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Reciprocal constructions in Nêlêmwa (New Caledonia)

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1. Introduction

Nêlêmwa is one of the twenty-eight Kanak languages spoken in New-Caledonia; they belong to the Oceanic subgroup of the Austronesian family. Nêlêmwa, and its dialectal variant Nixumwak, are spoken by neighbouring groups (approximately one thousand speakers) in the far north of New Caledonia, around Koumak, Poum, Tiabet and the neighbouring islands (Bril 2002).

1.1 An overview of the *pe-* prefix

There are no reciprocal pronouns in Nêlêmwa. Reciprocity is marked morphologically by the prefix *pe-* associated (under certain conditions) with the suffix *-i*. The circumfix *pe-...-i* is a reflex of the Proto-Oceanic reciprocal affixes **pa(R)i-...-i* (Pawley 1973:152). In Proto-Oceanic, this prefix (referred to as reciprocal¹) implies “mutual interaction between the entities denoted by the subject of the verb” and refers to “unified or conjoined action by a plural subject, or repeated action by a singular subject, or unification of objects” (Pawley 1973:150-1; see also Lichtenberk 2000, Bril 2005). Nêlêmwa *pe-* has all these meanings, but it does not express reflexivity.

1.1.1 *Reciprocal meanings of pe-*

They are as follows.

- *Subject-oriented reciprocity* (see 3.1). Reciprocity may be restricted (with dual subject arguments) or extended (with plural subject arguments). The reciprocal suffix *-i* (henceforth ***R-i***) is restricted to the expression of reciprocity and is only suffixed to transitive verbs (see table 3 and Section 3). *pe-* may be prefixed to any lexical item (verbal or nominal), it may also be prefixed to any class of nouns or verbs (intransitive, transitive, ditransitive, ± active). Reciprocal subject arguments may be animates or inanimates.
- *Object-oriented reciprocity* (see 3.2). With transitive verbs, *pe-* may express reciprocity between object arguments. Subject pronoun number is then indifferent (singular, dual or plural). The suffix ***R-i*** never appears in this case. Reciprocal objects are mostly (but not exclusively) inanimates.
- *Reciprocity and expression of identity*. With this meaning, *pe-* is prefixed to stative verbs expressing quality, to impersonal verbs and to nouns with predicative or argument function; it has a comparative force and expresses identity, similarity or symmetry between two or more items (see Section 9). The suffix ***R-i*** does not appear in this case either.

¹A ‘misleading label’ according to Pawley: “the strict reciprocal meaning was restricted to a subclass of verbs whose properties remain to be defined”. (Pawley 1973:152).

1.1.2 Polysemy of *pe-*

This prefix may have non-reciprocal meanings. In this case, the two arguments (subject and object) are not coreferential.

- *Sociative value of pe-*: sociative subject arguments may be dual or plural.
- Other values. These are mostly chain relations indicating successive, reversible or non-reversible processes and adverbial² values such as intensive, diversative and spontaneous meanings (see Table 1 and Section 8). Subject pronoun number is indifferent (singular, dual or plural) and varies with the number of arguments involved (see Table 2).

The reciprocal, sociative and adverbial meanings of *pe-* all are very productive. With such semantic diversity, potential ambiguities are avoided by subject pronoun number, the occurrence of the suffix *R-i* and that of additional adverbs. The syntactic/semantic category of verbs also acts as a filter to help interpret the various meanings of *pe-*. With active verbs (\pm transitive), *pe-* may have any of these meanings. With stative verbs, *pe-* may express comparison as well as other meanings (intensive, diversative), but excludes the sociative meaning. There are other semantic filters: intransitive verbs of movement rule out the reciprocal meaning; *pe-* may then express sociative or adverbial values (see Section 8.). Context also helps interpret the meaning of *pe-*.

Table 1. Possible association of the prefix *pe-*

	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
<i>pe-</i> + stative verb	comparison	∅	∅	+
<i>pe-</i> + intransitive verb	+	∅	+	+
<i>pe-</i> + transitive verb	+	+	+	+
<i>pe-</i> + noun				
in predicate function	comparison	∅	+	+
in argument function	+	∅	+	+
<i>pe-</i> + pronouns ³	+	∅	+	+

Table 2. Types of subject pronoun agreement

Subject pronouns	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
dual or plural	+		+	
all persons		+		+

² Here “adverbial” refers to the fact that such meanings are often expressed or reinforced by adverbs.

³ Independent, deictic or anaphoric pronouns. *pe-* is never prefixed to subject or object personal pronouns.

2. Notes on Nêlêmwa grammar

2.1 Nouns and pronouns

2.1.1 *Noun classes*

There are two main classes:

- Bound nouns have an obligatory possessive suffix (*-t* when the determiner is an inanimate noun or a collective, indeterminate animate noun such as *agu* ‘people’; *-n* for a 3rd person human possessor): *duxa-t* ‘noise’ (lit. ‘noise of this’), *axomoo-n* ‘mother’ (lit. ‘mother-his/her’). Bound nouns are marked directly by possessive suffixes or postposed possessor nominals: *pwaxi thaamwa ena* ‘the child of this woman’ (lit. ‘child woman this’). They express inalienable possession and include kinship terms and body parts.
- Independent nouns have an autonomous form (without any obligatory determination marker) as in *mwa* ‘house’, *bu* ‘bait, hook’. There are two subclasses of independent nouns, those which have direct (inalienable) possessive markers like bound nouns (*mwa-ny* ‘house-my’) and those which have indirect (alienable) prepositional possessive markers (marked by *i* for humans, *o* for inanimates): *bu i axaleny* ‘this man’s bait’, *bu i ye* ‘his bait/hook’ (lit. ‘bait of him’), (see B in Section 2.1.2).

Nouns do not vary in number. Number (singular, dual, or plural) is marked only by agreement with a subject pronoun or with deictic/anaphoric pronouns. In some cases, reduplication may also express plurality with the meaning ‘all sorts, all types of’.

2.1.2 *Personal pronouns*

The system of personal pronouns is given in Table 3.

Table 3.

	Bound pronouns		Independent pronouns	Suffixes (Inalienable possession)	Alienable Possession
	subject	object		(A)	(B)
1SG	<i>na</i>	<i>-na</i>	<i>na</i>	<i>-ny</i>	<i>i na</i>
2SG	<i>co / yo</i> ⁴	<i>-yo</i>	<i>co</i>	<i>-m</i>	<i>i yo</i>
3SG	<i>i/∅</i> ⁵	<i>-e/∅</i>	<i>ye/e</i>	<i>-n /-t</i>	<i>i ye</i>
1DU.INCL	<i>hî</i>	<i>-hî</i>	<i>hî</i>	<i>-hî</i>	<i>i hî</i>
1DU.EXCL	<i>ma</i>	<i>-man</i>	<i>yaman</i>	<i>-man</i>	<i>i man</i>
1PL.INCL	<i>hâ</i>	<i>-hâ</i>	<i>hâ(âk)</i> ⁶	<i>-hâ</i>	<i>i hâ</i>
1PL.EXCL	<i>va</i>	<i>-va</i>	<i>yava(ak)</i>	<i>-va</i>	<i>i va</i>
2DU	<i>mo</i>	<i>-mon</i>	<i>yamon</i>	<i>-mon</i>	<i>i mon</i>
2PL	<i>wa</i>	<i>-wa</i>	<i>yawa(ak)</i>	<i>-wa</i>	<i>i wa</i>
3DU	<i>hli/∅</i>	<i>-hli/∅</i>	<i>hli /∅</i>	<i>-hli</i>	<i>i hli</i>
3PL	<i>hla/∅</i>	<i>-hla/∅</i>	<i>hla(ak)/ ∅</i>	<i>-hla</i>	<i>i hla</i>

2.1.3 Nouns as predicates

There is a noun-verb opposition evidenced by derivational processes such as nominalising affixes which derive verbal roots.

On the other hand, all lexical items (nouns, pronouns or verbs) may be predicates. Thus, nouns may have both argument and predicative functions. When nouns are used as predicates as in (1), they retain their nominal determiners and may be associated with aspect, modal markers and subject pronouns:

- (1) *i u thaamwa.*
 3SG PFV woman
 ‘It became a woman.’ (a coconut was changed into a woman)

2.2 Verbs

There are four main categories:

- Stative verbs expressing quality (adjectives as a syntactic category do not exist).
- Intransitive verbs with an active or non-active meaning.
- Verbs of feeling, speech that may be both intransitive or transitive with an indirect object. The indirect object (IO) is marked by a preposition (*i* + humans, *o* + inanimates⁷): *i hiiya* ‘he is jealous’, *i hiiya i hla* ‘he is jealous of them’.
- Transitive verbs with direct object: most have a transitive flexion (generally marked by a vowel *-i*, *-e*, or of the (V)CV type), or by a transitive suffix (*-li* + inanimate objects): v.i. *fuung* and v.t. *fuug-e* ‘to gather’; v.i. *tuâ* and v.t. *tuâ-i* ‘to deceive’; v.i. *khet* and v.t. *khiri* ‘to comb’; v.i. *hiwi* and v.t. *hiwi-li* ‘to rub, grate’.

⁴ *co* when sentence initial or with emphatic sense; in all other positions *yo*.

⁵ For inanimates, 3SG, 3DU, 3PL are marked \emptyset .

⁶ Pronouns with final *-ak* are emphatic and occur in ceremonial speeches.

⁷ Thus, the indirect object pronouns of a verb and the indirect/alienable possessive pronouns are marked by the same paradigm introduced by the preposition *i*, *o* (see Table 3 on personal pronouns in 2.1.2).

Some verbs (generally ending in *-a*) do not have any transitive flexion: *khua* ‘to bite’, *thiwalaxa* ‘to tickle’, *cabwa* ‘to pinch’, *oxo* ‘to follow’.

— Ditransitive verbs with either one direct and one indirect object, or with two indirect objects.

2.3 Case marking and word order

Argument structure is split: bound pronouns are accusative (they mark subject and object functions, coded as **s** and **o**), whereas nominal arguments are marked absolutive or ergative.

— Order of personal pronouns: **s V-o**

Subject pronouns are preverbal but non-proclitic, object pronouns are postverbal and enclitic (**sV-o**).

— Order and case marking of nominal arguments.

The neutral order is verb initial, followed by nominal arguments. The nominal prime argument of a transitive verb (coded A) is marked by agent morphemes (*(e)a* for human agents, *ru* for non-human or indefinite, collective human agents), whereas the nominal prime argument of an intransitive verb (coded S) is absolutive, like the second nominal argument of transitive verbs (the object, coded O). The absolutive case is marked \emptyset .

Besides, a prime human nominal argument is cross-referenced by a co-occurring subject pronoun (inanimates are zero-marked):

(2) *i gi thaamwa ena.*
 s V S

‘This woman is crying.’

(*thaamwa* is absolutive and agrees with the subject pronoun *i*).

(3) *hla hiiya i ye a âlô mahleena*
 3PL be.jealous CONN 3S AG child these.DEICT
 s V IO A

‘These children are jealous of him.’

(*âlô* is ergative and agrees with the subject pronoun *hla*).

Agreement patterns as follows:

— with an intransitive verb: **sVS** (s = S);

— with a transitive verb: **sVOA** (s is coreferential with A; O may be a noun or a pronoun, or may be direct or indirect (IO)).

The transitive flexion of verbs varies with object determination, as well as its \pm human, \pm animate feature. Argument structure also varies with object determination:

— an indeterminate object is “incorporated”, verbal flexion is then indeterminate, the prime argument is absolutive as in an intransitive structure;

— with a determined object, verbal flexion is definite, the prime argument is ergative; this is the canonical transitive structure.

2.4 Valence and diathesis

There is no passive in Nêlêmwa; diathesis is expressed by variations of transitivity and verbal valence, which can be reduced or increased by various syntactic means.

It may be increased with the causative prefix *fa-*: thus *coola* ‘be strong’ → *fa-coola* ‘to strengthen’. It can be decreased by nominalisation of verbs or by demotion of the second argument which is then marked as an oblique. This correlates with the absolutive marking of the prime argument (VOA → V IO S) and the backgrounding of the agent with a change in diathesis (as in (4b)).

(4)a. *hla hobwaxe vaayi a agu Pum.*

3PL take.care.of cattle AG people P.

‘The people from Poum raise cattle.’ (VOA)

b. *hla hobwaxe-wo o vaayi agu Pum.*

3PL take.care.of-wo CONN cattle people P.

‘The people from Poum do some cattle-raising.’ (V IO S)

(in such a construction, *wo* then fills the position of the direct object)

(in such a construction, *-wo* fills the position of an indefinite, plural direct object).

Reciprocity and reflexivity are valence decreasing (intransitivising) constructions, due to the non-distinction of the prime and second arguments.

There is no specific morphological expression of reflexivity. For a limited set of verbs, reflexivity may be marked by coreferential subject and object pronouns: *i bwagi-e* ‘he returns’ (*i-* and *-e* are coreferential); *hla bwagi-hla* ‘they returned’. When the reflexive argument is a noun, the construction is intransitive and the nominal argument is absolutive: *i bwagi Pwayili* ‘Pwayili retraces his steps’.

Reflexivity may also be expressed by coreference between the subject pronoun and the possessive determiner of the object-argument: *na khiri pôô-bwaa-ny* ‘I am combing myself’ (lit. ‘I comb hair-head-my’). Most commonly, reflexivity is lexical and is expressed by intransitive verbs: *na hnet* ‘I am blowing my nose’.

2.5 Tense/aspect and mood

Tense/aspect and mood are expressed mostly by preverbal or pre-predicate morphemes which may be combined. *u* is the marked perfective form (*i u maak* ‘he is dead’); but in narratives, the resultative/perfective aspect is usually unmarked (\emptyset); *io* marks the future, *o* the virtual. There is a complex set of aspect markers which may combine. The iterative marker is *aa*, the continuous marker *na*, the duration marker *gaa* (‘still in the process of’), they are all anteposed to predicates.

2.6 Consonant lenition in intervocalic position

Final consonants /p/, /t/, /c/, /k/ regularly undergo lenition when followed by a vowel:

p	>	v (or) w	c [c]	>	y [j]
t	>	r	k [k], kh [x]	>	x [ɣ]

Lenition also occurs at word boundaries (-C#+V), when a final consonant is followed by a vocalic preposition; the phonetic change is signalled by a hyphen: *jeuk* ‘near, close to’ → *jeux-i na* ‘close to me’; *hla kuluk* ‘they hide’ → *hla kulux-i na* ‘they hide from me’; *faxet* ‘taboo’ → *pe-faxer-i hli* ‘their taboo relationship’; *whaayap* ‘fight, war’ → *hleeli pe-whaayaw-i hla* ‘their wars’ (lit. these mutual wars of theirs).

3. Types of reciprocal constructions

The suffix *R-i* only occurs with transitive verbs in “canonical” reciprocal constructions, as shown in Table 4.

Table 4. Occurrences of the reciprocal suffix *R-i*

	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
<i>pe-</i> + intransitive verb	∅	*	∅	∅
<i>pe-</i> + transitive verb	<i>R-i</i>	∅	∅	∅

* signals an ungrammatical construction; ∅ signals the absence of the *R(-i)* suffix.

3.1. Subject-oriented reciprocity

3.1.1 “Canonical” reciprocals

The argument structure of “canonical” reciprocal constructions is intransitive; consequently, the nominal prime argument is absolutive. “Canonical” reciprocals can be derived from two-place transitives and two-place intransitives.

3.1.1.1 Reciprocals with two-place transitives.

Reciprocal arguments are expressed in several ways: by nouns (type I); by subject pronouns (type II); by coreferential subject and object pronouns (type III).

- The circumfix *pe- ... -i* occurs in the two “light” one-argument constructions:
 - type I: with a nominal reciprocal argument (3.1.1.1.1);
 - type II: with a dual/plural subject pronoun (3.1.1.1.2);
- The prefix *pe-* occurs alone (without the suffix *R-i*) in the “heavy” two-argument construction (with two coreferential arguments):
 - type III: with coreferential subject and object pronouns (3.1.1.1.3).

Note that this suffix is glossed as *R* further on.

3.1.1.1.1 Type I: Circumfix *pe-* *-i* and a nominal reciprocal argument

There is one syntactic dual or plural nominal argument referring to participants in reciprocal relation.

- (5) *hli pe-thiwalaxa-i âlô mahliili.*
 3DU REC-tickle-R child these.DU.DEICT
 s V S
 ‘These two children tickle each other.’

The dual reciprocal nominal argument (*âlô mahliili*) is absolutive (S) as in any intransitive construction and agrees with the dual subject pronoun *hli*.

Compare the transitive ergative constructions in (6a), (7a), (8a) with reciprocal (6b), (7b) and (8b):

- (6)a. *hli yagei-hli a hliili meewu.*
 3DU help.TR-3DU AG these2.ANAPH brother
 s V o A
 ‘These two brothers help them.’

- b. *hli pe-yage-i hliili meewu.*
 3DU REC-help-R these2.ANAPH brother
 s V S
 ‘These two brothers help each other.’

- (7)a. *hli cabwa-hli a âlô mahliina.*
 3DU pinch-3DU AG child these2.DEICT
 ‘These children are pinching them.’

- b. *hli pe-cabwa-i âlô mahliina.*
 3DU REC-pinch-R child these2.DEICT
 ‘These children are pinching each other.’

- (8)a. *hla khua-hla ru tavia.*
 3PL bite-3PL AG dog
 ‘The dogs bit them.’

- b. *hla pe-xua-i tavia.*
 3PL REC-bite-R dog
 ‘The dogs bit each other.’

There are some exceptions; some transitive verbs do not allow the suffix *R-i*: this is the case of *not* ‘to watch’ whose transitive form is marked by final consonant fall (*nô*), which is preserved in the reciprocal construction.

- (9) *hli pe-nô hliili thaamwa.*
 3DU REC-watch these2.ANAPH woman
 ‘The two women are watching each other.’

3.1.1.1.2 Type II: Circumfix *pe-... -i* and a pronominal reciprocal argument

The argument is a dual or plural pronoun.

A. Transitive verbs without transitive flexion or root modification.

With such verbs, the suffix *R-i* appears clearly, as there is no possible confusion with the transitive flexion (*-i*). Here is a short list of these verbs: *thiwalaxa* ‘to tickle’, *shêlâ* ‘to know’, *ko* ‘to chase’, *khua* ‘to bite, eat up’, *cabwa* ‘to pinch’, *oxo* ‘to follow’.

Compare non-reciprocal (10a) with reciprocal (10b):

- (10)a. *i ko-e.* ‘They chase him.’

- b. *hli pe-xo-i da.* ‘They chase each other up.’ (lenition: k [k] > x [ʎ])
 3DU REC-chase-R DIR
- (11) *hla pe-xua-i.* ‘They bite each other.’
 3PL REC-bite-R
- (12) *hla pe-yêlâ-i.* ‘They know each other.’ (lenition: sh [ʃ] > y [j])
 3PL REC-know-R
- (13) *hli pe-cabwa-i.* ‘They pinch each other.’
- (14) *hli pe-oxo-i.* ‘They follow each other (in line).’

B. Transitive verbs with transitive flexion or root modification.

An example may be *weenge* ‘to agree on, discuss and institute sth.’, which is a transitive verb with an obligatory inanimate object. The suffix *-i* is clearly reciprocal. Compare non-reciprocal (15a) with reciprocal (15b):

- (15)a. *hla weenge fek.* ‘They discussed to institute a custom.’
- b. *hli pe-weeng-i.* ‘They agreed with each other.’
 3DU REC-agree-R

In the case of *yage* ‘to help’, the transitive flexion (associated with a human object) and the reciprocal suffix are identical in form (both are marked by *-i*).

- (16) *hli pe-yage-i.* ‘They help each other.’
 3DU REC-help-R

As above, the verb *not* ‘to watch’ does not allow the *R-i* suffix (**hli pe-nô-i*). Only construction (19) (see below) with coreferential subject and object pronouns is allowed.

3.1.1.1.3. Type III: Without *R-i* and with coreferential subject/object pronouns.

In the “heavy” construction, there are two syntactic arguments marked by coreferential subject and object pronouns; **R-i* is excluded. The choice of type II or type III, for verbs allowing both constructions, has semantic and diathetic correlates (see Section 3.1.5).

— Verbs with transitive flexion.

Compare non-reciprocal (17a), (18a) with reciprocal (17b), (18b): in (17) the intransitive root is *tuâ* ‘to lie, deceive’, the transitive form is *tuâi*:

- (17)a. *i tuâi-hli.* ‘He has deceived them.’
 b. ***hli pe-tuâi-hli.*** ‘They deceived each other.’
 3DU REC-deceive.TR-3DU
 s V o
- (18)a. *i fuugi-hla.* ‘He gathers them.’ (the intransitive form is *fuung*)
 b. ***hla pe-wuugi-hla.*** ‘They are gathering/meeting [one another].’
 3PL REC-gather.TR-3PL

— Verbs with root modification (vi *not*, vt *nô*):

- (19) ***hli pe-nô-hli.*** ‘They two are watching each other.’
 3DU REC-watch-3DU

— Transitive verbs without flexion:

- (20)a. *hli cabwa-hli.* ‘They pinch them.’
 b. ***hli pe-cabwa-hli.*** ‘They are pinching each other.’
 3DU REC-pinch-3DU
- (21) ***hla pe-xua-hla.*** ‘They are biting one another.’

Type III does not allow any nominal reciprocal argument: **hli pe-cabwa-hli âlô mahleena* (intended meaning) ‘the children are pinching each other’ is ungrammatical, the correct sentence is (7b).

3.1.1.2 Reciprocals with two-place intransitives

Here is a short list of some of these verbs: *hiiya* ‘to be jealous’, *kâlaxi* ‘to be ashamed’, *boima* ‘to kiss, embrace’, *kuluk* ‘to hide’, *alu* ‘to stare, watch’, *faaxeen* ‘to ask, inquire’, *celec* ‘to nudge’, *ten* ‘to touch’.

These verbs have indirect objects marked by various prepositions (*i, o; nai, nao*): *hli kâlaxi i hli* ‘They are ashamed of them’; *i boima i ye* ‘She kisses him’.

Again, there are three possible constructions with similar functions and meanings, though the use of ***R-i*** is restricted to type I in this case:

- type I: circumfix ***pe-...R-i*** and a nominal reciprocal argument (3.1.1.2.1).
 type II: ***pe-*** (without ****R-i***) and a dual/plural subject pronoun (3.1.1.2.2).
 type III: ***pe-*** (without ****R-i***), and with coreferential subject/indirect object pronouns (3.1.1.2.3).

3.1.1.2.1 Type I: Circumfix ***pe-*** ***R-i*** and a nominal reciprocal argument

The nominal reciprocal argument is absolutive and agrees with the dual or plural subject pronoun. Compare non-reciprocal (22a), (23a) and reciprocal (22b), (23b):

- (22)a. *hla hiiya i agu mahleeli.*
 3PL be.jealous CONN people those.ANAPH
 ‘They are jealous of those people.’
- b. ***hla pe-hiiya-i agu mahleeli.***
 3PL REC-be.jealous-R people those.ANAPH
 ‘Those people are jealous of each other.’ (absolutive prime argument)

(23)a. *hli alu i na a hliili thaamwa.*
 3DU stare CONN ISG AG those.ANAPH woman
 ‘Those women are watching me.’

b. *hli pe-alu-i hliili thaamwa.*
 3DU REC-stare-R those.ANAPH woman
 ‘Those women are watching each other.’ (absolute prime argument)

The suffix **R-i** is more restricted even in type I; some verbs do not allow it: for instance *boima* ‘to kiss, embrace’ and *kuluk* ‘to hide’ do not allow it (see (38) and (70)); nor does *ten* ‘to touch’: *hli pe-ten agu mahliili* ‘those two persons are touching each other’. In fact, the use of **R-i** may have extended to some of these two-place intransitive verbs by analogy with “canonical” transitive verbs.

3.1.1.2.2 *Type II: Without R-i and with a pronominal argument*

The reciprocal argument is a dual or plural subject pronoun.

(24) *hli pe-hiiya.* ‘They are jealous of each other.’
hli pe-boima. ‘They kiss.’
hla pe-kuluk. ‘They play hide and seek.’

Some verbs do not allow this construction: for instance *alu* ‘to stare, watch’ only allows types I and III.

3.1.1.2.3 *Type III: Without R-i and with coreferential subject and indirect object pronouns*

In the “heavy” two-argument construction, the reciprocal arguments are marked by coreferential subject and indirect object pronouns. Here, *i* is the preposition marking the indirect object.

(25) *hâ pe-hiiya i hâ.* ‘We are jealous of one another.’
ma pe-faaxeen i man. ‘We question one another.’
hli pe-alu i hli. ‘They stare at each other.’

3.1.2 “Indirect” reciprocals with three-place verbs

In contrast to the usual absolute marking of reciprocal nominal arguments, with ditransitive verbs or ditransitive constructions, the presence of a non-coreferential object (direct or indirect) triggers the ergative marking of reciprocal nominal arguments (as in (26b)).

3.1.2.1 *Reciprocals with three-place transitive verbs (ditransitives)*

Some of these verbs have an obligatory argument structure in which one of the objects is direct and the other is indirect, without any possible position inversion. This is the case of *khiiboxa* ‘to hit’.

Compare the transitive construction (26a) with the reciprocal construction (26b):

(26)a. *i khiiboxa-ve balô shi âlô a axaleny.*
 3SG hit-DIR ball side child AG this.DEICT
 ‘This man sends the ball to the child.’

- b. *hla pe-khiiboxa-ve shi-hla balô a âlô mahleeli.*
 3PL REC-hit-DIR side-their.PL ball AG child these.ANAPH
 ‘The children send the ball to each other.’

The subject pronoun (*hla*), the recipient (*shi-hla*) and the prime nominal argument (*âlô*) are coreferential. The benefactive case marker *shi-* is a bound noun with a possessive determiner (marked by a pronominal suffix or a noun). The noun *shi-* (meaning ‘hand, claw, tentacle, extremity, side’) has been grammaticalised without losing its nominal properties.

Other verbs, such as *taxe* ‘to give’ (+ inanimate object; *taxi* +human object), allow dative shift: either object may be direct or indirect, according to stress and pragmatic value. In (27) reciprocity is expressed by *pe-* and coreferential subject and indirect object pronouns (such as *nai hla*); in (28) reciprocity is expressed by *pe-* and coreferential subject and object pronouns *hla* :

- (27) *hla pe-taxe hnoot nai hla.*
 3PL REC-give wealth LOC 3PL
 ‘They give riches to each other.’

- (28) *hla pe-taxi-hla o hnoot a agu mahleena.*
 3PL REC-give-3PL CONN wealth AG people these.DEICT
 ‘These people give each other riches.’

3.1.2.2. Reciprocals with three-place intransitives (ditransitive constructions)

Two variants can be distinguished:

— Ditransitive construction with two indirect objects.

Due to the presence of a non-coreferential indirect object argument (*puxet doo* in (29)), the prime argument is ergative as in any canonical transitive construction:

- (29) *hla pe-hiyya i hla puxe-t doo a agu mahleeli.*
 3PL REC-jealous CONN 3PL reason-of.it land AG people those.ANAPH
 ‘Those people are jealous of one another on account of the land.’ (*agu*=ergative)

The marker of the oblique argument *puxe-t* is a noun meaning ‘origin, cause of’.

— Ditransitive construction with one indirect object:

- (30) *hli pe-yage-i o ya mwa a hliili meewu.*
 3DU REC-help-R CONN thatch house AG those2.ANAPH brother
 ‘Those two brothers help each other out with the thatching of the house.’ (*meewu* = ergative)

3.1.3 “Possessive” reciprocals

In such cases, the subject pronoun and the possessive determiner of the object are coreferential. Compare middle-reflexive (31a) and reciprocal (31b-c):

- (31)a. *gi hli na khet*⁸.
 LOC.PRED 3DU CONT comb
 ‘They are combing.’

⁸ The intransitive form is *khet* ‘comb’; it is only used with the middle meaning (comb oneself).

- b. *hli pe-khiri pôô-bwaa-hli.*
 3DU REC-comb.TR hair-head-their.DU
 ‘They comb each other’s hair.’
- c. *hli pe-khiri pôô-bwaa thaamwa.*
 3DU REC-comb.TR hair-head woman
 ‘The women comb each other’s hair.’ (lit. they two mutually comb the hair-head of the women; *thaamwa* is the possessive determiner of *pôô-bwaa* and agrees with *hli*).

3.1.4. Reciprocals with intransitive verbs

The reciprocal suffix ***R-i** never appears in this case (see (32b)).

- (32)a. *na thek na bwaa ciic.*
 1SG hit LOC on wood
 ‘I hit on the piece of wood.’
- b. *hli pe-thek bwaa-hli.*
 3DU REC-bump head-their.DU
 ‘Their heads bumped against each other.’ (the subject pronoun and the sole nominal argument of the verb are coreferential).

3.1.5 Summary of the various reciprocal constructions: Diathetic and semantic values

The suffix **R-i** is restricted to “canonical” subject-oriented reciprocal constructions (excluding object reciprocity), in association with canonical transitive verbs, and with most two-place intransitive verbs (with indirect objects); it is also restricted to “light”, one-argument constructions (see Table 5).

Table 5.

	LIGHT CONSTRUCTION		HEAVY CONSTRUCTION
	Type I 1 nominal argument	Type II 1 pronominal argument	Type III 2 coreferential subject/object pronouns
<i>pe-</i> transitive V (with direct object)	<i>pe-...-i</i> (cf. (8b))	<i>pe-...-i</i> (cf. (36a))	<i>pe-</i>
<i>pe-</i> two-place intransitive V (with indirect object)	<i>pe-...-i</i> (cf. (22b))	<i>pe-</i> (cf. (35a))	<i>pe-</i> (cf. (35b))
<i>pe-</i> intransitive V	<i>pe-</i>	<i>pe-</i>	*

R-i = reciprocal suffix; + signals an existing construction; Ø signals a non-existent or ungrammatical construction.

The suffix **R-i** is excluded from the “heavy” construction with coreferential subject and object pronouns. It is also excluded with intransitive verbs and two-place intransitives when the reciprocal argument is a subject pronoun.

In Nêlêmwa, the choice of a “light” (one-argument) or “heavy” (two-argument) reciprocal construction has diathetic function. The “light” strategy has the functions of a middle voice, it is depatientive (33a, 34a, 35a, 36a) and refers to a single action involving several undifferentiated participants; while the “heavy” strategy with two

coreferential arguments (33b, 35b, 36b) refers to several reciprocal, sequential or iterated actions and often denotes an ongoing action.

- (33)a. *hla pe-taxu.* ‘They are in exchange relationship.’
 b. *hla pe-taxi-hla o hnoot* ‘They give each other riches.’ (see also (28))
 (vi *taxu* ‘to make a gift’ has two transitive flexions, *taxe* (+ inanimate object), *taxi* (+ human object) ‘to give’)
- (34)a. *hli pe-faxet.*⁹ ‘They are taboo to each other.’
 3DU REC-be.taboo
- (35)a. *hla pe-kuluk.* ‘They play hide and seek.’
 b. *hla pe-kulux-i hla.* ‘They hide from each other.’ (in turns)
- (36)a. *hli pe-oxo-i.* ‘They are in line.’
 b. *hla pe-oxo-hla.* ‘They are following one another.’

To quote Lichtenberk: “if the patient is of low salience, it is backgrounded, made non-prominent through not being encoded at all” (1991:179) [...] “there is a lower degree of distinctness of both the relations and the participants” (1991:181) [...] “the overall situation is conceptualised as an undifferentiated whole” (1991:182).

The “light” construction thus constitutes the core of the middle domain as defined by Kemmer (1993:243): “Middle: a semantic area comprising events in which (a) the Initiator is also an Endpoint or affected entity, and (b) the event is characterised by a low degree of elaboration”.

The “light” construction has depatientive and deagentive functions, it often refers to a state or property of the subject and expresses “natural” reciprocity (with verbs like ‘fight, meet, kiss, argue’, etc.) or self-directed actions with verbs of grooming.

As Kemmer (1993:247) notes, “The scale of transitivity [...] forms the conceptual underpinning for voice systems in general, and for reflexive and middle marking systems in particular”.

The middle value of the “reciprocal” prefix also appears in other Kanak languages: in Nemi, reciprocity is marked by the prefix *i-* or *u-* associated with *keu* ‘together’; without *keu*, this prefix may have generic meaning and refers to properties, permanence, duration. In Cemûhî, the prefix *pi-* also expresses reciprocity and the middle voice.

3.1.6 Argument structure in reciprocal constructions

Reciprocal arguments may be expressed by nouns, deictic or anaphoric pronouns, personal pronouns; they may be collective nouns such as *agu* ‘people’, *yameewu* ‘clan’, *âbeen* ‘foreigner, stranger’, etc. Reciprocal arguments may be coordinated nouns (see 38)).

⁹ Compare with the non-reciprocal transitive construction of *faxet* ‘to forbid, be taboo, set a taboo’:
na faxer-i ye. ‘I am in taboo relation to her.’ *Faxet* ‘taboo’ is also a noun, see (111).

- (37) *ma pe-hiiya i man ma Yul.*
 1DU.EXCL REC-be.jealous CONN us and Y.
 ‘Jules and I are jealous of each other.’ (lit. we two are jealous of us with Jules).
- (38) *hli pe-boima axomoo-n ma pwaxi-n thaamwa.*
 3DU REC-kiss mother-her and child-her girl
 ‘The mother and the girl kissed.’

Reciprocal nominal arguments are absolutive, except in transitive constructions with a non-coreferential direct or indirect object; the prime argument is then ergative as in (39a, b).

- (39)a. *hla u pe-weeng-i o foliik mahleeli a axamalaaleny.*
 3PL PFV REC-discuss-R CONN thing those.ANAPH AG these.DEICT
 ‘These men agreed on those things.’
- b. *hla u pe-weeng-i i thaamwa hleny.*
 3PL PFV REC-discuss-R CONN woman this.DEICT
 ‘They agreed about this woman.’

weenge is a transitive verb with an obligatory inanimate object. The transitive construction would thus be direct: *hla weenge foliik* ‘they agreed on that’ (see (15a)). The reciprocal construction requires the demotion of the direct object to the oblique position. But this is due to the specific argument structure of this verb and not to any general rule concerning the case marking of the object in a reciprocal construction, as sometimes occurs in some languages: “the morphosyntactic behaviour of verbs designating natural reciprocal events varies. In some languages, such verbs must always be intransitive; if there is an affected entity in addition to the two mutually involved participants, it must receive coding different from ordinary objects (e.g. in Manam, which requires such objects to appear in the dative). In other languages, such verbs may take object noun phrases [...] although these NP may lack some syntactic properties of objects.” Kemmer (1993:107).

In Nêlêmwa, there is no such general restriction, the direct or indirect construction of the object is due to the argument structure of the verbs (see (26b), (27) for direct object, (29) and (40) for indirect object).

- (40) *hla pe-hiiya-i o doo ru yameewu.*
 3PL REC-be jealous-R CONN land AG clan
 ‘These clans are jealous of each other because of the land.’

3.2 Object-oriented reciprocity

With transitive verbs, object arguments may be reciprocal; they are mostly –though not exclusively (see (44b))– inanimates set in this type of relation by an animate being. Subject pronouns may be singular, dual or plural. Transitive flexions vary with the ± human, ± animate feature of the object. Object arguments may be dual or plural.

Compare (41a) and (41b): *hiwi-lî* is the transitive form (+inanimate) of *hiwi* ‘to rub, grate’. Without *pe-*, (41b) would mean that he is rubbing his hands, but not against each other.

(41)a. *i hiwi-lî hele.* ‘He is sharpening the knife.’

b. *i pe-hiwi-lî ara-yi-n mali a âlô eli.*
 3SG REC-rub-TR palm-hand-his the.2 AG child this.ANAPH
 ‘The child is rubbing his hands (together).’

khi ‘to hit, strike, knock’ is a transitive verb without flexion; omission of *pe-* in (42b) would mean that the metal pieces are not hit against each other:

(42)a. *i khi ga.* ‘He knocks on the bamboo (to call on people).’

b. *i pe-khi dooviu mahliili.*
 3SG REC-hit iron those2.ANAPH
 ‘He hit the two metal pieces against each other.’

Compare the transitive construction in (43a) with (43b), where *pe-* signals that a plurality of objects are set in identical positions, with notions of adjustment, union, junction and symmetry. *pe-* is prefixed to the locution *na bwaa-t* ‘to put on top/head’ with the meaning ‘to pile up’. Since subject and object arguments are not coreferential, the nominal prime argument is ergative:

(43)a. *i na ara-tin bwa taap a Polie.*
 3SG put CLF.empty-tin on table AG P.
 ‘Polie puts the empty tin on the table.’

b. *i pe-na bwaa-t ara-tin a Polie.*
 3SG REC-put top-of it CLF.empty-tin AG P.
 ‘Polie piles up empty tins.’

Compare subject-oriented reciprocity in (44a) and (18b) with object-oriented reciprocity in (44b). *Agu* ‘people’ belongs to the category of collective human nouns and triggers the transitive flexion of inanimates (*fuuge*) as in (44b), which is evidence that *-i* in *wuug-i* (see (44a)) is the reciprocal suffix. (vi *fuung* ‘to pile up, gather’, vt *fuuge* (+inanimate or collective human object), vt *fuugi* (+ definite human object)). Note consonant lenition [f] > [w]):

(44)a. *hâ pe-wuug-i agu Pum ma agu Cavet.*
 we REC-gather-R people P. and people T.
 ‘We people from Poum and people from Tiabet have gathered.’

b. *hâ pe-wuug-e agu Pum ma agu Cavet me hla pe-tax-i do.*
 we REC-gather-TR people P. and people T. AIM 3PL REC-give-R forgiving
 ‘We have gathered people from Poum and Tiabet together so they forgive one another.’

Compare transitive (45a) and reciprocal (45b) in which *pe-* stresses object reciprocity and symmetry (*kêêlâ* is a transitive verb without flexion):

(45)a. *i u kêêlâ fââlô nai ye a Kaavo.*
 3SG PFV join route LOC 3SG AG K.
 ‘Kaavo joins him on the way.’ (lit. joins her way to him).

b. *i (pe-)kêêlâ kha mahliili a kêâma-n.*
 3SG (REC)-join liana those2.ANAPH AG father-his
 ‘His father is joining the two ropes end to end.’

Such a construction with *pe-* requires that object arguments be in genuine reciprocal and symmetrical relationship; it cannot express object sociativity (see 8.1.2).

4. Causatives and reciprocals

The prefix *pe-* can be associated with the causative prefix *fa-*. But while causative diathesis marks the causer/agent in the ergative (see (46b)), when associated with the reciprocal prefix, the causer is in the absolutive (see (46d)) as in any canonical reciprocal construction. Compare reciprocal (46c) and causative reciprocal (46d):

- (46)a. *hli kâlaxi i ye a kââma-n ma axomoo-n.*
 3DU be.ashamed CONN 3SG AG father-his and mother-his
 ‘His father and mother are ashamed of him.’
- b. *hli fa-kâlaxi i ye a kââma-n ma axomoo-n.*
 ‘His father and mother are making him feel ashamed.’
- c. *hli pe-kâlaxi kââma-n ma axomoo-n.*
 ‘His father and mother are ashamed of each other.’
- d. *hli pe-fa-kâlaxi agu mahliili.*
 ‘Those two persons are making each other feel ashamed.’ (*agu* is absolutive)

A causative reciprocal construction, as in (46d), can only express causers who are reciprocally involved in the situation. If the causer and the reciprocal arguments are not coreferential, a periphrastic causative construction is used with the verb *diya me* ‘to do in such a way that’; see also (60).

- (47) *hla diya me hla pe-khua-i tavia.*
 3PL make AIM 3PL REC-bite-R dog
 ‘They are making the dogs bite each other.’

5. *pe-* and lexical reciprocals

With active intransitive verbs which are lexical reciprocals, *pe-* stresses reciprocity:

- (48)a. *hla holae Anet.* ‘They said good-bye to/took leave of Annette.’
 b. *hli pe-holae.* ‘They say good-bye to each other.’
- (49)a. *hla whaayap.* ‘They make war.’ (against someone)
 b. *hla pe-whaayap agu Pum.* ‘People in Poum are fighting one another.’

jeuk ‘to be near’ is a locative predicate; without *pe-*, (50) would mean that the houses are close to another reference point, but not to each other:

- (50) *pe-jeuk awôlô mahleena.*
 REC-be.near dwelling these.DEICT
 ‘These dwellings are close to each other.’

In (51) *jeuk* has prepositional function with the meaning ‘close to’ in association with preposition *i* (+ humans) and *o* (+ inanimates). *pe-* expresses reciprocity and symmetry;

and without *pe-*, (51) would mean that they live close to another point of reference, but not to each other:

- (51) *hla mu pe-jeux-i hla.*
 3PL stay REC-near-CONN 3PL
 ‘They live close to each other.’

With stative verbs expressing quality and comparison or difference, such as *khare* ‘to be different, be a stranger’, *maariik* ‘to be similar’, the prefix *pe-* indicates that the property (similarity or difference) applies reciprocally to the arguments. Compare non-reciprocal (52a, b) and reciprocal (52c):

- (52)a. *hli khare.* ‘They are different (from us), strangers (to us).’
 b. *na khare nai yo.*
 1SG be.different LOC you
 ‘I am different from you.’ (transitive construction with indirect object)
 c. *hli pe-xare.* ‘They are different from each other.’

The reciprocal expression *pe-xare* has undergone lexical fossilisation and is re-analysed as a verbal modifier in (53a, b) meaning ‘separately from each other’.

- (53)a. *hla o pe-xare* ‘They go their own way.’ (*o* ‘to go’; mutual relation)
 b. *hla hnawo pe-xare* ‘They make a gift separately.’ (*hnawo* ‘to leave, give’)

It is also reinterpreted as a verb liable to be marked by the transitive suffix *-li*, with the meaning ‘to separate, put aside’, in (54):

- (54) *na pe-xare-li.* ‘I put them aside.’ [from each other] (object-oriented)

The verb *maariik* ‘to be similar’ is also a lexical reciprocal. When *maariik* has an inanimate argument, *pe-* is optional and merely stresses reciprocity:

- (55) *(pe-)maariik puyeva-t.*¹⁰
 (REC)-be.similar height-of.it
 ‘They are the same height.’ (lit. its height is similar)

But with a human argument, *pe-* is obligatory; there are few such cases in Nêlêmwa:

- (56) *hli pe-maariik âlô mahliili.*
 3DU REC-be.similar child these.ANAPH
 ‘These children are similar to each other.’ (**hli maariik*)

6. Lexicalisation with *pe-*

6.1 Incomplete fossilisation

Some lexicalised reciprocals are only partially fossilised and their constituent elements may still be dissociated. Their meaning is usually different from that of the root.

¹⁰ The inanimate possessive pronoun *-t* is compatible with singular or plural referents.

The verb *pe-regek* ‘to be stuck’ is analysable into *pe-+tegek* (intervocalic lenition [t] > [r]); *tegek* ‘to be caught, hooked, resist’ also has an abstract meaning ‘to be difficult’ and expresses resistance. Its meaning varies with the ± human feature of the argument. It does not imply any symmetry (X catches, Y is caught):

- (57) *tegek pwiak bwa pânâât.*
 be.caught net on rock
 ‘The net is caught on the rock.’

In (58), *pe-* expresses reciprocal and close contact, though the relation involved (rice/pot) is asymmetrical. The optional presence of a singular subject pronoun *i* is evidence that some kind of semantic fossilisation has occurred.

- (58) (*i*) *peregek lai ni cet.*
 (3SG) be.stuck rice in pot
 ‘The rice sticks to the pot.’

The prefix *pe-* expresses symmetry only when both participants belong to the same category, as in (59) where the prefixation of *taa-* has stative and resultative meaning.

- (59) *taa-veregek duu tiiwo hleny.*
 STAT-be.stuck leaf book this.DEICT
 ‘The pages of this book are stuck to each other.’
 (Note the intervocalic consonant lenition: [p] > [v] and [t] > [r] in the verb).

Such a form does not (yet?) allow an agent argument and is not yet interpreted as an active transitive verb, a lexical causative periphrasis is mandatory (see Section 4.). This lexical causative is the verb *diya* ‘to make’ associated with *me* ‘in order to, so that’:

- (60) *na diya me peregek duu tiiwo hleny.*
 1SG do AIM be.stuck leaf book this
 ‘I am sticking the pages of this book together.’ (in process)
- (61) *hla diya me taa-veregek duu tiiwo hleny.*
 3PL do AIM STAT-be.stuck leaf book this.DEICT
 ‘They have glued the pages of this book.’ (perfective, resultative aspect)

In the case of *peru-i*, which is both a noun ‘meeting’ and a verb ‘to meet, gather’, the fossilisation of < *pe-+tu* ‘to find, encounter’+ the reciprocal suffix *R-i* > is complete. Yet subject pronoun agreement is still dual or plural; cf.:

- (62)a. *i tu-e* ‘He finds her.’
 b. *hâ perui* ‘We have met’ (or) ‘See you soon!’

The comitative/co-agentive *ma* introduces the co-agent; the dual subject pronoun refers to the sum of participants:

- c. *mo perui ma ti?*
 2DU.EXCL meet COM who?
 ‘Who have you met?’ (lit. You met with whom?)

The word *pexaagiik* is a modifier analysable as *pe-* + *khaa* (distributive morpheme ‘each’) + *-giik* (numeral suffix ‘one’, it is generally suffixed to a numeral classifier to

count classes of objects). *-xaagiik* cannot be used autonomously. *Pexaagiik* expresses sequential, symmetrical relations and chain relations.

- (63) *hla shaya pe-xaa-giik.*
 3PL work REC-DISTR-one
 ‘They work in turn.’

The unit *pe-o-xaagiik* is composed of *pe-*+ *o* ‘to go’+ *khaa* (distributive)+*giik* ‘one’; *pe-* marks the distributive meaning as applying symmetrically to the arguments.

- (64) *hli u pe-o-xaa-giik.*
 3DU PFV REC-go-DISTR-one
 ‘They each went their own way.’

6.2 Complete fossilisation

In such cases, the constituent elements are no longer analysable and the root may not even be distinguished. Yet, *pe-* retains its full reciprocal meaning and these expressions only accept dual or plural subject pronouns.

The unit *pewhan* is both a noun ‘oath, agreement’ and an intransitive verb ‘to swear, promise, take an oath, espouse’; but *whan* has no lexical autonomy.

- (65)a. *hli pe-whan* ‘They got married.’ (‘took an oath’)

- b. *hli pe-whan me io i na shi-n.*
 3DU REC-take.an.oath COMP FUT 3SG give BEN-his
 ‘They agreed that he would give it to him.’

Similarly, *penudavi* ‘to meet on the way’ is always used with dual or plural subject pronouns, which points out its reciprocal origin (*nudavi* has no lexical autonomy).

- (66) *ma penudavi ma thaamwa dalaen.*
 1DU.EXCL meet COM woman European
 ‘I met the European lady on the way.’ (lit. we met on the way, the European lady and I)

Finally, there are cases of metaphorical resemanticization which change the meaning of the root. Thus, *pe-oda-i* ‘to fight, argue’ is derived from *oda* ‘to go up’:

- (67) *hli pe-oda-i nai âlô ena a hliili thaamwa.*
 3DU REC-oppose-R LOC child this.DEICT AG those2.ANAPH woman
 ‘Those women argue about this child.’

Similarly, when the verb compound *o-wuung* (*o* ‘to go’ + *wuung* ‘together’) is prefixed by *pe-*, it has the specific meaning ‘to be allied’:

- (68) *hli pe-o-wuung* ‘They are allies.’ (lit. they go together).

7. Sequential and chain reciprocity

7.1 Sequential reciprocity

Reciprocity is generally associated with simultaneous processes, but lexical semantics may inflect it towards sequentiality. Thus, sequential reciprocity (i.e. ‘done in turn’), appears in (26b), (30), (31b). The relationship is symmetrical.

(69) *hla pe-pae balô a âlô mahleena.*
3PL REC-throw ball AG child these.DEICT

‘The children are throwing the ball to one another.’ (sequential and reciprocal)

The item *kuluk* ‘to hide from view’ is another such example.

(70) *hla pe-kuluk hleeli âlô.* ‘Those children play hide and seek.’ (they hide in turn)

Intransitive *kuut* ‘to stand’ allows an indirect transitive construction with the preposition *shi-* :

(71)a. *hla kuut shi-hla.* ‘They visit them.’

b. *hla pe-kuut shi-hla.* ‘They visit one another.’

(the subject pronoun *hla* and the recipient *shi-hla* are coreferential).

7.2 Chaining

In some lexical contexts, *pe-* may express chaining, that is a single event in which participants are involved symmetrically ($X > Y > Z$), though not reciprocally. Compare the transitive construction in (72a) with chaining in (72b) :

(72)a. *hla oxo-hla a agu mahleeli.*
3PL follow-3PL AG people those.ANAPH

‘These people follow them.’

b. *hla pe-oxo-i.* ‘They walk in line.’

8. Polysemy of *pe-*

8.1 Sociative meaning of *pe-*

8.1.1 Sociative subject arguments

The prefix *pe-* may refer to collective actors simultaneously involved in a common and identical process. Relation is thus symmetrical, but non-reciprocal. Verbal semantics acts as a filter to allow the reciprocal or sociative interpretation.

(73) *hla pe-gi.* ‘They are crying together.’ (vi *gi*, vt *gîlî*)

(74) *hla pe-khuwo.* ‘They eat together.’

With transitive verbs, the sociative marker *pe-* may only refer to a collective subject argument; sociative objects are expressed lexically. As there are two non-coreferential arguments, the prime argument is ergative.

- (75) *hla pe-gîllî maaxa i aayo a hlaabai agu bwa fwamwa.*
 3PL REC-mourn.TR death CONN chief AG those.ANAPH people in country
 ‘The inhabitants of the country mourn the chief’s death together.’
- (76) *hla pe-taxe hnoot ru agu.*
 3PL REC-give.TR wealth AG people
 ‘People give away the riches together.’
 (Cf. with reciprocal constructions in (27), (28)).

8.1.2 Prefix *pe-* with lexical expressions of the sociative meaning

In case of semantic ambiguity between the reciprocal and the collective meaning, or between the intensive and the collective meaning as in (77b) (see Section 8.3), the sociative meaning of *pe-* may be emphasized by the adverb *wuung* ‘together’ (77c), derived from the verb *fuung* ‘to gather, pile’. The construction in (77c) is emphatic in comparison with (77a).

- (77) a. *hâ shaya wuung.* ‘We work together.’
 b. *hâ pe-shaya.* ‘We work fast.’ (or) ‘We work together.’
 c. *hâ pe-shaya wuung.* ‘We work together.’

The sociative meaning of *pe-* may also be disambiguated and emphasized by the prepositional noun *mudi-* ‘in company of’, as in (78b), (see also (106)).

- (78)a. *co â mudi thaamwa ena.*
 2SG go company woman this.DEICT
 ‘Go with this woman.’
- b. *hla pe-â mudi-hla.*
 3PL REC-go company-their.PL
 ‘They went away/left together.’

Without *mudi-*, (78b) might be interpreted as diversative in meaning (see 8.4.2).

8.1.3 Lexical expressions of sociative objects

Object sociativity may only be marked by adverbial and lexical items (such as *wuung*); *pe-* only refers to sociative subjects. The adverb *wuung* makes up a complex predicate with the verb and shows transitive agreement with it:

- (79) *i shaawô-lî wuug-e shimiz me taraushi.*
 3S wash-TR together-TR shirt and trousers
 ‘She is washing the shirt and the pair of trousers together.’
- (80) *hâ fuug-e wuug-e duu ciic.*
 1PL.INCL gather-TR together-TR leaf tree
 ‘We have gathered the leaves of the tree together.’

8.2 Sociative and competitive meaning

Competition is one of the pragmatic interpretations of a collective process, it is conditioned by the semantics of the verb and its object, a single object common to all participants or an object specific to each of them (as in (83)). Competition involves more or less reciprocal and simultaneous actions. Compare the transitive and reciprocal

constructions below (*khaaxa* ‘to push, drive in’ and *khaaya* ‘to give a tug’ are transitive verbs without flexion):

- (81)a. *i khaaxa-e du.*
 3SG push-3SG down
 ‘He pushed him down.’
 b. *hla pe-khaaxa do.* ‘They compete at assagai throwing.’
- (82)a. *hla khaaya-e na ni delek*
 3PL tug-3SG LOC in mud
 ‘They took him out of the mud.’
 b. *hla pe-khaaya-i.*
 3PL REC-tug-R
 ‘They compete at tug-of-war.’ (simultaneous)
- (83) *hli pe-kur-i doo-hla.*
 3DU REC-stick-R assagai-their.PL
 ‘They compete at throwing their assagai.’ (simultaneously or in turn)
 (Here *-i* is the reciprocal suffix; the transitive form of the verb with inanimate objects being *kure*).

8.3 Intensive meaning

This meaning may derive from the sociative meaning ‘to do together’ to that of ‘to do quickly’. In this case, *pe-* means ‘to achieve a goal quickly, reach a high intensity, be fast’. Subject pronouns may be in any number, including singular (as in (85)). There are possible ambiguities with the sociative meaning, as in (84a) where, according to context, *pe-khoxo* (< *khoxo* ‘to be numerous, in great amount’) may mean ‘to be numerous together’ (sociative) or ‘to increase, be more numerous’ (intensive).

- (84)a. *pe-khoxo* ‘They are numerous together’, or ‘It increases’.
 b. *i diya me pe-khoxo.* ‘He did it so that there should be a great amount soon.’
- (85) *na pe-diya me toven.* ‘I did it fast to finish it.’
 (86) *hla pe-shaya.* ‘They work fast’, (or) ‘They move fast.’
 As in other Kanak languages, *shaya* means both ‘to move’ and ‘to work’.

Possible ambiguity with the sociative meaning is avoided by addition of lexical items such as *wuung* or *mudi-* (see (77b, c)). Some verb types may also filter the meaning: thus *bwaa* ‘to leave’ in (87) does not admit the sociative meaning of *pe-* (see (78b) for the sociative meaning ‘to leave together’).

- (87) *co yage-i-na ma io hî pe-bwaa.*
 2SG help-TR-me AIM FUT 1DU.INCL REC-leave
 ‘You helped me so we could leave earlier.’
- (88) *pe-noot at, pe-khîlî at.*
 REC-wake.up sun REC-heat sun
 ‘Let the sun wake up soon and heat soon.’ (children’s song)
- (89) *kio pe-top ciic hleny.*
 NEG REC-rot wood this.DEICT
 ‘This wood does not rot fast.’

- (90) *i gi me i pe-hmoric mwa.*
 3SG cry and 3SG REC-have.hiccups in.the.end
 ‘He cried to the point of having hiccups.’

With active verbs, *pe-* may infrequently express iteration, but does not express duration:

- (91) *i pe-thalic* ‘She stumbles.’ (over and over again; *thalic* ‘to stumble’)

In other Kanak languages (Nemi, Ozanne-Rivierre 1979; Cèmuhi, Rivierre 1980; Ajië, La Fontinelle 1976), the polysemous reciprocal-middle prefix expresses the sociative/collective meaning, intensity, iteration, and duration (verbal semantics allowing).

8.4 Non-volitional, undirected, separative action, diversative meaning

The prefix *pe-* also has a variety of interrelated meanings, with no clear boundary between them; both context and verbal semantics help direct the interpretation.

8.4.1 Non-volitional, undirected meaning

The prefix *pe-* may signal spontaneous, accidental events that escape intentionality, occur independently from the actor, are done without concertation, project or partner, thus in opposition to the sociative meaning.

— With an inanimate argument, *pe-* has anticausative interpretation as in (92b) and stresses the non-directed, non-volitional meaning:

- (92)a. *ku nuk fagau mwa.*
 PFV fall body house
 ‘The wall of the house fell down.’
- b. *pe-nuk du bwa doo pwâ-mâgo.*
 REC-fall DIR on earth fruit-mango
 ‘Mangoes are falling.’ (without anyone shaking the tree, because they are ripe and numerous)

— With human agents and active verbs such as *diya* ‘to do’, *pe-* denotes a tentative undertaking done without any clear project, without any effort or specific intention, listlessly, with various degrees of success. It may have some adversative undertone. Context and verbal semantics help interpret such a meaning.

- (93) *i u pe-kâlap mwamaidu.*
 3SG PFV REC-lie.down over.there.down
 ‘He lay down.’ (having nothing else to do).
- (94) *na pe-â bwa on.*
 1SG REC-leave on sand
 ‘I go by the beach.’
- (95) *va pe-diya fagau mwa.*
 IPL.EXCL REC-make body house
 ‘We have tried to build the wall of the house.’ (as might be, without any preconceived plan or idea)

- (96) *na pe-diya yumwêlî.*
 1SG REC-do thus
 ‘I am doing this just so.’ (without much enthusiasm)

8.4.2 *Diversative or separative meaning*

With this meaning, *pe-* is prefixed to active verbs. Subject agreement may be in any number. The diversative meaning of *pe-* is semantically related to the notion of an undirected action, performed separately, on one’s own (the reverse of the sociative meaning), as in (97):

- (97) *wa pe-diya roven fo awa-wa.*
 2PL REC-do all there.is will-your
 ‘You may do as you wish.’

With verbs of movement, *pe-* has the meaning ‘here and there’, ‘(done) aimlessly’:

- (98) *bu na xe na gaa pe-hâga du hmwiny.*
 as.for 1SG TOP 1SG DUR REC-fish down here
 ‘As for me, I’m going to go on fishing around here.’ (listlessly, with no intention of catching any specific type of fish in any specific place).

With dual or plural subjects, there may be semantic ambiguities between the sociative and diversative readings of *pe-*, as in (99). Context, verbal semantics and additional adverbs help disambiguate the meaning.

- (99) *hla pe-hâgee mat.*
 3PL REC-fish at.low.tide
 ‘They are fishing together.’ (or) ‘They are fishing here and there at low tide.’

8.4.3 *Lexical expression of the diversative/separative meaning*

Various adverbs, such as *hayu* ‘without aim, carelessly’ and *hada* ‘alone’, help disambiguate or stress the diversative/separative meaning of *pe-*. Thus, without the adverbs, examples (100b) and (101b) might be interpreted as intensive: *i pe-vhaa* ‘he speaks away’ and *i u pe-shaya* ‘he has worked/moved fast’. With a dual or plural subject pronoun, there might be some ambiguity with the sociative meaning, which would then be disambiguated by *wuung* ‘together’ (as in (77c)). As in the case of *wuung*, *hada* and *hayu* suffice to express the separative meaning, their association with *pe-* is emphatic:

— *hada* ‘alone’

- (100)a. *i vhaa hada.* ‘He alone is speaking.’
 b. *i pe-vhaa hada.* ‘He speaks for himself.’ (i.e. in his own name, not expressing a consensus)

— *hayu* ‘haphazardly, without project’

- (101)a. *i shaya-ayu.* ‘He works carelessly.’ (without any method).
 b. *i u pe-shaya-ayu.*
 3SG PFV REC-work-careless
 ‘He has worked carelessly.’ (the intervocalic aspirate of *hayu* is deleted)

9. Reciprocals and sociatives derived from nouns

9.1 Reciprocal nominal predicates with *pe-*: Comparison, symmetry and identity

This function of *pe-* appears when it is prefixed to nouns in predicative function. It may be prefixed to any type of noun (for example, denoting body parts and position). These nominal predicates are stative in meaning and *pe-* expresses symmetry, comparison of equality and identity (of function, direction, position). These nominal predicates retain their possessive determiners, but may have a subject pronoun just like verbs. In the reciprocal construction, the subject pronoun is then coreferential with a possessive determiner (as in (102), (115)).

— Symmetrical position.

1. *duaxa-t* ‘its back’, *duaxa-n* ‘his back’:

- (102) *ma pe-duaxa-man i man.* (or: *ma pe-duaxa-i*).
IDU REC-back-our.DU CONN us.DU
‘We are back to back.’ (lit. we are reciprocally our back to us).

2. *aramaa-t* ‘face’, *aramaa-n* ‘his face’:

- (103) *ma pe-aramaa-man i man* (or) *ma pe-aramaa-i*.
IDU REC-face-our.DU CONN us.DU
‘We are facing each other.’ (lit. we are reciprocally our face to us).

3. *ida-t* ‘line, row’; *pe-ida-t* ‘be on the same line’:

- (104) *pe-ida-t dau eli me Negec.*
REC-line-of.it island this.ANAPH COORD Negec
‘That island is on a line with Negec.’ (it lies in a line with the island of Negec).

4. *avi-t* ‘side, flank’; *pe-avi-t* ‘to fit, be adjusted’:

- (105) *co paage kawa me pe-avi-t.*
2SG lay.out corrugated.iron AIM REC-side-of.it
‘Lay out the sheets of corrugated iron so that they fit together.’

— Same direction.

fââla-t ‘way, journey, route’

- (106) *pe-fââla-man ma ye.*
REC-route-our.DU with 3SG
‘He and I have travelled together.’

— Symmetrical quality or quantity.

1. *thala-t* ‘side, flank, width’; *pe-rala-t* ‘to be the same width’:

(107) *pe-rala-hla*.¹¹ ‘They are the same width.’

2. *ura-t* ‘length, distance’; *pe-ura-t* ‘to be the same length, distance’:

(108) *pe-ura-hli* ‘Both are the same length.’
(agreement in the dual is compulsory, **pe-ura-t*)

3. *ka* ‘year’; *pe-kau-n* ‘to be the same age’ (*ka* changes to *kau-* before possessive determination):

(109) *pe-kau-hli ma Yul* ‘He is as old as Jules.’
REC-year-their.DU with J.

4. *khora-t* ‘piece of’; *pe-khoda da* ‘to be one blood’ (*da* ‘blood’):

(110) *va pe-khoda da*. ‘We (are) the same blood’; ‘our family.’

5. *faxet* ‘taboo’; *pe-faxet* ‘to be in taboo relationship’:

(111) *pe-faxer-i ha* ‘(It’s) our taboo relationship.’
REC-taboo-CONN 1DU.INCL

6. *bale-t* ‘the other’ (of a pair, a couple), ‘companion’:

(112) *kio pe-bale-t*. ‘It is not the (right) pair.’ (*bale-t* is the predicate)
NEG REC-companion-of.it

(113) *co na me pe-bale-t*. ‘Put them two by two.’
2SG put AIM REC-companion-of.it

7. *bala-t* ‘ally, partner’; (*bala-t* like *bale-t* is a lexical reciprocal); *pe-* stresses reciprocity or sociativity:

(114a) *bala-hla* ‘their partner’

(114b) *pe-bala-hla*. ‘They are partners/in the same team.’
REC-ally-their.PL

8. *khooba-t* ‘number of’; *pe-khooba-t* ‘be the same number’:

(115) *wa pe-khooba-wa* ‘You are equal in number.’
2PL REC-number-your.PL

9.2 Reciprocal nouns with argument function

Without *pe-*, (116) would mean ‘during their war’ without any reciprocity.

¹¹ When reciprocal arguments are inanimate nominals, the pronoun *-t* is retained:
pe-rala-t khaxa-yiic ‘The planks are the same width.’
REC-width-of.it piece.of-log

If they are pronouns, the possessive plural pronoun is compulsory: *pe-rala-hla* (not **pe-thala-t*).

- (116) *na ni hleeli pe-whaayaw-i¹² hla.*
 LOC in those.ANAPH REC-fight-CONN 3PL
 ‘during their mutual fight’ (lit. in the mutual fights of theirs)

Compare non-reciprocal (117a) with reciprocal (117b); the noun *puxi-t* ‘origin, cause, reason’ expresses causal relation;

- (117a) *hla peeve puxi-hla hî thaamwa bai.*
 3PL argue reason-their.PL this woman that.ANAPH
 ‘They argue on account of that woman.’
- (117b) *kia fo pe-puxi-man na i khiibwa-na.*
 there.is.not thing REC-reason-our but 3SG hit-me
 ‘He hit me without any reason between us.’
- (118) *kia pe-bale-t.*
 there.is.is.not REC-companion-of.it
 ‘The other (one of a pair, a couple) is missing.’ (*pe-bale-t* here is the nominal argument of the verb *kia*).
- (119) *hooli pe-bala-t ak.*
 that.ANAPH REC-ally-of.it man
 ‘a team of men’ (*ak* has attributive function and specifies *pe-bala-t*).

9.3 Sociative nouns and pronouns

The relation implied here is sociative and inclusive; the prefix expresses symmetrical membership to a group or to a whole.

— Prefixation of *pe-* to a noun or nominal group:

- (120) *pe-hmava-t* ‘patch-work’ (*hmava-t* ‘piece-of it’)
- (121) *pe-hlaabai thaamwa, pe-hlaabai ak*
 ‘those women (*thaamwa*) together, those men (*ak*) together’

— Prefixation of *pe-* to a deictic, directional pronoun or independent pronoun:

- (122) *pe-hleena, pe-hlaaleny, pe-hlaîdu, pe-yava*
 REC-these REC-these REC-these.down.there REC-1PL.INDEP
 ‘These together, these together, these down there together, we together.’
- (123) *xam pe-yamon, na ye hada!*
 ASS REC-2DU.INDEP but 3SG.INDEP alone
 ‘You are together, but he is alone!’ (as spokesman of his own views)

When prefixed to nouns, the polysemy of *pe-* is actually reduced to its two primitive meanings, viz. the reciprocal and the sociative.

¹² *whaayap* is a verb or a noun ‘(to make) war, fight’ with indirect possession marked by preposition *i*. Note intervocalic consonant lenition [p] > [w].

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Abbreviations

A	ergative nominal argument1	INSTR	instrumental
ACC	accomplished	ITER	iterative
ANAPH	anaphoric	LOC	localiser
ASP	aspect	MOD	modifier
ASS	assertive	NEG	negation
ASSOC	associative	o	bound pronoun object
BENEF	beneficiary	O	nominal direct object
CAUS	causative	Oi	indirect nominal object
CLASS	classifier	COLL.OBJ	collective object
COMIT	comitative	PL	plural
COMP	complementizer	LOC.PRED	locative predicate
CONT	continuous marker	NEG.PRED	negative predicate
COORD	coordination	REC	reciprocal
DEICT	deictic	CONN	connector (preposition)
DIR	directional	s	subject bound pronoun
DISTR	distributive	S	absolute nominal argument1
DU	dual	SG	singular
DUR	durative	TOP	topic marker
ERG	ergative	TR	transitive
EXCL	exclusive	VIRT	virtual
FACT	factitive	VI	intransitive verb
FUT	future	VT	transitive verb (bivalent)
INCL	inclusive	lit.	literal translation
INDEP	independent (pronoun)		

