two types of verbs are different as well. The verb ‘to see,’ when causativized, has a subject or causer, a direct object or experiencer, and an oblique object. Ditransitive verbs have a causer as subject, a goal as direct object, and a theme as the oblique argument.

A noteworthy issue is whether it is possible to identify two classes of intransitive verbs corresponding to the unergative (active) versus unaccusative (stative) distinction in Karitiana. Storto (2001) has claimed that some intransitive verbs were apt to be passivized and that this is an evidence for the existence of a class of intransitive verbs (unaccusative or stative) whose only argument is internal. Rocha tested the two verbs that have been presented by Storto as examples of intransitive verbs that could be passivized and found that there are two versions of the same verb, one transitive and one intransitive in both cases, with slightly different meanings or phonological forms. The verb root *oty* ‘to bathe’ is intransitive, but there is a homophonous verb, ‘to bathe,’ that is transitive and means ‘to bathe oneself with medicinal

plants.’ The verb *kinda oti* ‘to be/get sick’ has another variant, *akinda oti*, that is homophonous with the passivized version of the other verb’s root. These homophony cases have been the source of Storto’s incorrect analysis. We conclude that no intransitive verbs in Karitiana are apt to be passivized and therefore there is no morphosyntactic evidence to distinguish between unergative and unaccusative verbs in the language. The behavior of intransitive verbs with agent subjects, such as ‘to dance,’ is exactly the same as that of intransitive verbs with patient subjects, such as ‘to arrive.’

- (28) pyterekteregngan taso
 ø-py-terekterek-na-n taso
 3-ASSERT-dance-SF-NFUT man
 ‘the man danced’
- (29) *pyraterekteregngan taso
 ø-pyr-a-terekterek-na-n taso
 3-ASSERT-PASS-dance-SF-NFUT man

The verb ‘to arrive’ is formed from the reduplicated root *terekterek*—where *terek* is a verb that can be translated as ‘to walk’—plus *-na*, used as a stem formative with other reduplicated verbs in the language as well (Storto, to appear). The default word order is invariably VS, in both assertative (28) and declarative sentences (33)-(34). The verb is not apt to be passivized directly (29), but if it is first causativized—(31) and (36),—it may be passivized (32).

- (30) ypynterekteregngan (yn) taso
 y-py-m-terek.terek-a-n yn taso
 1-ASSERT-CAUS-dance-SF-NFUT I man
 “the man made me dance”
- (31) ypynterekteregngan hyryĵa hãraĵ
 y-py-m-terek.terek-na-n hyryĵ hãraĵ
 1-ASSERT-CAUS-dance-SF-NFUT song good
 “the good song made me dance”
- (32) pyramterekteregngan taso
 ø-pyr-a-m-terek.terek-na-n taso
 3-ASSERT-PASS-CAUS-dance-SF-NFUT man
 “[something] made the man dance”
- (33) *taso naterekteregngat
 taso Ø-na-terek.terek-na-t
 man 3-DECL-dance-SF-NFUT
- (34) naterekteregngat taso
 ø-na-terek.terek-na-t taso
 3-DECL-dance-SF-NFUT dance
 “the man danced”
- (35) *taso naterekteregngat ĵonso
 taso Ø-na-terek.terek-na-t ĵonso
 man 3-DECL-dance-SF-NFUT woman

- (36) taso namterekterenggat ãonso
 taso ø-na-m-terek.terek-na-t j↓onso
 man 3-DECL-CAUS-dance-SF-NFUT woman
 “the man made the woman dance”

Copular sentences may only be formed with the verb ‘to dance’ if the verb is the head of the complement of the copula in its underived form (37) or if it is causativized and then passivized (40), but not if it is simply causativized (39). This verb may not be passivized in the copula construction (38) nor in any other sentence type (29). This is so because copular sentences must have one-place predicates (nouns, adjectives, or intransitive verbs) as complements.

- (37) taso naakat iterektterenggat
 taso Ø-na-aka-t i-terek.teregng-na-t
 man 3-DECL-COP-NFUT NMZ-dance-SF-ABS.AGR.
 “the man danced”

- (38) *taso naakat iaterektterenggat
 taso Ø-na-aka-t i-a-terek.teregng-a-t
 man 3-DECL-COP-NFUT NMZ-PASS-dance-SF-ABS.AGR.

- (39) *taso naakat imterektterenggat
 taso Ø-na-aka-t i-m-terek.teregng-a-t
 man 3-DECL-COP-NFUT NMZ-CAUS-dance-SF-ABS.AGR.

- (40) taso naakat iamterektterenggat
 taso Ø-na-aka-t i-a-m-terek.teregng-a-t
 man 3-DECL-COP-NFUT NMZ-PASS-CAUS-dance-SF-ABS.AGR.
 “[something/somebody] made the man dance”

We must conclude that, since all the verbs in table 1 are affected in the same way by operations of valence change, there is no evidence that allows us to distinguish two classes of intransitives with respect to morphosyntax or semantics in Karitiana. We could even go further and suggest that all intransitive verbs in Karitiana seem to be unaccusative, because their sole argument becomes an object when they are causativized. We will see below that transitive and ditransitive verbs, which have an external argument, cannot be causativized in the language in the same way as intransitive ones. The behavior of intransitive verbs could be explained by the hypothesis that they do not select an external argument but have an internal argument instead as their sole argument, and causativization adds an external argument to that structure.

A final point must be made with respect to the data presented by Storto (2001). Three verbs mentioned by this author—namely, *eem* ‘to be/get dirty,’ *’obm* ‘to pierce,’ and *atat* ‘to break’—form a subclass of intransitive verbs in which causativization is possible without the use of the causative morpheme *m-*. Rocha has confirmed this fact with some speakers but points out that all speakers nowadays accept the transitive version of those verbs with the *m-* morpheme as well. In view of this change, it no longer seems necessary to posit that these verbs belong to a special subclass of intransitives.

4. Transitive verbs

The paradigms of transitive verbs such as 'y 'to eat' exhibit a completely different pattern from the ones observed so far for intransitives (for instance, the intransitive *pyt'y* 'to eat,' which must be derived from the transitive through the incorporation of an object). They occur in SVO word order in declarative clauses (45) and in VSO word order in assertatives (41). They may always be passivized (42), and are never causativized through the *m-* prefix (43)-(44) and (46):

- (41) *pyry'ydn taso ti'y*
 ø-pyry-'y-dn taso ti'y
 3-ASSERT-eat-NFUT man food
 "the man ate the food"
- (42) *pyra'ydn ti'y*
 ø-pyr-a-y-dn ti'y
 3-ASSERT-PASS-eat-NFUT food
 "the food was eaten"
- (43) **pyrym'ydn (ti'y) taso*
 ø-pyry-m-'y-dn (ti'y) taso
 3-ASSERT-CAUS-comer (food) man
- (44) **pyram'ydn ti'y*
 ø-pyr-a-m-'y-dn ti'y
 3-ASSERT-PASS-CAUS-eat-NFUT food
- (45) *taso naka'yt ti'y*
 taso ø-naka-'y-t ti'y
 man 3-DECL-eat-NFUT food
 "the man ate the food"
- (46) **taso nakam'yt ti'y*
 taso ø-naka-m-'y-t ti'y
 man 3-DECL-CAUS-eat-NFUT food

Copular sentences cannot have transitive verbs as the head of their nominalized complement (47). This is only possible if the verb is first passivized (48). Transitive verbs cannot be prefixed by the causative morpheme in copula constructions nor anywhere else (49)-(50):

- (47) **ti'y naakat i'yt*
 ti'y ø-na-aka-t i-'y-t
 food 3-DECL-COP-NFUT NMZ-eat-ABS.AGR.
- (48) *ti'y naakat ia'yt*
 ti'y ø-na-aka-t i-a-'y-t
 food 3-DECL-COP-NFUT NMZ-PASS-eat-ABS.AGR.
 "the food was eaten"
- (49) **ti'y naakat im'yt*

ti'y ø-na-aka-t i-m-'y-t
 food 3-DECL-COP-NFUT NMZ-CAUS-eat-ABS.AGR.

- (50) *ti'y naakat iam'yt
 ti'y ø-na-aka-t i-a-m-'y-t
 fod 3-DECL-COP-NFUT NMZ-PASS-eat-ABS.AGR.

A list of the transitive verbs tested by Rocha is given in Table 2. These verbs behave in exactly the same way as the verb 'y 'to eat,' discussed above:

Table 2

| | | |
|-----|------------|-----------------------------------|
| 1. | 'y | 'to eat' |
| 2. | 'y | 'to spend' |
| 3. | ahoj | 'to laugh at' |
| 4. | atik | 'to throw away' |
| 5. | boit | 'to adorn' |
| 6. | byjyt | 'to wrinkle' |
| 7. | hārajxa | 'to beautify' |
| 8. | hee | 'to blow' |
| 9. | hey | 'to inhale' |
| 10. | ḷy | 'to be somewhere or with someone' |
| 11. | kapidyp | 'to ask, to search' |
| 12. | kim | 'to toast' |
| 13. | ko | 'to break' |
| 14. | kynō | 'to close' |
| 15. | kyrot | 'to reply' |
| 16. | mī | 'to hit someone' |
| 17. | ohok | 'to peel' |
| 18. | okop | 'to break' |
| 19. | oky | 'to kill, to hurt' |
| 20. | opyj | 'to leave, to let it go' |
| 21. | ot | 'to take' |
| 22. | otet | 'to cook' |
| 23. | pesek | 'to squeeze' |
| 24. | pīi | 'to take' (plural) |
| 25. | pinir(i/a) | 'to pinch with the nails' |
| 26. | pipāram | 'to sow' |
| 27. | pitik | 'to empty' |
| 28. | pyotagng | 'to help' |
| 29. | pyp | 'to thread' |
| 30. | seka | 'to squeeze' |
| 31. | soko'ī | 'to tie up' |
| 32. | sooja | 'to marry' |
| 33. | tak | 'to process in a mortar' |
| 34. | ting | 'to extract the timbo juice' |
| 35. | top | 'to free' |
| 36. | yt | 'to dig' |

5. Ditransitive verbs

Ditransitive verbs behave exactly in the same way as transitive ones, except that they have an optional oblique object. The three verbs tested by Rocha in this class are *hit* ‘to give,’ *oign* ‘to present with a gift,’ and *hithit* ‘to lend.’ The ditransitive verb agrees with its direct object, which is the goal argument, and the theme is marked as an oblique. The word order observed is, in assertative sentences, V DO IO (51) and, in declarative ones (55), SV DO IO. A ditransitive verb cannot be causativized with *m-*—(53)-(54), (56), and (59)-(60). Note that the causative allomorph *mb-* occurs before verbs beginning with an oral vowel:

- (51) *ypyroigngan ðwã boetety*
y-pyr-oigng-<a>n ðwã boet-<e>ty
 1-ASSERT-present-NFUT child necklace-OBL
 “the child presented me with a necklace”
- (52) *pyraoigngan ðwã boetety*
∅-pyr-a-oigng-<a>n ðwã boet-<e>ty
 3-ASSERT-PASS-present-NFUT child necklace-OBL
 “the child was presented with a necklace”
- (53) **ypymboigngan ðwã boetety*
1-py-mb-oigng-<a>n ðwã boet-<e>ty
 3-ASSERT-CAUS-present-NFUT child necklace-OBL
- (54) **pyramboigngan ðwã boetety*
∅-pyr-a-mb-oigng-<a>n ðwã boet-<e>ty
 3-ASSERT-PASS-CAUS-present-NFUT child necklace-OBL
- (55) *taso naoigngat ðwã boetety*
taso ∅-na-oigng-<a>t ðwã boet-<e>ty
man 3-DECL-presentear-NFUT child necklace-OBL
 “the man presented the child with a necklace”
- (56) **taso namboigngat ðwã boetety*
taso ∅-na-mb-oigng-<a>t ðwã boet-<e>ty
man 3-DECL-CAUS-present-NFUT child necklace-OBL

Copular sentences are ungrammatical with a ditransitive verb as the head of the complement of the copula (57). If the verb is passivized, it can be used in the copula constructions (58).

- (57) **taso naakat ioigngat boetety*
taso ∅-na-aka-t i-oigng-<a>t boet-<e>t
man 3-DECL-COP-NFUT NMZ-present-ABS.AGR. necklace-OBL
- (58) *taso naakat iaoigngat boetety*
taso ∅-na-aka-t i-a-oigng-<a>t boet-<e>t

man 3-DECL-COP-NFUT NMZ-PASS-present-ABS.AGR. necklace-OBL
“the man was presented with a necklace”

(59) *taso naakat imboingnat boetety

taso ø-na-aka-t i-mb-oingng-<a>t boet-<e>t
man 3-DECL-COP-NFUT NMZ-CAUS-present-ABS.AGR. necklace-OBL

(60) *taso naakat iamboingnat boetety

taso ø-na-aka-t i-a-mb-oingng-<a>t boet-<e>t
man 3-DECL-COP-NFUT NMZ-PASS-CAUS-present-ABS.AGR. necklace-OBL

6. Conclusions

Karitiana is a language in which verbs are extremely well behaved with respect to valence change. An intransitive verb may always be causativized by the addition of the prefix *m-*, which adds to its structure an external argument (the causer). Transitive and ditransitive verbs are never causativized in the same way because they already have an external argument (causer). To be intransitivized, they must be passivized. Passivization is an operation that eliminates the agent argument of a transitive verb and gives subject status to the patient or theme. Ditransitive verbs can be analyzed as a subclass of intransitive verbs, in the same way that psychological intransitive verbs with experiencer subjects and oblique objects are a subclass of intransitive verbs. Ditransitive and psychological verbs may have semantic properties that are particular to them, but overall they behave with respect to valence change in the same way—respectively, as transitive and intransitive verbs do.

Abbreviations

| | |
|---------|------------------------------|
| ASSERT | assertative mood |
| CAUS | causative |
| COP | copular verb |
| ABS.AGR | absolutive copular agreement |
| DECL | declarative mood |
| NFUT | nonfuture tense |
| NMZ | nominalizer |
| OBL | oblique case |
| PASS | passive |
| SF | stem formative |

References

- Coutinho-Silva, Thiago (2008) “Aspectos dos sintagmas nominais em Karitiana: a quantificação universal” (master’s thesis), Universidade de São Paulo
- Everett, Caleb (2006) “Gestural, perceptual and conceptual patterns in Karitiana” (PhD dissertation), Rice University
- Hale, Kenneth & Storto, Luciana (1997) “Agreement and spurious antipassives”, *Boletim da Associação Brasileira de Linguística (Abralín)*, 20: *Homenagem a Aryon Dall’igna Rodrigues*
- Landin, David (1983) *Lexico Karitiana-Português, Português-Karitiana*, SIL
- (1984) “An outline of the syntactic structure of Karitiana sentences,” in Dooley, R. (ed.) *Estudos sobre línguas Tupi do Brasil*, Brasília: SIL
- Marques de Carvalho, Andrea (2010) “O auxiliary aspectual tyka do Karitiana” (master’s thesis), Universidade de São Paulo

- Muller, Ana & Negrão, Esmeralda (2010) “On distributivity in Karitiana,” *Proceedings of Semantics of Under-Represented Languages in the Americas 5*, Amherst
- & Sanchez-Mendes, L. (2008) “Pluractionality in Karitiana,” *Proceedings of SuB 12: Sinn und Bedeutung*, Oslo: Department of Literature, Area Studies and European Languages, University of Oslo, v. 1: 442-454
- Rocha, Ivan (2011) “A estrutura argumental da língua Karitiana: desafios descritivos e teóricos” (master’s thesis). Universidade de São Paulo
- Sanchez-Mendes, Luciana (2008) “A quantificação adverbial em Karitiana” (master’s thesis), Universidade de São Paulo
- & Muller, A. (2008) “The meaning of pluractionality in Karitiana,” *Proceedings of SULA IV*, Amherst: University of Massachusetts at Amherst
- Storto, Luciana (1999) “Aspects of a Karitiana grammar” (PhD dissertation), MIT
- (2001) “Duas classes de verbos intransitivos em Karitiana”, en Queixalos, F. (ed.) *Des Noms et des Verbes en Tupi-Guarani: état de la question*, Lincom-Europa
- (2002) “Algumas categorias funcionais em Karitiana”, in *Línguas indígenas brasileiras: fonologia, gramática e história. Atas do I Encontro Internacional de Grupos de Trabalho sobre Línguas Indígenas da ANPOLL*, t. I, Brasília
- (2008) “Marcação de concordância absoluta em algumas construções sintáticas em Karitiana,” *Ameríndia 32: La Structure des langues amazoniennes*
- (2010) “Copular constructions in Karitiana: a case against case movement,” *Proceedings of Semantics of Under-Represented Languages in the Americas 5*, University of Massachusetts at Amherst
- (to appear) “Reduplication in Karitiana,” in Goodwin-Gomez, G. & Van der Voort, H. (eds.) *Reduplication in Amazonia*, Brill