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# Symmetrical and reciprocal constructions in Austronesian languages: the syntax-semantics-lexicon interface

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► **To cite this version:**

Isabelle Bril. Symmetrical and reciprocal constructions in Austronesian languages: the syntax-semantics-lexicon interface. Workshop on Cross-Linguistic Semantics of Reciprocal, Institute of Linguistics OTS, Oct 2019, Utrecht, Netherlands. pp.1-16. hal-03958971

**HAL Id: hal-03958971**

**<https://hal.science/hal-03958971>**

Submitted on 7 Mar 2023

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**Workshop '*Cross-linguistic semantics of reciprocals*'**

Utrecht University, 7<sup>th</sup>-8<sup>th</sup> October 2019

On the 7th and 8th October 2020, the workshop '*Cross-linguistic semantics of reciprocals*' took place at Utrecht University. The workshop was organized as part of the ERC-AdG project '*Forests and Trees: the Formal Semantics of Collective Categorization*' (grant agreement No 742204). The workshop brought together typologists and formal semanticists, with the idea of gaining a clearer understanding of the cross-linguistic semantics of reciprocal expressions.

This volume contains some of the papers that were presented during the event.

We are grateful to the participants whose engagement contributed to a fruitful and enjoyable workshop. We also thank Charlotte Jonker, Imke Kruitwagen, and Sonya Nikiforova for their help with the organization.

Giada Palmieri, Yoad Winter, Joost Zwarts

Utrecht, May 2020

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**Symmetrical and reciprocal constructions in Austronesian languages:  
the syntax-semantics-lexicon interface.**

Isabelle Bril (LACITO-CNRS, LABEX EFL<sup>1</sup>)

**Abstract**

In Austronesian languages, reciprocal relations are most generally marked by productive and highly polysemous prefixes occurring in monoclausal constructions, not by reciprocal pronouns or reciprocal anaphors or quantifiers such as ‘each other’ or ‘one another’.

These prefixes are reflexes of Proto-Austronesian \*maR-/\*paR- (Pawley & Reid 1979: 110), and of Proto-Oceanic \*paRi- for languages of the Oceanic sub-branch (Pawley 1973).

Not all Austronesian and Oceanic languages have retained these morphemes; some have innovated new markers (Bril 2005, Moysse-Faurie 2008). The focus here will be on languages that have retained these affixes in various Austronesian subgroups; the Amis (Formosan) and Nêlêmwa (New Caledonia) data were collected during fieldwork.

**1. Introduction: polysemous affixes for plural and reciprocal relations**

The reciprocal affixes considered are reflexes of Proto-Austronesian (PAN) \*maR-/\*paR, which contain an infix <aR> (Sagart 1994: 275, Zeitoun 2002, Blust 2009) marking plurality of relations; this was inherited as Proto-Oceanic (POc) \*paRi-. These prefixes basically express co-participation, collective actions and reciprocal relations as a sub-set of some general notion of union of plural relations (Pawley 1973, Lichtenberk 2000).

These prefixes have become extremely polysemous (Lichtenberk 1985, 2000). In some languages (esp. Malayo-Polynesian and Oceanic), they have taken on Middle functions and developed various other meanings (intensive, iterative, dispersive, distributive, Bril 2005), these will not be detailed here. In the course of their evolution as Middle markers, these morphemes have come to denote self-directed actions in some languages,<sup>2</sup> yet, these affixes are not originally reflexive morphemes, nor are they reconstructed as such in Proto-Austronesian or Proto-Oceanic.

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<sup>1</sup> This research is supported by the LACITO-CNRS and mostly financed by the research strand 3 “Typology and dynamics of linguistic systems” of the Labex EFL (Empirical Foundations of Linguistics) (ANR-10-LABX-0083/CGI). All the data on Nêlêmwa and Amis are from my own fieldwork. My gratitude goes to the informants and friends for their invaluable collaboration.

<sup>2</sup> In various New Caledonian languages (Drehu, Ajië, Xârâcùù, Bwato, Cemuhî, see Bril 2005, Moysse-Faurie 2008), as well as Malay, Indonesian. But not in Amis, nor in Nêlêmwa.

There are in fact no reconstructed reflexive morpheme at PAN or POc levels. Reflexive meanings are expressed in various distinct ways: by intransitive verbs, by transitive verbs with coreferential pronominal arguments (as in Nêlêmwa), by nouns like *tireng* ‘body’ (Amis), by verbs like ‘return’ (Moysse-Faurie 2008), by modifiers such as ‘alone’ (Bril 2005), etc.

The discussion will mostly focus on the reciprocal and collective meanings of these affixes, including some of their Middle functions, and their expression of dyadic kinship.

Section 2 deals with their morphosyntactic features, section 3 with the distribution of affixes encoding reciprocal and plural relations; section 4 and 5 discuss the semantics of the various reciprocal affixes, including dyadic kinship. To conclude, several possible developments towards other Middle functions and meanings are outlined.

## 2. The morphosyntax of reciprocal and plural relations

Two Austronesian languages go under some more detailed scrutiny in what follows; Amis is a Formosan language spoken in Taiwan, and Nêlêmwa is an Oceanic language of New Caledonia. Both have reciprocal, collective markers that are cognate with the reconstructed morphemes. The reflex of PAN \*maR- in Amis is *mal(a)-*, which I analyse as the middle prefix *ma-* and the infix <aR> marking plurality of relations. In Nêlêmwa, the reflex of POc \*paRi- is *pe-*.

In Amis as in Nêlêmwa, there are few inherently reciprocal verbs, except Amis *ma-ramud* ‘marry’, *ma-licinuwas* ‘separate from each other’ (both exclude the reciprocal affix \**mal(a)-*); but verbs like Amis *cabiq* ‘compete’, *taes* ‘fight’ all take reciprocal affixes and constructions. Consider *mal-cabiq* ‘compete with each other’ (vs. *mi-cabiq* ‘want to be ahead’), *mal-taes* ‘fight with each other’ (vs. *mi-taes* ‘beat, flog s.o.’).

In Nêlêmwa and in many Oceanic languages, verbs like ‘they meet, separate, compete, fight, kiss’ all carry reciprocal affixes.

### (1) Nêlêmwa (New Caledonia)

- a. Hli pe-ru-i.  
3DU REC-find-R<sup>3</sup>  
‘They met.’
- b. Hli pe-boima.  
3DU REC-embrace<sup>4</sup>  
‘They hugged.’

<sup>3</sup> The circumfix *pe-...-i* is the reflex of POc \**paRi-...-i* denoting reciprocal, collective and iterative meanings (Pawley 1973: 152).

<sup>4</sup> Abbreviations follow the Leipzig gloss rules ; additional ones are : AV actor voice; NM noun marker/article; PM personal marker/article; UV undergoer voice; -R reciprocal suffix (part of a the circumfix *pe-...-i*).

Reciprocal affixal strategies occur in monoclausal constructions, sometimes in combination with reduplication, as in Amis, but not in Nêlêmwa. Owing to the symmetrical relations between the agent and patient, reciprocals are generally low transitive constructions, often favouring the evolution of these prefixes towards middle markers, though rarely into reflexive markers; if they do, some additional and disambiguating morphemes usually occur (Bril 2005, Moysse-Faurie 2008).

### 2.1. Reciprocal constructions in Amis

The two reciprocal prefixes in Amis are *mal(a)-* (from PAN \*maR-), and *ma-Ca-* (i.e. the middle-voice marker *ma-*, together with obligatory *Ca-* reduplication). Their semantics are detailed in §4 and §5 below. Reciprocal constructions are intransitive (2a) or low transitive constructions with an oblique patient (2b). The reciprocal or collective subjects are expressed once.

(2) Amis (Formosan)

- a. Mal-taes k-ira ta~tusa-ay.  
 REC-fight NOM-DEIC CA~two-NMZ  
 ‘Those (two) people are fighting with each other.’
- b. Mal-alaw t-u titi k-ira wacu.  
 REC-snatch OBL-NM meat NOM-DEIC dog  
 ‘The dogs snatched the meat from each other.’ (nu Kiwit atu Piyuma a lalais.050)

### 2.2. Reciprocal constructions in Nêlêmwa

In Nêlêmwa, the reciprocal prefix *pe-*, together with dual or plural subject pronouns, express restricted or extended reciprocity, without any reduplication. On the other hand, *pe-* is highly polysemous (Bril 2007); it is affixed to stative or active verb stems, and to derived event nominals (3b) and nouns.

(3) Nêlêmwa (Bril 2002)

- a. Hla pe-whaayap.  
 3PL REC-fight  
 ‘They fight with each other.’
- b. .. na ni hleeli pe-whaayaw-i hla.  
 LOC in those REC-fight-DET 3PL  
 ‘... during their mutual fight.’ (lit. in those mutual fights of theirs)

Reciprocal constructions can be (i) ‘light’ constructions as in (4a), with an intransitive verb, one absolutive argument denoting co-participants engaged in some reciprocal relation, or (ii) ‘heavy’ constructions as in (4b) with a transitive verb, but two coreferential subject and object pronouns. The heavy construction denotes more strongly and symmetrically reciprocal relations, it may denote pluractional reciprocal events.

- (4) a. Hla pe-taxu agu.  
 3PL REC-give.INTR people.ABS  
 ‘The people are in exchange relationship.’ (Bril 2007)
- b. Hla pe-taxi-hla (o hnoot).  
 3PL REC-give.TR-3PL OBL riches  
 ‘They give each other (riches).’ (lit. with riches).

The ‘light’ intransitive construction also has Middle semantics (see Bril 2007).

In many Oceanic languages, strict reciprocal relations tend to be expressed by ‘heavy’ constructions with the prefix and two coreferential pronominal arguments, while weakly, non-strictly reciprocal relations (and Middle constructions) are marked by ‘light’, one-argument constructions.

### 3. Distribution and semantics of reciprocal affixes in Amis

The distribution and semantics of the two reciprocal prefixes *mal(a)-* and *ma-Ca-* in Amis are now discussed.

#### 3.1. *Mal(a)-* holistic reciprocal event vs. *ma-Ca-* plural reciprocal sub-events

*Mal(a)-* tends to be used for collective and reciprocal relations profiled as one holistic event, without considering any potential sub-event; it is selected by verbs whose semantic features allow holistic profiling. *Mal(a)-* is also used for comparison (§5.2) and for dyadic kinship (§5.3).

On the other hand, *ma-Ca-* tends to profile more weakly symmetrical relations, possibly involving several reciprocal sub-events, such as chaining or actions done in turn as in (5a). The verb’s basic voice in a non-reciprocal construction is given in (5b). Both *mal(a)-* and *ma-Ca-* reciprocal constructions are intransitive or low transitive and reciprocal/collective subjects are nominative/absolute, as in (5a, 6).

- (5) a. Ma-sa~suwal [k-aku a ci Abas].  
 MIDD-CA~speak NOM-1SG and PM Abas  
 ‘I and Abas spoke to each other.’
- b. S<em>uwal cira.  
 <AV>speak NOM.3SG  
 ‘He’s speaking.’
- (6) Ma-ka~kuku [k-u wacu atu nani].  
 MID-CA~chase NOM-NM dog and cat  
 ‘The dog and the cat chase each other.’



— **Restricted vs. extended reciprocal relations: the role of reduplication**

In addition, two types of reduplications occur in reciprocal relations. *Ca-* reduplication is used for reciprocal relations involving two or more participants, while *CVCV-* reduplication is used for extended (plural) reciprocal relations and often with intensive meaning.

Both types of reduplication occur with *mal(a)-* and *ma-*. Compare *mal-paliw* in (7a), which denotes a holistic event, while *mal-pali~paliw* (7b) denotes a plurality of participants engaged in reciprocal, iterated actions, also denoting intensity. The non-reciprocal construction is given in (7c).

- (7) a. *Mal-paliw=tu k-uhni.*  
REC-collaborate=PFV NOM-3PL  
 ‘They collaborated.’
- b. *Mal-pali~paliw=tu k-uhni.*  
REC-CVCV~collaborate=PFV NOM-3PL  
 ‘They collaborated.’ (a lot, or often)
- c. *Mi-paliw cira a mi-tepus.*  
AV-collaborate=PFV NOM.3SG COMP AV-harvest.rice  
 ‘He cooperates in harvesting rice.’

The same pattern occurs on stems denoting dyadic or plural social relations; (8a) may denote dual or plural relations, while (8b) denotes plural, extended reciprocal relations.

- (8) a. *Mal(e)-cabay k-ami.*  
REC-friend NOM-1PL.EXC  
 ‘We’re friends’ (dual, symmetrical relation)
- b. *Mal(e)-caba~cabay k-uhni.*  
REC-CVCV~friend NOM-3PL  
 ‘They’re a group of friends.’

The *ma-Ca-* construction in (9a, b) tend to profile actions done in turn or involving various sub-events. *Ma-Ca-* is indeterminate for number, thus compatible with dual or plural reciprocal participants. On the other hand, extended reciprocity with *CVCV-* reduplication, as in (9b) denotes plural participants, pluractionality, intensity or protracted actions, with possible sub-events. The non-reciprocal construction is given in (9c).

- (9) a. *Ma-ka~kiting k-ita a r<em>akat.*  
MIDD-CA~hold NOM-1PL.INCL LNK <AV>walk  
 ‘We walk holding each other’s hands.’
- b. *Ma-ka~kiti~kiting k-uhni a ma-keru.*  
AV-CA~CVCV~hold NOM-3PL LNK NAV-dance  
 ‘They dance holding each other by the hands.’ (in a chain)
- c. *Mi-kiting cira t-u kamay n-u wawa.*  
AV-hold NOM.3SG OBL-NM hand GEN-NM child  
 ‘He takes the child’s hand.’

### 3.2. Distribution of reciprocal affixes in Amis

Reciprocal affixes attach to roots or stems denoting actions or events, properties, entities, as well as kinship terms, locative nouns in predicative or referential functions, which then denote reciprocal or symmetrical relations.

(10) Amis

- a. Mala-abang k-u cabay.  
REC-hold.shoulder NOM-NM friend  
'The friends held each other by the shoulder.' (dual, symmetrical)
- b. Mal-ada k-uhni.  
REC-enemy NOM-3PL  
'They're enemies.'
- c. Mal-abubu k-uhni.  
REC-embrace NOM-3PL  
'They hug each other.'

*Mal(a)-* and *ma-Ca-* are both compatible with entity-denoting and action-denoting roots, the derived reciprocal stems have different meaning. For instance, *mal-paliw* 'collaborate' describes one cooperative action, while *ma-pa-paliw* profiles several events of reciprocal help done in turn, as in (11b).

(11) Amis

- a. Mal-paliw k-uhni  
MIDD-CA~take.turn NOM-3PL  
'They collaborated.'
- b. Ma-pa-paliw k-ami t-u demak n-u umah.  
MIDD-CA~collaborate NOM-1PL.EXC OBL-NM work GEN-NM house  
'We helped each other with our (own) fieldwork.' (i.e. in turn)

To sum up, the reciprocal morpheme *mal(a)-* tends to profile reciprocal and collective relations as one holistic event, while the middle reciprocal affix *ma-Ca-* profiles less symmetrical relations such as chaining, or which involve several sub-actions done in turn, possibly with distributive semantics. Extended (plural) participants are additionally marked by CVCV reduplication.

### 4. Strong vs. weak reciprocal constructions and their morphological encoding

Semantically, restricted (dual) reciprocity is more symmetrical than extended reciprocal relations which remain vague as to whether all participants are symmetrically involved in the reciprocal event, but imply some general union of local reciprocal relations (Dalrymple et al. 1998). The notion of co-participation (Creissels & Voisin 2008) or the union of local relations is sufficient. Meanings other than strictly reciprocal relations are generally weakly symmetrical. They denote collective or plural relations, mode of grouping, chaining; these

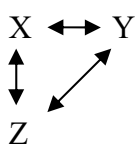
sometimes paves the way for other non-reciprocal meanings, such as iterative, intensive, distributive meaning, (as in Nêlêmwa, and various other Austronesian and Oceanic languages, Brill 2005, 2007).

In chaining relations such as *they run after one another*, the reciprocal morpheme denotes some co-participation, done in turn and with unspecified symmetry. In languages where chaining is expressed as a subtype of reciprocal, but asymmetrical, relation, the whole chain makes up the domain of co-participation and is the union of local asymmetries, as in *they walk one behind the other*, in (13, 14) below.

Similarly, without a context, the semantics of *they dance holding each other's hands* is indeterminate. With up to three people, given a circle or loop configuration, it can denote a symmetrical relation (graph 1). Beyond that, the relation is necessarily one of chaining (graph 2), with weakly symmetrical or asymmetrical relation between plural participants; the reciprocal affix then denotes transitive relations, which may not be strictly reciprocal, but the union of which constitutes the domain of co-participation.

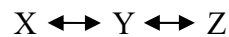
*They dance holding each other's hands'* can read as in graph 1 or 2.

Graph 1: strongly reciprocal



Graph 2: weakly reciprocal, chaining

indirect reciprocity between X & Z



#### 4.1. The role of lexical semantics in Amis

Lexical semantics contribute to selecting either or both affixes, with different profiling. Lexical roots derived with *mal(a)-* have, or are compatible with some inherent collective or collaborative meaning and with actions done simultaneously. But roots like *curuk* 'take turn' in (12a), denoting asymmetrical reciprocal relation, must take the *ma-Ca-* construction. The basic meaning of the stem *padang* 'help s.o.' is asymmetrical, and only occurs with *ma-Ca-* (12b), it denotes distinct events of reciprocal help, done in turn. The non-reciprocal construction is given in (12c).

(12) Amis

- a. Ma-ca~curuk k-uhni a mal-paliw.  
MIDD-CA~take.turn NOM-3PL LNK REC-collaborate  
'They took turns to collaborate.'
- b. Ma-pa-padang k-ami (a pa-tireng t-u lumaq).  
MIDD-CA~help NOM-1PL.EXC LNK CAUS-erect OBL-NM house  
'We helped each other (to build our own house).' (i.e. in turn)

- c. Mi-padang cira itakuwan.  
 AV-help NOM.3SG OBL.1SG  
 ‘He helped me.’

#### 4.2. Polysemous affixes in Oceanic languages, Nêlêmwa, Fijian

Among the widely attested polysemy of reciprocal prefixes in Austronesian and Oceanic languages are mode of grouping, chaining, pluractional and intensive meanings.

*Pe-* in Nêlêmwa has all those meanings; it occurs for instance in chaining events (13) (Bril 2007 for the full description).

(13) Nêlêmwa

Hla pe-oxo-i agu mahleeli.  
 3PL REC-follow-R people.ABS those  
 ‘Those people walk in line.’ (one behind the other)

Fijian *vei* possibly co-occurring with the medio-passive, detransitivising suffix *-vi*, also occurs in chaining or actions done in turn.

(14) Fijian (Dixon 1988 : 178)

- a. Vei-tara~tara-vi ‘follow each other’  
 REC-CVCV~follow-vi
- b. Vei-sii.sivi ‘pass each other in turn’ (*sivi* ‘pass, exceed’)  
 REC-RED~pass

#### 5. The semantic diversification of reciprocal affixes

Other frequent meanings include symmetrical spatial configuration, symmetrical properties in comparative constructions, dyadic kinship or social relations, and distributive meanings.

The semantic reading results from the composition of the affix and the stem. It varies with :

- 1) the lexical category of the stems as being (i) entity-denoting, (ii) property-denoting, (iii) action-denoting, (iv) denoting some spatial property or configuration;
- 2) the semantic properties of the stems (i.e. as active, stative, motion verbs);
- 3) their inherent  $\pm$  symmetrical features and semantics.

Motion verbs and some action verbs tend to select collective or chaining readings; while stative, property-denoting verbs tend to denote comparative readings.

The strong or weak symmetrical readings are constrained by various features:

- (a) the semantics of the lexical stem (e.g. ‘collaborate’ vs. ‘help’);
- (b) the number of participants (dual vs. extended, plural participants);
- (c) the spatial configuration (such as loop, cycle, chaining);
- (d) the time frame (i.e. simultaneous actions or actions done in turns).

The following tables summarise their distribution.

Table 1. The semantics of reciprocal *mal(a)-* and *ma-Ca-* in Amis

	collective/reciprocal		chaining	mode of grouping	symmetr. positions, locations	comparison	dyadic kinship / social relation
	simult. holistic	done in turn					
mal(a)-	+					+	+
ma-Ca-		+	+	+	+	+	

Table 2. The semantics of reciprocal *pe-* in Nêlêmwa

	collective/reciprocal		chaining	mode of grouping	symmetr. positions, locations	comparison	dyadic kinship / social relation
	simult. holistic	done in turn					
pe-	+	+	+	+	+	+	

### 5.1. Symmetrical positions or locations, mode of grouping

When the prefixes attach to stems denoting positions and locations, the reading is not strictly reciprocal, but denotes some symmetrical features that are dependent on lexical semantics, as in (15) below. Again, the reciprocal affix simply signals a vague union of more or less symmetrical, iterated relations.

#### — Amis

In Amis, only *ma-Ca-* reduplication or *ma-CVCV* reduplication are attested with such semantics; the reciprocal affix *mal(a)-* does not occur in spatial configurations.

*Ma-Ca-* constructions are weakly symmetrical with asymmetrical configuration involving plural entities, such as *ma-ta~tungruh* (15a), derived from the locative noun *tungruh* ‘top’. The same asymmetry holds with *ma-ta~tepar* derived from *tepar* ‘side’ in (15b); but the relation with *tepar* ‘side’ is more symmetrical if only two persons are involved.

(15) Amis

- a. Ma-ta~tungruh k-u kasuy.  
MIDD-CA~top NOM-NM wood  
‘The wood-logs are piled on top of each other.’ (asymmetrical configuration)
- b. Ma-ta~tepar k-ita a m-aruq.  
MIDD-CA~side NOM-1PL.INCL LNK AV-sit  
‘We are sitting side by side (or) next to each other.’

#### — Nêlêmwa

In Nêlêmwa, *pe-* (POc \*paRi) is also prefixed to location nouns in predicative function, or to stative verbs denoting symmetrical positions, locations or points between landmarks or objects. Again plural entities imply some vague union of more or less symmetrical, distributed relations or properties.

(16) Nêlêmwa (N. Caledonia, Brill 2002)

- a. Ma pe-aramaa-i.  
IDU.INCL REC-face-R  
'We are facing each other.' (dual)
- b. Pe-jeuk awôlô mahleena.  
REC-near dwelling these  
'These dwellings are close to each other.' (plural)

Fijian combines the reciprocal prefix and reduplication, with similar meaning.

(17) Fijian (Milner 1972: 112)

- Vei-taqa~taqa-i.  
REC-CVCV~put.on.top-i  
'(they) are piled on top of each other'.

The strong or weak symmetrical interpretations are thus context dependent.

## 5.2. Symmetry and comparison of equality

As an offshoot of symmetrical relations, these prefixes also occur as markers of comparison with respect to a *tertium comparationis*, generally a property, patterning as 'A & B are RECIP-big'. They are prefixed to property predicates (denoting age, size, appearance, quantity, property, etc.) which constitute the parameter of comparison.

### — Amis

In Amis, both affixes *mal(a)-* and *ma-Ca-* occur in these constructions. *Mal-* tends to profile one global symmetrical property, while *ma-Ca-* tends to profile a more distributed approach. *Mal-singteb* (18a) profiles the property *tarakaw* "height" as being globally identical in relation to the parameter of comparison (the 'same level'); *mal-selal* (18b) profiles the same collective relation to the same age group property. On the other hand, the *ma-Ca-* construction in (18c) tends to profile a more distributed membership to one age group, implying the existence of other age groups (there are eight age groups in the Amis social organisation).

(18) Amis

- a. Mal-singteb k-u tarakaw n-uhni.  
REC-level NOM-NM height GEN-3PL  
'They're of equal height.' (lit. their height is REC-level)
- b. Mal-selal k-ami.  
REC-age.group NOM-1PL.EXC  
'We are in the same age-group.'
- c. Ma-sa~selal-ay a kaput k-ami.  
MIDD-CA~ age.group-MODF LNK team NOM-1PL.EXC  
'We are a team of the same age-group.' (others belong to another one)

— Nêlêmwa

In Nêlêmwa and other New Caledonian languages, the reciprocal affix *pe-* also has comparative meaning, even with stems that have inherent comparative meaning, like *maariik* ‘similar’. In (19a), ‘they are like each other’ must be used with the reciprocal prefix (*\*hli maariik*).

(19) Nêlêmwa

- a. Hli pe-maariik âlô mahliili.  
3DU REC-similar child these  
‘These children are similar to/look like each other.’
- b. Wa pe-khooba-wa.  
2PL REC-number-POSS.2PL  
‘You are in equal number.’
- c. Hlaabai pe-ida-la.  
those REC-line-POSS.3PL  
‘Those (who are) of the same generation.’

### 5.3. Dyadic kinship or social relationship

When affixed to stems denoting kinship or social relations, these prefixes express dyadic kinship (Evans 2006) or reciprocal social relations, which are symmetrical (‘they’re RECIP-friends’, ‘they’re RECIP-sisters’) or asymmetrical (‘they’re RECIP-mother and daughter’). Languages vary as to which term of the dyad is chosen, i.e. the higher or the lower term.

#### 5.3.1. Amis and other western Austronesian languages

In Amis, only *mal(a)-* (from PAN \*maR-) is used with that meaning and function; it refers to relations which are profiled holistically, as the union of  $\pm$  symmetrical relations, as in (20).

(20) Amis

- a. U mal(e)-kaka-ay k-ami.  
NM REC-elder.sibling-NMZ NOM-1PL.EXC  
‘We’re elder siblings.’ (together, as a group, symmetrical kinship)
- b. Mal(e)-wama k-uhni, mal(e)-wina k-ami.  
REC-father NOM-3PL REC-mother NOM-1PL.EXC  
‘They’re father and child, we’re mother and child.’ (asymmetrical kinship)
- c. Mal-cabay k-ita.  
REC-companion NOM-1PL.INC  
‘We’re friends.’ (symmetrical social relationship)
- d. Mal-kaput k-uhni.  
REC-team NOM-3PL  
‘They’re class-mates.’ (symmetrical social relationship)

There is much unpredictable variation on whether the root selects the higher or the lower term of the asymmetrical kinship dyads. In Formosan languages, the root tends to be the

higher term, with some exceptions. In Amis, the root is always the higher term. In Paiwan (21), the same reciprocal affix *may-* occurs on noun stems denoting dyadic kinship, as well as on verb stems.

- (21) Paiwan (Formosan, Zeitoun, 2002)  
*may-aka-akak* ‘parent and children’ (*akak* ‘child’; tri-moraic reduplication marks plurality)  
*may-ta-təvəla* ~ *pay-ta-təvəla* ‘answer each other’ (the basic actor voice is *t<əm>vəla* ‘answer’)

Dyadic kinship is common among Austronesian languages. In Tagalog, the choice of the higher or the lower term of the dyad has different meanings.

- (22) Tagalog (Philippines, Schachter and Otnes 1972: 293)  
*mag-ama* ‘mother and child’ (*ama* ‘mother’)  
*mag-anak* ‘parent and child’ (*anak* ‘child’).

### 5.3.2. Dyadic kinship in New Caledonian and other Oceanic languages

There are some variations in New Caledonian languages; in Bwatoo, the higher term is chosen; in Nêlêmwa, it is the lower term. There is also some variation in the choice of affixes, either reciprocal prefixes or different affixes. Bwatoo uses morphemes that are different from reciprocal prefixes; so does Nêlêmwa.

- (23) Bwatoo (N. Caledonia, Rivierre & Ehrhart 2006)  
 Lu **xaa-(ve)-voona-n.**  
 3DU DYAD-(REC)-maternal.uncle-DYAD  
 ‘The maternal uncle and his nephew.’

Nêlêmwa also uses different morphemes for dyadic kinship and reciprocal constructions.

- (24) Nêlêmwa (Bril 2000, 2002)
- a. Hli **am-xola-n.**  
 3DU DYAD-nephew-DYAD  
 ‘They are in maternal uncle/aunt and nephew/niece relation.’
  - b. Hli **a-maawa-n.**  
 3DU DYAD-spouse-DYAD  
 ‘They are spouses.’
  - c. Hli **pe-whan.**  
 3DU REC-agree  
 ‘They are married.’

On the other hand, the same reciprocal affixes are used in Caac. Dual or plural relationships are marked by distinct pronouns.



(25) Caac (N. Caledonia, Hollyman 1971)

Pe-abaa-le.  
REC-brother-POSS.3PL  
'They are brothers and sisters.'

In Fijian, the reciprocal affix is also used for dyadic kinship.

(26) Fijian (Milner 1972 :112-113, Dixon 1988)

- a. Keirau vei-gane-ni.  
1DU.EXC REC-sibling-NI  
'We(2) are in sister-brother relationship.'
- b. Erau vei-tauri liga.  
3DU REC-take hand  
'They (2) are holding hands.'

#### 5.4. Pairing or distributed mode of grouping

In Amis, neither *mal(a)-* nor *ma-Ca-* occur on numerals with distributive meaning, a distinct morpheme *ha(la)* denotes numeral distributivity.

(27) Amis

Ma-ha-tulu a mal-kaput (k-uhni).  
MIDD-DISTR-three LNK REC-team (NOM-3PL)  
'They were grouped by 3/(they) made a team of three.'

In Nêlêmwa, the distributive meaning of *pe-* is mostly restricted to mode of grouping in 'natural' pairs of similar entities. Beyond pairs, a distinct distributive morpheme is used.

(28) Nêlêmwa (Bril 2000, 2002)

Co na me pe-balet.  
2SG put AIM REC-partner  
'Put them two by two/in pairs.' (from a bigger amount of similar entities)

On the other hand, the distributive use of the reciprocal affix is attested in Indonesian: *ber-ratus-ratus* 'by hundreds' (see Bril 2005).

#### 5.5. Other meanings

Among other meanings, generally related to the co-occurrence of the reciprocal or middle affix with reduplication, are intensive and augmentative meanings.

Moving further away from the notion of collective/reciprocal action, these once "reciprocal" affixes take on meanings that increasingly pertain to the Middle domain such as (i) anticausative meaning denoting spontaneous, unintentional actions lacking any initiator as in (29a), or (ii) aimless, dispersive, unbounded actions lacking a patient, as in (29b); Indonesian *ber-* also has that meaning, e.g. *ber-malas-malas* 'be idle, be lazying around'. (See Bril 2005, 2007 for detailed analysis).

(29) Nêlêmwa (Bril 2007)

- a. Pe-nuk=du bwa doo pwâ-mâgo.  
MIDD-fall=down on ground fruit-mango  
'Mangoes are falling.' (because they are ripe, anticausative)
- b. Wa pe-diya roven fo awa-wa.  
2PL MIDD-do all EXS heart-POSS.2PL  
'You may do as you wish.'

In some Oceanic languages, these meanings are marked by circumfixes that are reflexes of POc *\*paRi-...(-i /-aki)* together with some additional, disambiguating morphemes. POc *\*paRi-...-i* expresses reciprocal, collective and iterative meanings, "combined or repeated action by a plurality of actors or affecting a plurality of entities" (Pawley 1973: 152); this is attested in Nêlêmwa, see (30a); POc *\*paRi-...-aki* expresses distributive, dispersive actions (Lichtenberk 2000: 55-56, Bril, 2005).

In Nêlêmwa, subject-oriented reciprocity (30a) and object-oriented reciprocity (30b) are distinguished by the presence of *pe- ...-i* (from *\*paRi-...-i*); object reciprocity is marked by *pe-* together with the transitive verb form (30b).

(30) Nêlêmwa (Bril 2007)

- a. Hâ pe-wuug-i agu Pum ma agu Cavet.  
1PL.EXC REC-gather-R people Poug and people Tiabet  
'We people from Poug and people from Tiabet have gathered.'
- b. Hâ pe-wuug-e agu Pum ma agu Cavet.  
1PL.EXC REC-gather-TR people Poug and people Tiabet  
'We have gathered people from Poug and people from Tiabet.'

## 6. Conclusion

Austronesian languages support Nedjalkov's (2007) generalisation that affixal reciprocal morphemes are more polysemous than are lexical reciprocal markers.

In Amis, the two morphemes *mal(a)-* and *ma-Ca-* profile distinct reciprocal relations; *mal(a)-* tends to profile one holistic, collective relation, while *ma-Ca-* tends to profile multiple sub-events, with distributed properties. Both morphemes combine with *Ca-* or *CVCV-* reduplication. *CVCV-* reduplication is used for plural relations and denotes pluractional, iterative and intensive meanings.

Combination with reduplication is also found in Philippine (Tagalog) and Malayo-Polynesian languages (Malay, Indonesian) and, further to the east, in many Oceanic languages which also retained the original reciprocal affixes (e.g. Fijian, Dixon 1988), some New Caledonian languages (but not Nêlêmwa), Samoan (Milner 1966). In those languages, the reciprocal-middle prefixes often combine with reduplication to express the core meanings, i.e. collective, reciprocal relationship, and various types of more or less symmetrical relations,

such as dyadic kinship, comparison, chaining, mode of grouping (in pairs), sometimes expanding towards distributivity. They also have more peripheral meanings, such as pluractionality *via* the notion of actions done in turn, and intensity.

Many languages have also developed other meanings probing further into the middle domain. Among them are anticausative meaning, atelic, unbounded actions, sometimes expressing aimlessness, as well as middle reflexive notions, generally starting from their occurrence on verbs of grooming. Tagalog is such a case, *mag-* (from PAN \*maR-) expresses collective, reciprocal meaning, pluractionality, intensive meanings, as well a more middle-like functions such as durative, and middle reflexive notions with verbs like ‘shave oneself’. This also occurs in Indonesian and in various Oceanic languages, among which some Kanak languages of New Caledonia (Bril 2005). Of course, not all such meanings are attested; for instance, the very polysemous *pe-* in Nêlêmwa stops short of the reflexive meaning. Amis reciprocal prefixes have not moved as far into the middle domain, due to the existence of competing morphemes for middle voice, and to different constructions for reflexives, such as the use of the *tireng* ‘body’, or the recourse to transitive verbs with coreferential arguments.

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