

Research Article

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Alignment in Vamale, South Oceanic: Diachrony and contact influence

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Abstract: This article describes three homophonous morphemes *ka* integral to alignment in Vamale, a South Oceanic language: a relational classifier, a subject marker clitic, and a possessive linker in nominalizations. Northern New Caledonian languages tend towards ergativity, while southern ones favour accusative alignment in all domains. Vamale is spoken near the border between the two and shows a fascinating pattern: one system in nouns, another in verbs, and a third one in nominalizations. Using first-hand field data, this article introduces the relevant concepts with examples and compares Vamale to its neighbours. While the development of this system remains speculative, we argue that the language has assimilated to its powerful neighbour Cèmuhi.

Keywords: alignment, morphology, syntax, Oceanic, New Caledonian, Vamale

1 Introduction

Alignment systems in Oceanic languages are diverse. Nominative–accusative systems are the norm in modern Oceanic languages, but ergative and split-transitive ones are also common (Ross 2004, 495, 496). New Caledonian languages, in particular, display strong diversity, between their subgroups as well as within them. These languages have long held a special place in Oceanic linguistics due to their early split from the Proto-Oceanic speaking Lapita culture complex (Sand, Bole, and Ouetcho, 2007, 310). For this reason, many of New Caledonia’s languages exhibit conservative phonological and syntactic features (Ozanne-Rivierre 1992, 198). Conservative as well as complex patterns are more common in the Northern Mainland languages than in the Southern Mainland ones. The Loyalty languages, the major branch opposite the Mainland one, are complex in different ways but lie outside the scope of this account. Possibly due to contact with outsiders, Southern languages especially show “aberrant” features¹ (Ozanne-Rivierre and Rivierre 2004). For Proto-Oceanic, the alignment system is still a matter of research, as reconstruction is contentious given the modern variation. As a result, studying this crucial group is fundamental to our broader understanding of Oceanic languages and of syntactic change in New Caledonia. Vamale has merged several markers of subjects, possessors, and undergoers. Through comparison with its neighbours, we can reconstruct the direction of this change; further research may in turn hypothesize the original state of Northern alignment systems.

The greatest part of the descriptive literature on New Caledonian languages is in French. This makes the group less widely known to anglophone Oceanists. Even in French, most of the 28 languages are under-

¹ Particularly Ajië and Tîrî show such phonological differentiation from Proto-Oceanic that “it is difficult to identify reflexes of Proto-Oceanic etyma in either of them” (Grace 1981, 259).

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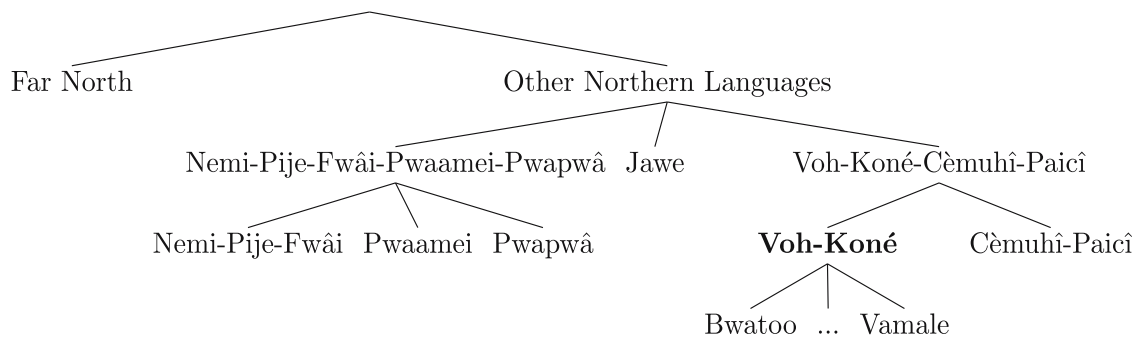


Figure 1: Language tree of some North New Caledonian languages, adapted from Ozanne-Rivierre (1995, 63).

described. Their contact history has also remained understudied. This history was significant; however, phonological systems enriched each other as a result of multilingualism and exogamy Rivierre (1994).

This study focuses on a branch of the Northern languages. These form a linguistic unit which splits into two smaller groups, Far North and Other North, or Centre-North (Figure 1). Those in the latter group, to which Vamale, the chief object of our study belongs, are especially underdescribed: with the notable exception of Cèmuhi (Rivierre 1980), a grammar sketch of western Voh-Koné languages is the only published work that describes grammatical structures (Rivierre and Ehrhardt 2006). Due to this lack of descriptions, this article discusses other Northern languages, but can only make limited claims about some of them, based on dictionaries and text collections. The data are written in the orthography used in the original source, except for Cèmuhi. Françoise Ozanne-Rivierre refined a writing system which had its roots in missionary work (Ozanne-Rivierre 1975, Haudricourt and Ozanne-Rivierre 1982), and this is nowadays in use for most of the Northern languages. Cèmuhi and Paici have very different phonological systems and have several competing writing systems. I used IPA in this account to make comparisons easier.

The data for Vamale were collected in 11 months of fieldwork, a major part of which involved elicitation to test for the grammaticality of rarer constructions, or constructions found in neighbouring, flourishing languages. It is relevant that Vamale is endangered and that the everyday language for most villagers in the three main tribes is French. This means that overheard data were relatively scant. The shift towards French began in the twentieth century for several reasons, but contact with other languages is common in the area, as it is in much of Melanesia. Marriages tend to be virilocal in New Caledonia (Guiart 1992, 89), meaning that the men will stay near their father and their wives will come from elsewhere. This is partly due to an effort to expand the political ties to other groups. Particularly in the North, where languages are small (Vamale has ca. 180 speakers, Nemi ca. 300), marrying an outsider often means bringing another language into the village. The children grow up speaking the language of the mother with her, and their father's with their friends and cousins. Any contact with the outside involves hearing other languages, like the traditional markets (*janap*) between mountain and seaside villages, e.g. sea salt and hardwood. While French is a near-universal lingua franca nowadays (Salaün 2005, 2), Vamale elders still speak several languages: Chief Luc Oué of Téganpaik speaks his father's Pije and related Fwâi, his mother's Cèmuhi, his village's Vamale, understands all Voh-Koné varieties, and does not see himself as particularly multilingual. Before the widespread use of cars, the slower travel on foot meant that people would stay longer with a relative, to help with house-building or preparing a ceremony. In the case of Vamale, Cèmuhi and Pije are the contact languages with the longest history: Vamale was formerly spoken on the Pamale and Vawe rivers (Leenhardt 1978, 26), which flow north through the mountain chain to join the Tipije river, formerly settled along its entire length by Pije speakers. To the south and east, Cèmuhi was and is still spoken. During the colonial war of 1917, the Cèmuhi-speaking chiefs Amane of Poyes and Hippolyte of Touho made peace in Vamale-speaking Pamale (Bensa, Muckle, and Kacué 2015, 368, 369, Leenhardt 1978, 24). Since the displacement of Vamale speakers from their homeland in the 1910s (Guiart 1970, 266), speaker numbers dwindled from up to 2000 in the early twentieth century (Couhia and Maepas 2008, 62), to roughly 50 in the late 1940s (Leenhardt 1946, 162). The introduction of public, French-language schooling in the 1980s has intensified attrition.

Our study describes alignment patterns in Vamale and then compares its structures with those of other languages. In New Caledonia, the Far Northern languages tend towards split ergativity (Bril 1997, 2002, 143–44, 159), Centre Northern ones to split-intransitive and tripartite systems, and the Southern ones to accusativity (Moyse-Faurie and Ozanne-Rivierre 1983). The term ‘alignment’ is used in this account not only formally but also distributionally. If the subject of a transitive verb (A) and the subject of an intransitive verb (S) are marked the same, under the same circumstances, and an undergoer (P) is marked the same but following different rules, e.g. depending on tense or animacy of the referent, this is viewed as s/A vs P, i.e. nominative–accusative alignment.

Alignment is occasionally subject to change, however. For example, Paicî, bordering on the Southern languages, has assimilated to the latter group’s verbal alignment and dropped the stative verb class (Rivierre 1983, 265). Vamale, a Voh-Koné language on the border between groups (Figure 2), also exhibits different

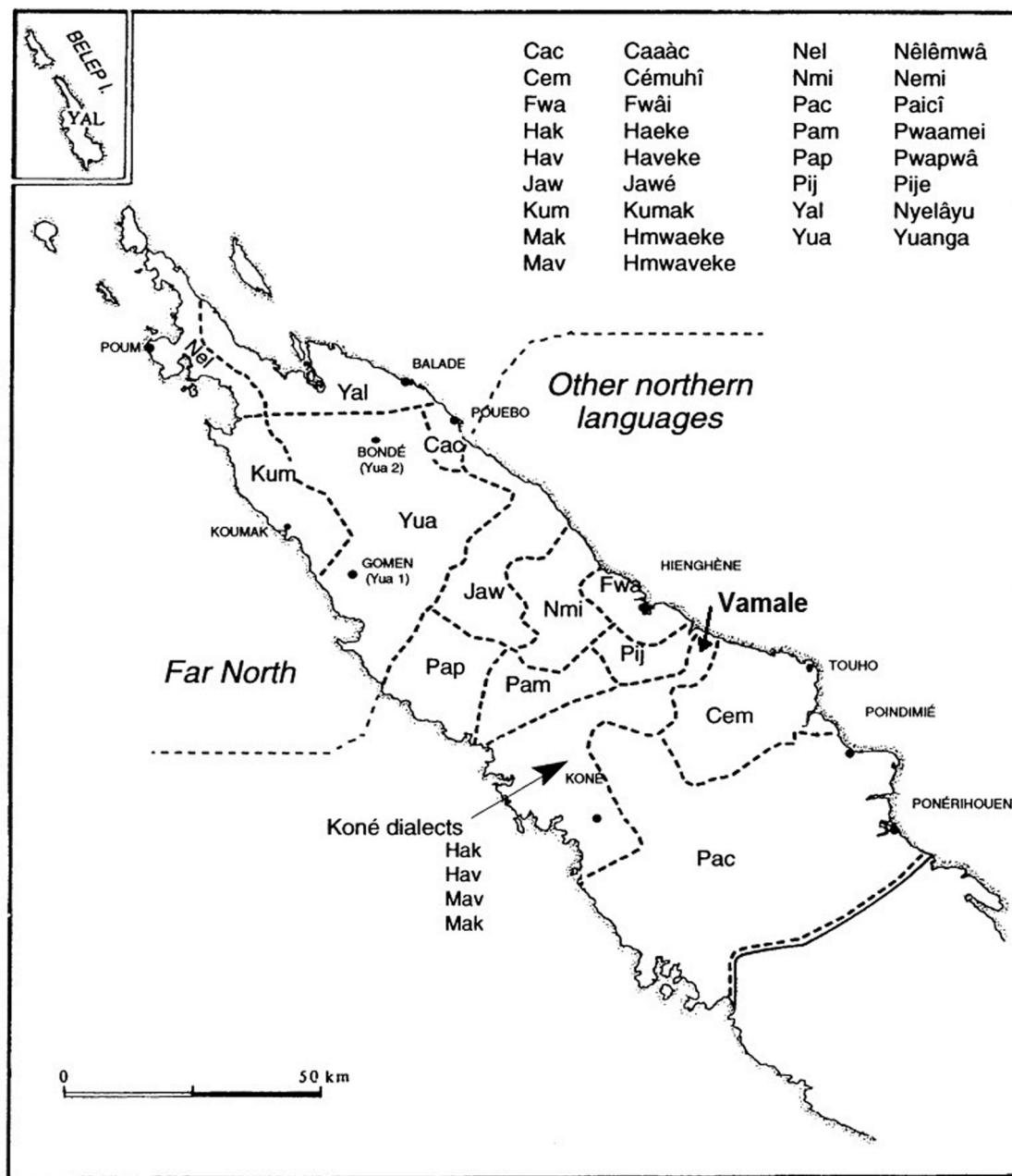


Figure 2: Northern New Caledonian languages, adapted from Ozanne-Rivierre (1995, 45) to show the Vamale area.

influences. While it was probably split-intransitive on verbs and nominative–accusative on nouns like its western dialects today (Rivierre and Ehrhardt 2006, 36), Vamale is now tripartite in its verb indexing and in its subject marking on nouns. Finally, the language shows ergative patterns in nominalized verbs. Our study first introduces alignment in verbs, then the alignment of noun phrases (with the clitic *ka=*) briefly presents a relational classifier *ka(-n)*, and finally discusses the role of a possessive linker in marking arguments of nominalized verb phrases. The relational classifier is relevant as the probable origin of the other *ka* forms. After introducing Vamale alignment, we discuss the available cognates discussed for comparison.

As we discuss four related, homophonous morphemes, the terms and distribution warrant a discussion before delving into the alignment systems proper. A possible descendant of the non-personal genitive relator POc **ni* (Ozanne-Rivierre 1991, 332), the construct suffix *-n* marks alienable nouns as possessed (1a). It is distinct from the generic possessor suffix *-n*, as the latter disappears when the possessor is specific (1b), while the former carries no information about specificity. Another morpheme, *ka*, marks alienable, semantically vaguely “dynamic” relations (Section 2.4). Similar morphemes are called general classifiers by several authors (Lichtenberk 2009, Lichtenberk 1985, Lynch 2000). However, *ka* is syntactically different from typical classifiers (it is not the head of its phrase, it has no clear semantics). We maintain the term classifier to distinguish it from a focussed possessor marker which we simply call a linker here, following Bril (2012): a morpheme part of the head noun’s noun phrase, introducing a modifier noun phrase. Contrary to the lexically assigned obligatory relational classifier *ka-* discussed in Section 2.4, the focussed possessor marker *ka* is optional, i.e. the noun can be marked as possessed by *-n* ‘POSS’ instead (1a). Furthermore, while the obligatory possessive classifier uses historically direct possessive suffixes, e.g. *daahma ka-n/k-ong* ‘chief POSS-3SG.POSS/POSS-1SG.POSS’, *phwêêdi k-an/k-ong* ‘youngest child’, the focused possession marking linker *ka* ‘FOC.POSS’ takes nominal and pronominal possessors.

- (1) a. *thala-n* *i=xhaohmu*
 knife-CST *ART.SG=elder*
 ‘The elder’s knife’
 b. *thala ka* *i=xhaohmu*
 knife FOC.POSS ART.SG=elder
 ‘The *elder*’s knife’
 ‘The knife belonging to the elder through his use of it’

There seems to be a gradient in sensitivity of the morphemes to animacy and specificity: although the possessive linker indexes only specificity, the nominalization linker² *ka* indexes both animacy and specificity, and the subject marking on nouns *ka=* is only sensitive to animacy. This makes sense in the areal context of the morphemes. The possessive linker follows an old Oceanic pattern of marking the possessor’s relationship to the possessum, including the former’s specificity (e.g. ‘a human(s) hand’ vs ‘the hand of a person’). The nominalization linker, whose function was expanded from a possessor-marking to a subject-marking one, combines the marking of specificity with that of animacy, which is a value expressed by Northern languages for subjects and objects. Finally, the proclitic’s function is to mark the subject, which in Northern languages is often marked only if animate. The homophony of the three *ka* markers may be recent, as they have clearly different cognates in their neighbouring languages, including other Voh-Koné varieties (otherwise mutually intelligible). Given the distribution of languages today, we assume that the Voh-Koné languages expanded towards the East, with Vamale on the very frontier, and that Cèmuhi was present prior to Vamale incursion. Because western Voh-Koné dialects show split-intransitive verbal alignment and split-intransitive nominal alignment, and Cèmuhi has tripartite verbal and split-intransitive nominal alignment, we hypothesize that Vamale assimilated its verbal alignment to that of its powerful neighbour Cèmuhi and began to expand subject-marking functions from active subjects to stative ones, going beyond its neighbour’s example. We argue that this case of contact-induced change is not only interesting in itself but also adds a puzzle piece to the regional history of both alignment and language contact.

² We use this term for a morpheme which is part of the possessed NP, introducing a modifier NP.

Table 1: Subject and object markers for active and stative verbs

	Free form	A=/S _A =	-S _P	-P
1SG	<i>yo</i>	<i>e=</i>	<i>-o(ng)</i>	<i>-o</i>
1DU.INCL	<i>gasu</i>	<i>gasu=</i>	<i>-gasu</i>	<i>-kaeu</i>
1PL.INCL	<i>gaa/gase</i>	<i>ga(se)=</i>	<i>-gaa</i>	<i>-kaa</i>
1DU.EXCL	<i>abu</i>	<i>abu=</i>	<i>-abu</i>	<i>-kabu</i>
1PL.EXCL	<i>abe</i>	<i>abe=</i>	<i>-abe</i>	<i>-kabe</i>
2SG	<i>go</i>	<i>go=</i>	<i>-go</i>	<i>-ko</i>
2DU	<i>gau</i>	<i>gau=</i>	<i>-gau</i>	<i>-kau</i>
2PL	<i>gavwe</i>	<i>gavwe=</i>	<i>-gavwe</i>	<i>-kavwe</i>
3SG	<i>ya</i>	<i>a=</i>	<i>-(e)a</i>	<i>-(e)a</i>
3DU	<i>lu</i>	<i>lu=</i>	<i>-lu</i>	<i>-lu</i>
3PL	<i>le</i>	<i>le=</i>	<i>-le</i>	<i>-le</i>

2 Alignment systems

Alignment systems group together different grammatical roles, in the way they are marked, indexed, or distributed. This account will not only take form into account but also rules. Pronouns and the related participant indices on verbs are highly cognate across Voh-Koné, and in large parts so in the neighbouring Hienghène languages Pije, Nemi, Fwâi, and Jawe (Haudricourt and Ozanne-Rivierre 1982) as well as Cèmuhi and Paici (Rivierre 1980, 61, Rivierre 1983). Jawe is not as closely related than the rest (Ozanne-Rivierre 1995), but due to proximity and contact, the languages interact and borrow actively and the regional label using the administrative centre is still useful as a group name. Vamale distinguishes free pronouns from bound forms, both listed in Table 1. The former display nominative-accusative alignment, as do the markers indexing transitive (A) and intransitive (S_A) subjects. These markers will accept various preverbs and aspect markers between themselves and the verb (2), but cannot occur alone. On these grounds, they are called proclitics here.

- (2) cipa=go=bwaa=ja=juu=vataan=fine li=mani
 NEG=2SG=ALR=ACCP=true=various=count DEF.PL=bird
 ‘You did not yet finish truly counting the various birds.’

Historically, all indexing forms are derived from freestanding forms, which still exist. This explains their formal similarities. The 1SG kept the free-form cognate with other Voh-Koné languages, but borrowed the bound form from Cèmuhi (Rivierre 1980, 81). Today, a free pronoun in a subject can co-occur with the obligatory subject index, but this is a marked construction (3a). The neutral version forgoes the free subject pronoun. In any case, the object is only indexed once (3b, 3c), either as a suffix or as a full noun phrase, but not as a free pronoun, like in Cèmuhi (Rivierre 1980, 188). This is probably the result of the position of direct object noun phrases after the transitive verbs (V-O-S), which we still see today with nouns. As Pije and Fwâi still show the same construction with free pronouns, it is likely that Vamale had the same structure and over time suffixed free object pronouns to the verb. Free forms show nominative–accusative alignment regardless of the verb’s class (cf. Section 2.2).

- (3) a. le=vavi-a ka=le
 3PL=hunt(TR)-3SG.OBJ SBJ=3PL.free
 ‘They hunt it.’
 b. *le=vavi-a i=dube ka=le
 3PL=hunt(TR)-3SG.OBJ DEF.SG=deer SBJ=3PL.free
 (for: ‘They hunt the deer.’)

- c. le=vavi i=dube ka=le
 3PL=hunt(TR) DEF.SG=deer SBJ=3PL.free
 ‘They hunt the deer.’

The verb *vavi* ‘to hunt (TR)’ shown here belongs to the dynamic or active verb class. The other major class is the stative one, with suffixed subject indexing. The relevant verb classes will be described in the next section. This split into verb classes is a typical feature of Oceanic languages (Lynch, Ross, and Crowley, 2002, 44, 63, 81). It is integral to verbal alignment.

2.1 Verbal alignment

Verb classes in Vamale, like in Proto-Oceanic (Lynch, Ross, and Crowley, 2002, 63), can be broadly split into “active” or “dynamic,” with subject indexing preceding the verb, and “stative,” with subject indexing suffixed to the stem. Most subjects (first, second, and certain third persons) are indexed in the former way, as all transitive verbs, nominal, and locative predicates use the active proclitics. Verbal alignment in Vamale is a tripartite system (Figure 3): objects are indexed with suffixes, much like stative subjects, but do not use the same forms as them. While class membership is lexically determined following semantic tendencies, some derivation may take place (always stative-to-active or active-to-active). The following is a summary of these main classes:

1. Active intransitive: subject personal index - V (4a).

- (4) a. e=hân (ka=yô)
 1SG.SA=go SBJ=1SG.free
 ‘I go.’
 b. gau=tipwa (ka=gau)
 2DU=fall SBJ=2DU
 ‘You fall.’

2. Active transitive: subject personal index - V, takes an object (5a). Free pronouns cannot be used to express objects. Pronominal objects must be suffixed. This is also the case with stative subjects, as the next point will show.

- (5) a. e=xale-kau (ka=yô)
 1SG=see-2SG.OBJ SBJ=1SG.free
 ‘I see you two.’
 b. a=thabilo-ko (ka=ya)
 3SG=kill-2SG.OBJ SBJ=3SG
 ‘He kills you.’

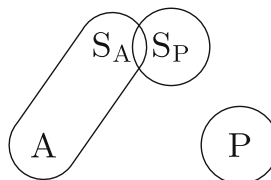


Figure 3: Alignment with verbs.

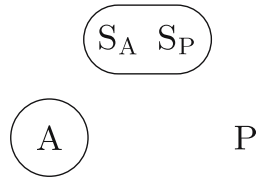


Figure 4: Alignment with noun phrases.

3. Stative: V - subject personal index (6a). Although the subject indices on active verbs are obligatory for all subjects, the ones on stative verbs are only obligatory for human ones and are optional for non-human, animate subjects (e.g. animals). Inanimate subjects are not indexed. The indexing suffixes are almost, but not completely identical to the object indexing suffixes (Table 1). Like the latter, they cannot be omitted in favour of a free pronoun, but the suffix and the free form may co-occur in marked cases.

- (6) sinu-ong (ka=yo)
 suffer-1SG SBJ=1SG.free
 'I am ill/in pain/dead.'

2.2 Nominal alignment

In Vamale, all active verbs as well as certain stative ones may mark a noun phrase as subject with a proclitic *ka=* 'SBJ' (7). The distribution of this clitic delineates an alignment pattern for noun phrases, how the latter are marked for their syntactic role.

- (7) a=la (ka=i=apuli)
 3SG=be.here SBJ=DEF.SG=man
 'He is here.'

Nominal alignment in Vamale is tripartite, but splitting along a *p/non-p* line (Figure 4).³ Undergoer (*p*) arguments are never marked, while intransitive subject (*s*) can be marked, and transitive ones (*A*) have to be. This means that the subject marker is the same, but the distribution is different. We propose that this is a transitional stage, from a split-intransitive system like in other Centre-Northern systems, towards an accusative system by expanding the function of the subject marker to allow all subjects to be marked. Unlike subjects, object arguments cannot be expressed with free personal pronouns, in any Centre-Northern language. Instead, Vamale uses the suffixes discussed earlier (Table 1). While nominal alignment is not sensitive to animacy in Vamale, all other described Northern languages restrict the use of the morphological subject marker to animate noun phrases.

Vamale has a fixed Verb–Object–Subject word order, but obliques are a bit more flexible (8). The subject marker *ka=* is an additional help to distinguish the subject from other non-subject noun phrases (NPs), especially in long clauses where bound pronouns marking the same subject may be omitted, oblique noun phrases included, etc. V OBJ (OBL) *ka=*SBJ (9).

- (8) a. e=holeke sikaa [nyasi i=apuli a xhwata]
 1SG=thank.for cigarette BEN DEF.SG=man REL bald
 'I thank the bald man for the cigarette'

³ Note that noun phrases embedded in nominalized verb phrases behave differently and will thus be discussed separately in Section 2.5.

- b. e=holeke nyasi-m li=fati
 1SG thank.for BEN-2SG.POSS
 'I thank you for the words.'
- (9) e=xale-le ka=yo
 1SG-see-3PL SBJ=1SG
 'I see them.'

With intransitive verbs, the subject nominal is often unmarked (10). Note that in 10b, there is no subject index on *sinu* because it is a stative verb and the subject is inanimate. As an optional subject marker puts the subject in a more active, volitional, or otherwise more marked position, the clitic is much more frequent with animate, especially human, subjects. In western Voh-Koné, only the subjects of active intransitive verbs can take subject marking. In Cèmuhi, animacy is one of the factors that influences which marker is used on the subject.

- (10) a. a=hup-wa (ka=) i=jati
 3SG=go.down-REP (SBJ=) ART.SG=sea
 'The tide goes down again.'
- b. sinu (ka=) mu=xho-ng
 suffer (SBJ=) ART.DU=leg-1SG.POSS
 'My legs hurt'

2.3 Relational classifier *ka*

The relational classifier⁴ *ka* marks the animate possessor of a tool or a dynamic relationship (11a and 12a). The relational classifier occurs with the same possessive morphemes as all Vamale classifiers (*k-ong* 'REL.CLF-my', *ka-m* 'REL.CLF-your'). It can also take the generic suffix *-n* to show that the possessor is non-specific (11b). This concerns a closed class of nouns. It is presented here not as part of the alignment pattern, but as the likely origin of the homophony, and to disambiguate it from the *s/p* marking linker *ka* discussed in Section 2.5.

- (11) a. e=mwadi-ke i=xhwata-ka-m!
 1SG=laugh-TR DEF.SG=bald-CLF-2SG.POSS
 'I laugh about your baldness!'
- b. udee ka-n nyaabu
 medicine CLF-NSPEC mosquito
 'Mosquito spray'

2.4 Possessive linker *ka*

Another *ka*, taking indirect (or set II in Table 2) possessive pronominal suffixes, optionally marks a focused possession in productive constructions, i.e. where *ka* is optional, has a predictable meaning, and is used in the same way as with loanwords. Given its similar function to the classifier, we suggest that the linker was assimilated to the classifier.

⁴ Following Aikhenvald (2000, 136) and especially Lichtenberk (2009, 399): a relational classifier takes possessive suffixes seen on many inalienable nouns, called 'set I' in Table 2, is used to mark usually unpossessed nouns as possessed, and contains semantic information about the relationship between possessor and possessum.

Table 2: Vamale possessive suffix paradigms

		I	II
SG	1	-ng	-eong
	2	-m	-go
	3	-n	-ea
DU	1INCL	-ju	-gaeu
	1EXCL	-bu	-abu
	2	-u	-gau
	3	-lu	-lu
PL	1INCL	-je	-gaa
	1EXCL	-be	-abe
	2	-vwe	-gavwe
	3	-le	-le

Another distinguishing feature of the possessive linker is that it is the only one of the *ka* markers presented in this article that has close cognate forms in surrounding languages, as is shown in Section 3. As mentioned at the beginning of the section, the possessive linker is usually optional, but has become fossilized in certain words, e.g. *daahma* ‘chief’, *daahma ka-n/k-ong* ‘chief of-his/mine’, where it is now obligatory in possessive contexts.⁵

The possessive linker and the optional nominalization linker share an anaphoric suffix *-n* and a homophonous generic suffix *-n*. If the possessor or *s/p* is anaphoric or immediately cataphoric information (“**their** chief,” “**its** way-of-being”), or if the relationship is a generic one (“**mosquito**-repellent,” ‘the hunting of **deer**’), this is indexed on both the classifier and the linker via *-n* (12a, 12b). The focus in both linking constructions is on the relationship, though they can be used to focus on the possessor’s identity (“**my** knife, not yours”), in which case we never find the generic *-n*.

- (12) a. Relational classifier linker
 daahma ka-n mani
 chief CLF-NSPEC bird
 ‘Gouldian Finch (bird)’
 b. Nominalizing linker
 i=hun-vavi ka-n dube
 DEF.SG=NMLZ-hunt LINK-NSPEC deer
 ‘the hunting of deer’

Examples (13a) and (13b) illustrate the difference the possessive linker makes: it is a mostly optional marker, relatively rare, and used without its focusing function only in lexicalized cases. Compare this with the identical construction below using the *s/p* linker (13c), illustrated again in more detail in Section 2.5, which displays a similar function. This *ka* is much more frequent. Although the distinction between the two morphemes *ka* is maintained through their possessive paradigms by speakers who use Vamale fluently and daily, some less fluent speakers merge them. This is likely due to the similar position, their shared sensitivity to specificity, and of course the form of the linkers. It is noteworthy that in an exogamous society such as the Kanak one, a sizeable part of the population acquires the community language later in life, which may facilitate language change (see an account of this in Francesca (2019)), but strong attrition is also a likely factor.

⁵ In some speakers’ speech, the linker is used with free pronouns as possessor forms: *i thala ka yo* ‘the knife CLF 1SG’. As far as could be ascertained, the function and distribution are the same.

- (13) a. thala-n i=xhaohmu
 knife-CST ART.SG=old
 ‘the elder’s knife’
- b. thala ka i=xhaohmu
 knife FOC.POSS ART.SG=old
 ‘the knife that the elder uses, the knife belonging to the elder through his use of it’
- c. i=hun-vii ka i=jaxhut
 DEF.SG=NMLZ-say LINK DEF.SG=story
 ‘the story’s meaning’

Beneficiaries, but not direct objects, can be focussed on with *ka* ‘FOC.POSS’ (14), because the beneficiary constructions are derived from *si-* ‘hand’ and *ko-* ‘on’, both taking possessors.

- (14) e=hole-ke nyasi-vwe ka gavwe
 1SG=thank-TR for-2PL FOC.POSS 2PL
 ‘I thank you (in particular) [for what you did].’

2.5 Alignment in deverbal nominalizations

In Vamale, as in many other Oceanic languages (Lynch, Ross, and Crowley, 2002), entire verb phrases can be nominalized. The whole verbal predicate, including dependent verbs and objects, becomes a nominal element by dropping the pre-verbal subject index and adding an article instead, without changing the object into a possessor (15). Often, a nominalizer prefix is added as well (16a), though this depends on the verb. For example, *jili* ‘to build with wood’ can be nominalized without any prefixes (15). There are only a few nominalizing prefixes: *hun-*, *e-* ‘INS.NMLZ’, *ape-* ‘LOC.NMLZ’, and *xa-* ‘AGT.NMLZ’. This account uses almost exclusively examples with *hun-*, as it is the vaguest semantically and used most often for spontaneous nominalizations.

- (15) i=jili i=bwaakala ka=li=apuli
 DEF.SG=build_with_wood DEF.SG=canoe SBJ=DEF.PL=man
 ‘the building of the canoe by the men’

Nominalized verb phrases also continue taking suffixed objects (16a), as well as overt object and subject noun phrases (16b).

- (16) a. i=hun-xale-a ka=yo
 DEF.SG=NMLZ-see-3SG.OBJ SBJ=1SG
 ‘my way of seeing **him** (lit. the how-see-him I)’
- b. le=saxhuti i=[hun-thake li=vai ka=i=xayu]
 3PL=narrate DEF.SG=NMLZ-throw DEF.PL=stone SBJ=DEF.SG=boy
 ‘They tell the story of the boy’s throwing the rocks.’

However, unlike normal verb phrases, nominalized ones have the possibility of adding a linker to the verb. This signifies that the overt non-A argument of the verb is marked (17a). Note that this is similar to the way the optional possessive linker described in Section 2.4 works.

- (17) a. i=hun-vii i=jaxhut
 ART=NMLZ-say DEF.SG=story
 ‘The story’s
 meaning/moral’
- b. i=hun-vii ka i=jaxhut
 ART=NMLZ-say LINK DEF.SG=story
 ‘The story’s
 meaning/moral’

If the argument is covert, e.g. because it was already mentioned, the linker *ka* takes the anaphoric suffix *-n*, which cannot be taken by the verb on its own (18a). In this case, the suffix replaces the overt noun phrase. If the argument is generic, however, the linker *ka* may also take the generic suffix *-n*, which cannot be taken by the verb on its own either. The generic suffix, unlike the anaphoric one, must directly precede an overt noun phrase, but may be omitted together with the linker *ka* (18b), though this construction is identical to an incorporated noun phrase. As the two suffixes refer to either generic referents or previously introduced and thus specific referents, they are distinguished in this account.

- (18) a. e=thapoke caihnan thuan i=hun-moo ka-n
 1SG=begin know do.well DEF.SG=NMLZ-be LINK-ANA
 ‘I started to understand the nature of it well’
- b. le=vi hapi can da-thuup tha vwa i=uci-n hmwaka
 3PL=say COMP in spear-dive ASS EXIST DEF.SG=little.stick-NSPEC like
 i=e-xhwali-dube kavi tha i=da-thuup
 DEF.SG=INS.NMLZ-pierce-deer but ASS DEF.SG=spear-dive
 ‘They said that in [matters of] fishing spears there is this little stick like the deer-piercer, but it’s a fishing spear.’

In any case, the linker *ka* with either the anaphoric or the generic suffix *-n*, allows for pronominal possession of the indirect, or set II type (19). However, as the pronominal possessive suffix must directly follow the construct suffix *-n*, the undergoer of the verb either precedes the possessor construction *ka-n-eong* (19a), or follows it (19b). Note that this cataphoric use was only found in elicitation.

We thus have two types of nominalization constructions: one where standard, unmarked, overt S and P behave the same, but A does not. This one looks like a verb phrase internally, with a preposed nominalizer. The other type is a group of constructions with marked (using the linker), anaphoric, or generic S and P which uses possessive morphology for pronominal A. Here, too, A is distinguished from the other subjects: *-n* never refers to an agent.

- (19) i=[hun-[saxhuti] ka-n]-eong
 DEF.SG=NMLZ-explain LINK-CST-1SG.POSS
 ‘My way of explaining it’
- a. i=hun-[saxhuti i=jaxhut] ka-n-eong
 DEF.SG=NMLZ-narrate DEF.SG=story POSS.LINK-CST-1SG.POSS
 ‘my way of telling the story’ (lit. the way.of-telling the story of-mine)
- b. i=hun-saxhuti ka-n-eong i=jaxhut-eong
 DEF.SG=NMLZ-narrate POSS.LINK-CST-1SG.POSS DEF.SG=story-1SG.POSS
 ‘my way of telling my story’ (lit. the way.of-telling of-mine the story-my)

Table 3: Distribution of the linker *ka*

Transitivity of the verb and overtness of the non-A argument	Animacy of the non-A argument	Occurrence of the linker <i>ka</i> and the suffix <i>-n</i>	Example
Tr.V, covert ARG	inanim. P	<i>hun-V ka-n</i> (<i>ka=A</i>)	(24a)
	anim. P	<i>hun-V-o/ko/a_{OBJ}</i> (<i>ka=A</i>)	(24b)
Tr. V, overt ARG	inanim. P	<i>hun-V (ka) ARG</i> (<i>ka=A</i>)	(24c)
	anim. P	<i>hun-V (ka) ARG</i> (<i>ka=A</i>)	(24d)
Intr. V, covert ARG	inanim. s	<i>hun-V ka-n</i>	(24e)
	anim. s	<i>hun-V-o/go/a_{SP}</i>	(24f)
Intr. V, overt ARG	inanim. s	<i>hun-V (ka) ARG</i>	(24g)
	anim. s	<i>hun-V (ka) ARG</i>	(24h), (24i)

Finally, animacy is relevant for the syntactic behaviour of both S and P: animate intransitive subjects and objects are indexed with the same pronominal suffixes if covert, and inanimate ones with *ka-n*. Transitive subjects are marked either like A arguments of a verb with the subject proclitic *ka=*, or as possessors.

In nominalized verb phrases, there are three main axes along which the distribution of our linker *ka-n* is organized: transitivity of the verb, overtness of the arguments, i.e. whether a noun phrase or a bound morpheme expresses the argument, and animacy of the non-A argument. The pattern is listed in Table 3, and groups *s* and *P* together in opposition to *A*.

There is a hierarchy similar to that discussed for verbs and nouns: specific animate entities are always indexed with person-marking morphology (20a), except when they have not yet been introduced and are thus still indefinite (20b).

- (20) a. *i=hun-vii-o*
DEF.SG=NMLZ-say(TR)-1SG.OBJ
 ‘my scolding’ (lit. the way.of-telling-me)
- b. *a=vwa ka=i=hun-moo (ka) i=apuli*
3SG=do SBJ=DEF.SG=NMLZ-stay LINK DEF.SG=human
 ‘It is done by the nature of Man/It is because of the nature of Man.’

Consider the two anaphoric constructions *hun-moo ka-n* ‘nature’ for inanimates (21a) and *hun-moo-o/go/a...* ‘character, way of being’ for animates (21b). The linker *ka* is not obligatory as long as the verb’s argument is an overt specific NP (22a). However, it becomes obligatory in generic or anaphoric contexts: the generic and anaphoric suffixes *-n* must attach to the linker, as the verb root alone cannot carry it (21c). This is the linker’s main distinction from the subject-marking proclitic, which cannot take affixes.

- (21) a. *e=thapoke caihnan thuan i=hun-moo ka-n*
1SG=begin know do.well DEF.SG=NMLZ-be LINK-ANA
 ‘I started to understand the nature of it well’
- b. *go=caeke nyako-ong ma tha go=caihnan i=hun-mo-o*
2SG=trust OBL-1SG.POSS while ASS 2SG=know ART.SG=NMLZ-be-1SG.SP
 ‘You trust me although you know how I am.’
- c. **i=hun-saxhuti-n*
DEF.SG=NMLZ-tell-NSPEC
 (for: ‘its telling, the way to tell it’)

Nominalized intransitive verbs, and nominalized transitive verbs where the subject is not expressed via a free form, share the same indexing morphology (22a, 22b).

- (22) a. i=hun-moo (ka) i=mwa
 DEF.SG=NMLZ-be LINK DEF.SG=house
 ‘the nature (lit. way of being) of the house’
 b. i=hun-vavi ka-n dube
 DEF.SG=NMLZ-hunt.TR LINK-NSPEC deer
 ‘the hunting of deer’

Due to the homophony of the nominalization linker *ka* and the subject marker *ka=*, a nominalized transitive construction featuring both an undergoer NP and a subject NP will favour the subject marker and omit the linker (23). Ignoring this preference by marking everything with different *ka* is not ungrammatical per se, but labelled as “confusing” by speakers and avoided, since the resulting construction may end up looking like this: V *ka*_{LINK} O *ka*=_{SBJ} A.

- (23) i=hun-[saxhuti (ka) i=jaxhut nyaanya-n-eong] ka=caacaa-n-eong
 DEF.SG=NMLZ-narrate NMLZ.LINK DEF.SG=story mother-CST-1.SG.POSS SBJ=father-CST-1.SG.POSS
 ‘my father’s way of telling my mother’s story’

Table 3 summarizes the distribution of the linker. Examples (24) illustrate the summary, but do not introduce new information.

- (24) a. i=hun-saxhuti ka-n(-eong)
 ART.SG=NMLZ-narrate LINK-ANA-(1SG.POSS)
 ‘the [traditional/proper] way of telling it (by me); its explanation (by me)’
 b. i=hun-vii-o
 DEF.SG=NMLZ-tell.off-1SG.POSS/OBJ
 ‘my being told off, how I am told off’
 c. i=hun-saxhuti (ka) i=jaxhut-eong (ka=yo)
 DEF.SG=NMLZ-narrate LINK DEF.SG=story-1SG.POSS (SBJ=1SG)
 ‘the way of telling my story (by me)’ (the way.of-telling the story-my)
 d. i=hun-vavi (ka) i=dube ka=caca
 DEF.SG=NMLZ-hunt.TR (LINK) DEF.SG=deer SBJ=father
 ‘Father’s hunting the deer’
 e. *e-* is a nominalizing prefix which often has an instrumental meaning (the tool for), but can also have a more general meaning, like here.
 na juu e-wanke ka-n
 DEM real NMLZ-change LINK-ANA
 ‘It’s a real change.’
 f. juu vataan holeeke mwa hun-hma-gavwe
 real each thank REP NMLZ-arrive-2PL
 ‘I thank you each again for your coming.’
 g. i=hun-moo (ka) i=mwa
 DEF.SG=NMLZ-be LINK DEF.SG=house
 ‘the design/nature of the house’
 h. e=vi tha i=hun-moo i=apuli
 1SG=say ASS DEF.SG=NMLZ-stay DEF.SG=human
 ‘I’m saying that this is how Man is.’
 i. a=vwa ka i=hun-moo ka i=apuli
 3SG=do SBJ DEF.SG=NMLZ-stay LINK DEF.SG=human
 ‘It’s because of the nature of Man.’

In deverbal nominalizations, inanimate *s* and *p* have the same distribution with respect to *ka(-n)*, meaning that the linker occurs before inanimate intransitive subjects under the same conditions as for all inanimate

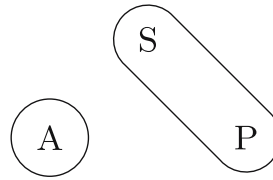


Figure 5: Alignment with *ka-n* nominalizations.

objects (Table 3). *s* and *p* NPs are treated the same as long as they are overt, the linker *ka(-n)* being optional but preferred when the participant is not overtly expressed (*i hun-moo* ~ *i hun-moo kan* ‘the nature [of something implied]’). There seem to be semantic differences with ambitransitive verbs like *thapoke* ‘to begin (something)’: compare exs. 25a, and 25b. Since animate subjects are either obligatorily marked *ka* if transitive or like *p* if intransitive, this linker system shows an ergative, *s/p* vs *A* split (cf. Figure 5).

- (25) a. *le=xaleke i=hun-thapoke ka i=vaa*
 3PL=see DEF.SG=NMLZ-begin LINK DEF.SG=war
 ‘They saw the beginning of the war.’
 b. *le=xaleke i=hun-thapoke i=vaa ka=li=apuli*
 3PL=see DEF.SG=NMLZ-begin DEF.SG=war SBJ=DEF.SG=man
 ‘They saw the beginning of the war by the people.’

3 Other Centre-Northern languages

Our study of Vamale alignment concludes with a brief comparison to some closely related languages, following the same structure as for Vamale. Bwatoo is the only other Voh-Koné language for which we have a grammatical description (Rivierre and Ehrhardt 2006). It is spoken west of the mountains and is mostly mutually intelligible with Vamale (close to Koné on the map in Figure 2). Cèmuhi is the next-closest kin, described in more detail by the same author (Rivierre 1980). It is spoken in the south of the Vamale area. The Hienghène languages are Vamale’s northern neighbours, with a comparative dictionary and some texts as available sources. For verbal alignment, data from other languages suggest that Vamale either preserved an older tripartite system or more likely followed a local innovation, while western Voh-Koné varieties were less affected. For nominative alignment, Vamale is shown to be the only language that may use a subject proclitic on stative subjects. The relational classifiers are the only true cognates to the Vamale form, making the classifier the probable source of the Vamale homophony. Finally, of our study’s objects, deverbal nominalization is the least well described in the other Northern studies. Cèmuhi uses possessor-linking morphemes to mark stative subjects (*ne-n*) and marks *p* the same way. We assume that Vamale followed this pre-existing pattern of using possessive morphology to mark *S_p*, and then expanded it to mark *p* as well, like in Cèmuhi. Although western Voh-Koné has several forms of the linker, Vamale only has one, though the data are too scant to determine whether a merger took place in Vamale, or a diversification in the West. As nominalizations are the one environment where the nominalization linker and the possessive linker have the same distribution, it is likely that a reanalysis took place: the possessive linker came to be used as a marker of *s* and *p*.

3.1 Verbal alignment

In Bwatoo, objects, stative subjects, and possessors are all marked the same way (Rivierre and Ehrhardt 2006, 31). We thus have a split-intransitive system, not a tripartite one. For lack of contradicting data, Voh-Koné, at least western varieties, are assumed to be split-intransitive as well. The other languages Cèmuhi,⁶ Pije and Fwài are

⁶ Cèmuhi has a three-way tonal system. Neutral tones, that depend on their environment, are not transcribed in this article.

Table 4: Cognate verbal suffixes and marking

	Bwatoo		Vamale		Cèmuhî	Pije	Fwâi	
	(Split-intransitive)		(Tripartite)		(Tripartite)	(Tipartite)	(Tripartite)	
S _P	-a ‘3sg’	-ong/-o ‘1sg’	-a ‘3sg’	-ong ‘1sg’	[nàng] ‘3sg’	nyang ‘3sg’	yek ‘3sg’	do ‘2sg’
P	-a ‘3sg’	-ong/-o ‘1sg’	-a ‘3sg’	-o ‘1sg’	[-eg] ‘3sg’	-sang ‘3sg’	-yek ‘3sg’	-ro ‘2sg’

tripartite, much like Vamale (Table 4, note that the 3sg form was used wherever possible for comparative purposes between languages, but that other persons were used to show internal differences). The more widespread system seems to be the tripartite one (Figure 3), that Vamale could have preserved due to contact.

3.2 Nominal alignment

In both Vamale and the other Voh-Koné varieties, an allomorph *a=* of the subject marker follows a nasal-final verb: *e=sohmun a=yo* ‘I=study_{SBJ}=I’. We assume a former Vamale **na=* form, as the other Voh-Koné languages have *na=* instead of *ka=* (Rivierre and Ehrhardt 2006, 31, 61, 62) and Cèmuhî also features a subject marker *ne*⁷ (Rivierre 1980, 185). In Vamale, **na=* must have assimilated to the *ka=* form used in nominalizations to mark S. There is no cognate subject marker in other languages of the area, we assume that *ka=* developed in eastern Voh-Koné either through an extension of the possessor marker described in Section 2.4, as is sometimes found in ergative languages (e.g. Tzeltal, (Shklovsky, 2005, 120)), or through an extension of the nominalizing linker introduced in Section 2.5. The latter scenario seems more convincing, as the linker already marks active and stative intransitive subjects. The subject marker is the only one in the area that marks all subjects regardless of animacy and specificity, as is summarized in Table 3. The subject marker *ka=* does not take a generic or anaphoric *-n*, unlike the other *ka* forms. This is the case for all other subject markers in the area as well, including western Voh-Koné’s *na*, and is likely a retention of the earlier form **na*. The Hienghène subject markers are Pije *lu*, Fwâi, and Nemi *ru* (Haudricourt and Ozanne-Rivierre 1982, 257). The Jawe marker *we* takes possessive marking and needs more research (Alexander Elias, pers. comm.). In Nemi, and possibly in the other Hienghène languages, the marker may only be used for _A or S_A in the case of animate referents (Ozanne-Rivierre 1979, 35). As the most frequent word order is V(O)S, it may be redundant to mark the S_P subject with its own particle. In all languages discussed in this article, the stative subject indexing suffix is in complementary distribution with the noun phrase (26). As the stative subject pronouns are identical to free forms in Pije and Fwâi, Voh-Koné stative subject suffixes may be a delexicalization of earlier free pronouns.

- (26) sinu-a (*ka i=apuli)
 ill-3sg SBJ DEF.SG=person
 ‘The person is ill.’

Like in Hienghène languages, Cèmuhî subject marking is restricted to active verbs, which makes Vamale the language with the broadest use of the subject marker in its group. The Vamale subject marker is the same for all non-P arguments, only its frequency changes depending on the agentivity of the argument. We propose that this is a recent development. Cèmuhî has a topical marker which can mark not only active subjects but also other topicalized noun phrases. As it is the only one in the area to do so, it may have been the source of stative subject marking in Vamale.

⁷ Even Ajië (Southern New Caledonian) has a form *na* ‘_{SBJ}’ (Lichtenberk 1978, 80), called ‘indicateur de sujet’ (I.S.) by de la Fontinelle (de La Fontinelle 1976, 192).

Table 5: Forms for relational classifiers

Vamale	Bwato	Cèmuhi	Pije	Fwâi
<i>ka-n</i>	<i>ka-n</i>	<i>hĩ</i>	<i>ne-n</i>	<i>ne-n</i>

Like all Northern languages, Cèmuhi subject marking is sensitive to animacy. Depending on the humanness of the Cèmuhi subject, two different markers are used: *ɔ* for human and “topical”⁸ referents, as shown in (27a), and *ne ~ na*⁹ for the others (Rivierre 1980, 185). The latter may be cognate to the Voh-Koné subject marker *na*. The non-human marker *ne* is “pretty rare” (ibid.), whereas *ɔ* occurs almost always (an exception seems to be mostly subjects bearing a feminine article, as in (27b)). With the semantic factors that Rivierre implies, we thus find a hierarchy of subject marking in Cèmuhi:

Specific human non-feminine > specific human feminine > non-human/generic

There does not seem to be a Cèmuhi marker that is always obligatory, unlike in Voh-Koné and Hienghène languages. Another difference to the other systems seen so far is that *ɔ* is also a topicalizer, used only with humans (28a) regardless of the nominal’s subjecthood (Rivierre 1980, 93). In (28b), the topicalizer allows the subject NP to be fronted, which is not possible with *ne*.

- (27) a. Cèmuhi
 ɛ pée-eg ɔ pa-ce apulip
 3SG take-3SG.F SBJ non.F.SG-INDF man
 ‘Someone took her (away).’ (Rivierre, 1980, 186)
- b. è té pi-éti-èg ē cèiú
 3SG ASS IPFV-rise-3SG.F F.SG one.F
 ‘One rises.’ (Rivierre, 1980, 186)
- (28) a. ɛ too-lupwɔ pwénáajien ɔ a-pwɔmwiidé me a-pwɔpicé
 3SG find-3DU brother TOP A. COM A.
 ‘He meets the two brothers, A-Pwɔmwiidé and A-Pwɔpicé.’ (Rivierre, 1980, 185)
- b. ɛ wii mwo ɔ e-je li pwɔkɔ wié-n
 3SG eat again TOP 3SG-DEM DEF.PL big meaty.portion-3SG.POSS
 ‘This one eats her big portion of meat again’ (Rivierre, 1980, 187)

3.3 Relational classifiers

The Bwato cognate is identical to the Vamale form: *ka-n* (Rivierre and Ehrhardt 2006, 40). While both verbal and nominal alignment differ slightly across Voh-Koné, the relational classifier seems to be identical throughout the group. This is thus likely the origin of the homophony. Whether western Voh-Koné has a form used to optionally put the possessor into focus needs further research.

In Hienghène languages, we find a (possibly enclitic) form *ne-n* (Haudricourt and Ozanne-Rivierre 1982, 248; Ozanne-Rivierre 1979, 32). In none of the texts nor in the examples provided in the dictionaries do we find cognates of the optional linker *ka-n*. However, the linker used in ordinals is *na-n* or *-e-n* (Haudricourt and Ozanne-Rivierre 1982, 261), and since numerals are stative verbs, we argue that these suffixes are linkers in deverbal nominalizations. Further research will clarify this question.

⁸ Termed ‘the answer to the question “Who did it? Who acted? Whom is it about?”’ (Rivierre 1980, 185).

⁹ If followed by [a].

In Cèmuhî, the relevant morpheme is $[-hĩ]$, which may be cognate with $ka-$: the Cèmuhî cognate in ordinals to Vamale $ka-$ is $[hẽ]$ (Rivierre 1980, 271), which suggests that similar sound changes happened. Unlike the other languages discussed, $[-hĩ]$ takes indirect possessive suffixes. It marks part-whole-relationships, but also certain other inalienable possessibles like ‘descendance’ (Rivierre 1980, 168) (Table 5).

3.4 Deverbal nominalizations

In Bwatoo, a “relator” suffix $-na-n$ for manner and instrumental nominalizations fulfills the same function as $ka-n$, whereas another relator $la-n$ is used for locative nominalizations but also the verb *moo* ‘to stay somewhere; to be’ (possibly related to *la* ‘be.here; place’) (Rivierre and Ehrhardt 2006, 36). The description of these constructions is, unfortunately, too brief to say much more about their sensitivity to animacy.

No Hienghène language seems to have cognates of Vamale $ka-n$ with overt noun phrases (Table 6). Noun phrases follow the verb directly without a linker, mirroring the behaviour of objects and stative subjects. Intransitive verbs index person with the same suffixes as for stative subjects regardless of the derived verb’s active or stative class. Nominalized transitive verbs index their animate objects in the same way as P in non-derived constructions (Haudricourt and Ozanne-Rivierre 1982, 253). In Hienghène languages, too, there is thus an alignment different from that of non-derived verbs, though this alignment opposes A , S , and P , but without aligning the latter two.

For covert noun phrases, we find a (possibly enclitic) form $ne-n$ (Haudricourt and Ozanne-Rivierre 1982, 248; Ozanne-Rivierre 1979, 32). In none of the texts in *ozanne-rivierre_textes_1979a* nor in the examples provided in the dictionaries do we find cognates of the optional linker $ka-n$. A Nemi example shows that animate subjects of active intransitive verbs in nominalizations take S_P pronouns (29), like in Vamale.

- (29) vi hun-hwi-aman o, u venaana
 DEF.SG NMLZ-eat-thing 1SG DEM DEM.PROX
 ‘My way of eating, here it is.’ (Ozanne-Rivierre, 1975, 431)

In Cèmuhî, the system is split-intransitive. The cognates are the possessor linker $[ne]-$ to mark inanimate or overt animate S_P , and optionally P of deverbal nominalizations (Rivierre 1980, 272). $[te]-$ is used for the A and S_A of deverbal nominalizations and is also a possessor linker (Rivierre 1980, 271, 273).

Table 6: Forms used for argument marking in nominalizations

Function	Vamale	Bwatoo	Cèmuhî	Pije and Fwâi	Nemi
A	(ka=) NP		$te(-n)$	na	ru
S_A	(ka(-n))	$na(-n)$	te	$\emptyset$ NP	$\emptyset$ NP
S_P	(ka(-n))	$na(-n)$	$ne(-n)$	$\emptyset$ NP	$\emptyset$ NP
P	(ka(-n))	$na(-n)$	$ne(-n)$		$\emptyset$ NP

Table 7: Subject marker particles in northern New Caledonian languages (♡ stands for animate NPs)

Function	Vamale	Bwatoo	Cèmuhî	Pije	Fwâi	Jawe
Transitive subject A	$ka=$	na	$\text{ɔ} (\♡), ne \sim na$ (non-♡)	lu	ru	$we-$
Intransitive subject subject S_A	($ka=$)	na	$\text{ɔ} (\♡), ne \sim na$ (non-♡)	$lu \sim ru \sim we-$ (only ♡)		
Stative S_P	($ka=$)	$\emptyset$ NP	$\emptyset$ NP	$\emptyset$ NP		

Table 8: Table of forms fulfilling the same function in Vamale and its neighbours

Function	Vamale	Bwatoo	Cèmuhi	Pije	Fwâi
Subject marker	<i>ka</i>	<i>na</i>	<i>ɔ/ nè</i>	<i>lu</i>	<i>ru</i>
Linker	<i>ka-n</i>	<i>na-n/la-n</i>	<i>te, ne</i>	<i>((y)a)-n</i>	<i>((y)e)-n</i>

4 Conclusion

Our study set out to do three things: describe Vamale alignment, compare it to its relatives, and offer an explanation for the origin of the homophony. We identified three alignment systems co-occurring in Vamale: a nominative-accusative system in nominals, a tripartite one in verbs, and an ergative-like one in deverbal nominalizations. Comparing the Vamale structures to related languages shows which forms in the language are old, and in which cases Vamale innovated. While alignment is described as such neither for Voh-Koné nor for Hienghène languages, the existing descriptions suggest that:

(1) Alignment in all languages discussed here distinguishes verb classes, transitivity, and animacy of the involved noun phrases. Though some Northern languages remain underdescribed, they likely all distinguish animacy on both the verbal indexing, and the nominal level. Stative verbs do not bear subject indices for inanimate subjects. Inanimate subjects tend not to be indexed by a subject marker or only in marked cases, depending on the language (Table 7). Nominalizations mark both inanimate subjects and objects with the linker in marked situations, or if the noun phrase is generic, and thus cannot index persons (e.g. ‘you’, ‘he’) using the linker. As animacy distinctions are common to both verbal and nominal alignment, they are likely old systems, as are the verb classes. Similarly, specificity is a factor in the marking of subjects and objects. Finally, possessors follow the same rules concerning overtiness, animacy, and specificity as verbal arguments do, which helps explain how in Vamale, the forms of the optional markers of possessors, and non-A arguments of nominalized verb phrases assimilated. (2) Verbal alignment in Cèmuhi is the most similar system to Vamale. It marks transitive and intransitive subjects the same in active verbs, but marks subjects distinctly in stative ones (Rivierre 1980, 194–196). Objects are separate in marking from the rest (Rivierre 1980, 186), which we interpret as a tripartite pattern like in Vamale. This system is not found in other Voh-Koné languages. One explanation for the Vamale system being different from that of its closest relatives would be intensive contact between the two neighbouring languages, which is also the reason for the fact that they share the active subject indexing 1_{SG} form. However, the Cèmuhi marking of noun phrases as subjects is restricted to active verbs, whereas Vamale may mark the subject of a stative verb with *ka=* as well, albeit with a focusing connotation. The Cèmuhi system marks all subjects but with dedicated forms for animacy and specificity, which is a more complex system than the Vamale one. The latter in turn marks inanimate *S_A*, unlike the other Voh-Koné languages. Vamale may have extended the functions of the existing subject marker *ka=* to match the Cèmuhi system, and then gone beyond its neighbour’s example to mark *S_P* as well. Given the political history of the region, it is more plausible that Cèmuhi influenced Vamale than the other way round (Guiart 2006). (3) The development of the unique homophony in Vamale was possible through intensive contact as well as similar indexing of possessors, intransitive subjects, and objects. The cognate sets seen in Table 8 invite the following speculation: the first *ka* of this form was the possessive linker, since a cognate is found in other Voh-Koné languages, and indeed in Cèmuhi as well. The possessive linker is also the most similar across the Hienghène languages, though further research is needed to ascertain this cognacy. In a second step, Vamale would have merged the classifier and the linker, as they occur in similar environments and both take a suffix *-n*. From there, a third merger in Vamale could have assimilated the linker and the subject marker. This merger is not complete, as the subject marker does not mark non-specificity with *-n* like the two others.

Since syntactic descriptions are rare for Northern languages, generalizations remain tenuous. However, given the complexity of the patterns seen in Vamale and Cèmuhi, more fine-grained descriptions of the other Northern languages will likely yield similarly complex and informative evidence of language contact. This study has shown how quickly and profoundly systems in the North could change, and provides a data point towards a reconstruction of Proto-Northern alignment.

Abbreviations

A	agent-like argument of canonical transitive verb
ACCP	finally
AGT	agent
ALR	present perfective (“already”)
ANA	anaphoric
ART	article
ASS	assertive
BEN	benefactive
CLF	classifier
COM	comitative
COMP	complementizer
CST	construct suffix
DEF	definite
DEM	demonstrative
DU	dual
EXIST	existential
F	feminine
FOC	focus
INDF	indefinite
INS	instrumental
IPFV	imperfective
LINK	linker
LOC	locative
NEG	negation
NMLZ	nominalizer/nominalization
NSPEC	non-specific
OBJ	object
OBL	oblique
P	patient-like argument of canonical transitive verb
PL	plural
POSS	possessive
PROX	proximal/proximate
REL	relativizer
REP	repetitive
S	single argument of canonical intransitive verb
SA	S marked like A
SP	S marked like P
SBJ	subject
SG	singular
TOP	topic
TR	transitive

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