# Plural words in Papuan languages of Alor-Pantar <br> ANTOINETTE SCHAPPER and MARIAN KLAMER Leiden University 

## 1. INTRODUCTION

The majority of the world's languages express nominal plurality by affixation. Dryer (2011) shows that after affixation, the use of independent plural words is the most widespread strategy: it is used in $16 \%$ of his sample of 1066 languages. Yet, 'plural words' have received remarkably little attention since their preliminary treatment in Dryer (1989). In this paper, we seek to further the investigation of plural words using data from the little-known Papuan languages of Alor and Pantar (AP) in south-eastern Indonesia (Map 1). ${ }^{1}$

Map 1: The Alor and Pantar languages (from Schapper 2011)


In this preliminary study, we examine the distribution of plural words reflecting Proto-AP *nong 'PL' in two modern AP languages: Kamang nung and Teiwa non. Kamang (Schapper 2011) has around 6,000 speakers living in Central-East Alor, Teiwa (Klamer 2010) has 4,000 speakers living in North-West Pantar. We show that the plural words in these closely related languages vary considerably both in their syntax and in their semantics. We suggest that the difference in grammar and meaning between plural words in these two languages betokens a hitherto unexpected cross-linguistic diversity that demands further research into plural words.

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## 2. SYNTAX OF PLURAL WORDS

In his treatments of plural words, Dryer (1989, 2007:166-168) notes that plural words vary widely in their categorical status. Dryer (1989) identifies plural words that map onto the following word classes: (i) plural words that are numerals; (ii) plural words that are articles; (iii) plural words that are part of a larger class of grammatical number words (e.g., words marking singular, dual, trial etc.) or, where there are multiple plural words in a single language, form their own class; (iv) plural words that are part of a small, closed class of noun modifiers. In addition, Dryer points out that there are several examples of plural words where the plural word appears to constitute its own single-item word class.

In our study of two closely related AP languages, we also find significant variation in the syntactic distribution of plural words, and hence word class membership. In Kamang, plural words, rather than actually being part of the noun phrase, have a distribution similar to that of a noun phrase. In Teiwa, plural words behave rather more like nominal quantifiers, although there are also differences between the distribution of plural word and quantifiers. These two languages thus illustrate new types of plural word categorical variation, furthering Dryer's introductory survey.

### 2.1. Kamang

The template of the Kamang noun phrase (NP) is presented in (1). The NP is maximally composed of a head noun ( $\mathrm{N}_{\text {HEAD }}$ ) followed by its attribute (ATTR), a numeral classifier (CLF), a numeral (NUM), a relative clause (RC), a demonstrative (DEM) and an article (ART). The article marks the right edge of an NP and is used to nominalise (i.e., create NPs from) clauses and other non-nominal phrases in the language. In addition, a Kamang NP can occur with a range of items co-referential with it in a slot outside the NP, called here the NP-appositional (APPOS) slot (discussed further below). The apposition between an NP and an item in the NPappositional slot is syntactically tight: there is no intonational break or pause between NP and appositional item, and no item may intervene between them.

The plural word nung (glossed 'PL') is conspicuously absent from the above template. In Kamang nung does not occur within the NP, but directly follows it. That is, it occurs to the right of the NP article, where one is expressed. For example, in (2) and (3) nung follows the specific ('SPEC') and definite ('DEF') articles respectively. ${ }^{\text {' }}$

[^1]The alternative order with the article following nung is not grammatical: *nung=a ' $\mathrm{PL}=\mathrm{SPEC}$ ' and *nung $=a k$ ' $\mathrm{PL}=\mathrm{DEF}$ '. In short, Kamang nung only occurs in the NPappositional slot.

## (2) almakang laising-laung=a nung ye'-baa sue. people youthful=SPEC PL 3.BEN-say arrive

 'Go tell the young people to come.'(3) muut=ak nung iduka.
citrus=DEF PL sweet
'The citrus fruits are sweet.'
By contrast, other Kamang quantifiers can occur within the NP, i.e., to the left of the NP-defining article. Non-numeral quantifiers, such as adu 'many/much' in (4), occupy the Attr slot in the NP. Kamang does not have a syntactic class of nonnumeral quantifiers; items denoting many, few, a little etc. are adjectives. Numeral quantifiers occur with a classifier in its own phrase, the numeral phrase (NUMP). The NUMP has two positions: (i) its unmarked position in the NP to the left of the article (5a), and; (ii) a marked position where the NumP is post-posed into the NPappositional slot outside the NP (5b). The latter position is less frequent and pragmatically marked, functioning to topicalise the enumeration of the NP referent.
a.

| sibe | $a d u=a$ |
| :--- | :--- |
| chicken many=SPEC |  |
| 'the many chickens' |  |

b. $\quad$ sibe $=a \quad a d u$ chicken=SPEC many
a. sibe $\quad[u h \quad s u]_{\text {NumP }}=a$ chicken CLF three=SPEC 'the three chickens'
b. $s i b e=a \quad[u h \quad s u]_{\text {Nump }}$ chicken=SPEC CLF three 'the chickens, the three ones'

The plural word shares distributional properties in common not only with a NUMP but also with a pronoun, since the NP-appositional position can also host a pronoun. In (6) we see that a pronoun (6a) and a plural word (6b) respectively can both occur in the slot following an NP. (The curly brackets are used to represent the meaning of elements in the appositional slot.) In (6a) the $3^{\text {rd }}$ person contrastive focus pronoun gera '3.CONTR' has the same referent as the NP and thus is appositional to it.

| a. | almakang $=a k$ | gera |
| :---: | :---: | :---: |
|  | people $=$ DEF | 3.CONT |
| b. | 'the \{specific group of\} people \{not some other group\}' |  |
|  | almakang=ak | nung |
|  | people=DEF | PL |
|  | 'the \{multiple |  |

The Kamang plural word has a distribution similar to that of an NP in two respects. Firstly, nung can substitute for a whole NP, where reference is sufficiently clear. For instance, in (7) nung is the sole element representing the S of the verb sue 'come'. Secondly, like an NP, a plural word can itself occur with a pronoun in the NP appositional slot where no NP is expressed, as in (8).

## nung sue.

PL arrive
' $\{$ Multiple $\}$ (people) arrived.'

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nung gera sue.
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PL 3.CONTR arrive
' $\{$ Multiple other\} (people) arrived.'
In sum, the Kamang plural word nung is not part of the NP. Nung stands apposite to the NP in the manner of a pronoun, but like an NP it can stand alone in an argument NP slot and take an appositional pronoun itself.

### 2.2. Teiwa

The template of the Teiwa NP is presented in (9). The NP is maximally composed of a head noun ( $\mathrm{N}_{\text {HEAD }}$ ) followed by its attribute (ATTR), followed by expressions of nominal quantity (QUANT; further explained below), a demonstrative (DEM) and a demonstrative particle (PART).

Template of the Teiwa NP
$\left[\mathrm{N}_{\text {head }} \text { Attr Quant Dem Part }\right]_{\text {NP }}$
A Teiwa NP typically contains a head noun and only one modifier, often an attribute (noun, derived nominal or adjective). In the DEM slot, we most frequently find ga'an (glossed as 'that.KNWN'), a 3SG object pronoun that also functions as a demonstrative modifier of nouns. In the PART slot are the demonstrative particles $u$ 'distal' and $a$ 'proximate'. These occupy the NP-final position and mark definiteness and/or the location of NP referent with respect to the speaker.

The Teiwa plural word non 'PL' is positioned in the quantity slot (QUANT) of the NP. Non must remain within the scope of the demonstratives, as seen in (10a) and (11a). It is not a nominal element and can neither project its own NP (11b) nor stand alone in an argument NP slot in an intransitive (10b, 11b) or transitive (12) clause.
a. uy non ga'an u aria-n maan?
person PL that.KNWN DIST arrive-REAL NEG
'Did many of the people come? (we know whom to expect)
b. * non ga'an u aria-n maan?
$\begin{array}{lllll} & \text { PL that.KNWN DIST } & \text { arrive-REAL } \\ \text { a. } & \text { toples } & \text { non } & \text { ga'an } \\ \text { dekal } & \text { gula'. }\end{array}$ 'Someone broke several / Several have been broken'

The Quantity slot can contain either a numeral or a non-numeral quantifier, see (13). Numerals are optionally accompanied by a numeral classifier, (13a). Nonnumeral quantity is expressed by either a plural word, or quantifiers such as aga' 'all' and dum 'much, many', or by a combination of plural word and quantifier (13b).

Quantity
a. Numeral

Num, Clf Num
b. Non-numeral

Pl, Quant, Pl Quant
A single NP can only contain one type of quantity phrase (14a-14c). Expressions of numeral and non-numeral quantity are mutually exclusive (14d-14f).

| a. | war <br> rock | haraq <br> two |  |
| :---: | :---: | :---: | :---: |
|  | 'two rocks' |  |  |
| b. | war | bag | haraqtwo |
|  | rock | CLF |  |
|  | 'two | cks' |  |
| c. | war | non |  |
|  | rock | PL |  |
|  | 'several/many rocks' |  |  |
| d. * | war | bag | non |
|  | rock | CLF | PL |
| e. * | war | haraq | non |
|  | rock | two | PL |
| f. * | war | bag | haraq |
|  | rock | CLF | two |

In other words, neither quantifiers nor plural words combine with numeral expressions.

However, it is possible for plural words and non-numeral quantifiers to co-occur. Illustrations are given in (15).
a. yaf non aga' ga'an un tas-an piling. house PL all that.KNWN CONT stand-REAL line.up 'All these houses are standing lined up.'
b. hala qif non dum pin aria'? someone goat PL many hold arrive 'Where the many goats brought here?'

This all serves to make a complex picture of non's categorial status. The fact that non does not combine with a numeral may be thought to suggest that it belongs to the numeral word class. However, on the one hand, non cannot combine with a classifier, while numerals can; on the other hand, non combines with a quantifier, which numerals cannot. At the same time, non cannot be considered a non-numeral quantifier for two reasons: (i) non-numeral quantifiers can occur as predicates, while non cannot (16), and; (ii) non-numeral quantifiers can occur both inside the NP (17a) and outside of it, adjacent to the verb (17b); while non must remain within it. In (17c), the NP contains non, and the ungrammaticality of (17d) shows that non cannot float to the position adjacent to the verb.

| a. | masar | un | dum. |
| :---: | :---: | :---: | :---: |
|  | male | CONT | many |
|  | 'There are many men.' (lit. 'Males [are] being many.') |  |  |
| b. * | masar | un | non. |
|  | man | CONT | PL |

Intended: 'There are several males.'


In sum, the Teiwa plural word non is a quantifying element that is part of the NP. It constitutes its own word class and cannot occur in a position outside the NP.

## 3. SEMANTICS OF PLURAL WORDS

In Dryer (1989: 865) a plural word is defined as 'a morpheme whose meaning and function is similar to that of plural affixes in other languages', in Dryer (2007: 166) a plural word is '[a word] whose meaning is similar to that of plural affixes in other languages, but which are separate words'. In Kamang and Teiwa, plural words not simply encode plurality, but also share some of the semantics of nominal quantifiers such as 'several' or 'many/much': they express a notion of vague quantity whose interpretation is context sensitive; and can impose individuating, distributive or partitive readings on the noun.

### 3.1. Kamang

The Kamang plural word nung is not restricted to marking plurality of particular kinds of referents (see the examples in section 2.1). That is, nung can occur with nouns of both animate an inanimate reference. Typically nung is used with count nouns, but it can also mark mass nouns. In this case, nung imposes an individuated reading on the noun. For instance, in (18a) the mass noun ili 'water' occurs with the plural word and denotes several different individuated referents, such as glasses or pools of water. The same individuation also occurs when a mass noun is combined with a quantifier, such as the numeral nok 'one' in (18b).

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a. ili nung
    water PL
    ' {multiple individual} waters' 'a water'
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In section 2.1, we saw that the Kamang plural word nung does not occur inside the NP. Nevertheless, the appearance of nung apposite to an NP has consequences for items inside of NP. Nung is not semantically compatible with NP-internal quantifiers. This is seen in the examples in (19) where nung fails to co-occur grammatically with the numeral quantifier $s u$ 'three' (19a) and with the non-numeral quantifier adu 'many' (19b).

$$
\begin{array}{llllll}
\text { a. * } \quad \text { sibe uh su nung b. * } & \text { sibe adu nung }  \tag{19}\\
\text { chicken CLF three PL }
\end{array} \quad \begin{aligned}
& \text { chicken many PL }
\end{aligned}
$$

Given their different syntactic positions, the inability of nung to co-occur with any other quantifier indicates that it has a vague quantificational value that is incompatible with the precise enumeration of a numeral. $A d u$ 'many', like other nonnumeral quantifiers in Kamang is not precise but it does imply a considerable number of referents. For this reason, it is also not semantically compatible with the plural word.

Nung can also be used contrastively with a partitive reading. That is, it can be used to contrast different sub-sets of the same referent. For instance, in (20) nung is used twice to divide the set of citruses into the multitude that are sweet and the multitude that are sour. Similarly, in (21) nung is used twice to contrast the sub-set of people who went to Molpui with the sub-set that went to the nearby village.

| muut $=a k$ | nung | iduka, ah=a | nung | alesei. |
| :--- | :--- | :--- | :--- | :--- |
| citrus=DEF | PL | sweet $\mathrm{CNCT}=\mathrm{SPEC}$ | PL | sour |
| 'Some of these citrus fruits, others are sour.' |  |  |  |  |

(21) nung gera ye-iyaa ai Molpui wo-oi ye-te,

PL 3.CONTR 3.GEN-returntake Molpui 3.LOC-to 3.GEN-go.up
'Some of them went home going up to Molpui,
nung gera yeeisol ye-iyaa ai
PL 3.CONTR straight 3.GEN-return take
others went straight home going
mane wo-oi ye-wete.
village 3.LOC-toward 3.GEN-go.up.across
up across to the village.'
In sum, the Kamang plural word nung is a quantificationally vague element which can be used to denote plurality of individuated referents, both animates and inanimate, often with contrastive meaning.

### 3.2. Teiwa

Teiwa non occurs with nouns referring to animates and inanimates and expresses plurality: an NP with non has more than one referent (22a), the referent of an NP without non may be singular or plural (22b).

$$
\begin{array}{ll}
\text { a. } & \text { qavif non ita'a ma gi? }  \tag{22}\\
\text { goat PL where come go }
\end{array}, \begin{aligned}
& \text { 'Where did the (several) goats go?' } \\
& \text { b. } \quad \text { qavif ita'a ma gi? } \\
& \\
& \text { goat where come go } \\
& \\
& \text { 'Where did the goat/goats go?' }
\end{aligned}
$$

Teiwa count nouns combine directly with numerals, while mass nouns must occur with an individuating measure noun (e.g., 'glass', 'piece', 'stem') before they can combine with a numeral. Non however combines directly with both mass and count nouns. But when combining with a mass noun, non imposes an individuating reading: the noun yir is interpreted as a mass in (23a), but gets an individuated reading in (23b).
a. na yir ma gelas mia'.

1 SG water OBL glass fill
'I fill the glass with water.'
b. na yir non ma drom mia'.

1SG water PL OBL drum fill
'I fill the drum with several containers of water.'

When it combines with count nouns, the core semantics of non is plural 'more than one'. However, in many contexts non imposes readings that are more specific. These readings vary according to the type of nominal referent and the pragmatics of the situation. For example, when combining with inanimate objects such as chairs, seeds or rocks, non typically implies a distributive reading: the set of objects is in multiple locations (e.g., seeds spilled across the floor, chairs scattered around the room) or is a non-homogeneous set (e.g., rocks of all kinds and sizes). When combining with consumable referents (e.g., mangos, pigs, etc.), the plurality of non has the connotation 'many, plenty'. A similar reading is imposed when non combines with small objects such as flowers or insects. As these come in sets of conventionally large numbers, the use of non implies that their set is larger than is usual/expected (e.g., very many, more than usual ants).

In sum, the Teiwa plural word denotes plurality of individuated referents, both animates and inanimate. In addition, non can imply non-quantificational readings that concern the constitution, location or size of the set of objects, depending on nonlinguistic factors such as the nature of the referent, and the conventional size of certain sets.

## 4. SUMMARY AND CONCLUSION

This paper has looked at the syntax and semantics of cognate plural words in two Papuan languages, Kamang and Teiwa. Plural words in these two languages differ considerably in both their syntax and semantics.

Syntactically, we saw that both the Kamang and Teiwa plural words cannot be squared away with another word class in the respective languages, but in each case must be thought of as constituting its own single-word syntactic category. This is coherent with Dryer's (1989) observations that plural words often comprise their own word class. What our study shows is that, even amongst typologically similar and genetically related languages, plural words can still differ considerably in their syntactic constituency: Kamang nung is a syntactically independent element which occurs in a position outside the NP; Teiwa non is a dependent element which occurs alongside an $\mathrm{N}_{\text {HEAD }}$ inside the NP. This makes clear that the cross-linguistic variability in plural word syntax goes beyond word order and syntactic category as
discussed in Dryer $(1989,2007)$, and extends to more complex issues of syntactic constituency.

Semantically, the Kamang and Teiwa plural words also present a picture of contrast, on the level of both combinatorics and contexts of independent use. In Kamang we have a plural word that cannot co-occur with any other quantificational elements in the NP. In Teiwa, the two different classes of quantifiers show differences in semantic compatibility with the plural word: whilst the plural word and numeral quantifiers cannot co-occur in the Teiwa NP, the plural word and nonnumeral quantifiers can. Their differences in semantic combinatorics point to a fundamental difference in the basic semantic content of the two languages' plural words. Kamang nung has a mid-scalar quantification value, as seen in its use in partitive contexts. By contrast, Teiwa non carries the connotation of abundance or plenty, suggesting it has a high-magnitude value.

These results throw up a number of questions about plural words which require further cross-linguistic investigation: (i) to what extent are plural words in the languages of the world combinable with numeral and non-numeral quantifiers?; (ii) what do these combinatorics tell us about the syntactic status and semantic content of plural words?, and; (iii) are there systematic differences in the syntactic and semantic behaviour of plural words that are not part of a larger system of number words (i.e., with a singular word and/or with other non-singular words, such as dual and trial words) and those that are not part of such a system? In short, there is still much to uncover about cross-linguistic variation in plural words. This preliminary study has illustrated some of the variation and suggested directions for further research into plural word diversity.

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[^1]:    ${ }^{2}$ The abbreviations used in this paper are: $\mathrm{BEN}=$ benefactive, $\mathrm{CLF}=$ classifier, $\mathrm{CNCT}=$ connector, CONTR = contrastive, CONT = continuative, DEF = definite, DIST = distal, GEN = genitive, KNWN $=$ known, $\mathrm{LOC}=$ locative, $\mathrm{NEG}=$ negation, $\mathrm{OBL}=$ oblique, $\mathrm{PL}=$ plural, $\mathrm{PROX}=$ proximate, $\mathrm{REAL}=$ realis, $S G=$ singular, $S P E C=$ specific.

