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Distinguishing subjects from topics: On (differential) subject marking in Daakaka

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Abstract

This paper investigates the morphosyntactic status of preverbal subject marking in West-Ambrym language Daakaka (Central Vanuatu, Oceanic, Austronesian). Cross-linguistically, argument marking has been treated as either agreement or pronominal clitics (e.g. Yuan, 2021, Bresnan & Mchombo, 1987). Based on natural corpus data (von Prince, 2013) and additional data from elicitation, I provide evidence for an agreement analysis. In particular, I show that subject NPs do not have the semantic and pragmatic properties of topics, contrary to the predictions of a clitic analysis (cf. Alexiadou & Anagnostopoulou, 1998). Instead, I reveal two designated structural positions for subjects and topics relative to modal adverbs. Since both subject NPs and subject agreement are optional in certain contexts, Daakaka is classified as a null subject language with differential subject marking sensitive to animacy, with further implications for the analysis of similar phenomena across Vanuatu languages (Ridge, 2022, on Vatlongos, Schnell, 2018, on Vera'a, Meyerhoff, 2000a, on Bislama).

Summary in Bislama

Risej ia i lukluk long mak blong sabjek we i stap long verb long lanwis Daakaka (West-Ambrym, Vanuatu). Long ol defren lanwis, sam riseja oli talem se mak blong subject i olsem wan mak blong agrimen o wan pronaon blong klitik (Yuan, 2021, Bresnan & Mchombo, 1987). Folem data blong kopas blong von Prince (2013) mo sam niufala data, mi soem evidens se mak ia i wan mak blong agrimen. Mi soem se ol sabjek oli no mas gat ol semantik mo pragmatik fasin blong topik, we klitik analisis i bin talem (Alexiadou & Anagnostopoulou 1998). Be, mi faenem se Daakaka i gat tu ples we i defren blong sabjek mo topik. From we sabjek NP mo mak blong subject i no stap long olgeta sentens, Daakaka i wan pro-drop lanwis mo mak blong subject i save jenis folem animasi. Risej long ol narafala lanwis blong Vanuatu, olsem Vatlongos (Southeast Ambrym; Ridge, 2022), Vera'a (Torres-Banks; Schnell, 2018), mo Bislama (Meyerhoff, 2000a), i soem se mak blong sabjek i gat sem fasin.

Keywords

syntax, morphology, semantics, agreement, clitic pronouns, differential subject marking, Oceanic

1 Introduction

In the West-Ambrym language Daakaka (Central Vanuatu, Oceanic), the person and number features of subjects are cross-referenced within the verb(al complex) by a subject marker (von Prince, 2015). In (1) for example, the 3rd person plural subject *vyanten nyoo ente* 'the men' co-occurs with the 3rd person plural subject marker *ya-* on the realis marker *-m*.[1]

(1) ***[Vyanten nyoo ente]***$_i$ ***ya***$_i$*-m* *téé* *vyan* *etes.*
person PL DEM 3PL-REAL look go at.the.sea
'The men looked to the sea.' (von Prince, 2015, p. 284)

At the same time, neither subject marking nor the subject NP is always obligatory, as illustrated below. In (2a), plural subject marking is grammatical in the absence of an overt subject, whereas in (2b), an inanimate plural subject does not trigger subject marking on the verb.

(2) a. ***Ya***-m *oko* *yan* *vyor* *nyoo* *ente.*
3PL-REAL walk on stone PL DEM
'They walked on these stones.' (von Prince, 2015, p. 295)

b. ***Wotop*** ***lim*** ***ma*** *sanga.*
breadfruit five REAL be.bad
'Five breadfruits are bad.' (von Prince, 2015, p. 295)

Although patterns of various types of optional subject (marking) have been described for and investigated in Vanuatu and other Oceanic languages (Ridge, 2022, on Vatlongos, Southeast Ambrym, Schnell & Barth, 2020, Schnell, 2018, on Vera'a, Torres-Banks, Meyerhoff 2009, 2000b, on Tamambo, Malo, and Bislama, among others, cf. Odango, 2014, on the Micronesian language Lukunosh Mortlockese), the morphosyntactic status of subject marking is not well-understood for most Vanuatu languages.

In cross-linguistic research, subject marking, and argument marking more generally (also *argument indexing*; cf. Haspelmath, 2013), is typically distinguished between agreement and pronominal clitics (Bresnan & Mchombo, 1987, Jelinek, 1984, Givón, 1976, among many others): While in some languages, subject markers are verbal agreement affixes that realize the *φ*-features, e.g. person and number features, of the subject on the verb, in other languages, subject markers are clitic pronouns that occupy the subject position itself, with the co-referring NP usually showing topic properties (cf. Haspelmath, 2013, for discussion). Due to their similar surface morpho(phono)logical properties, recent studies primarily focus on semantic and pragmatic diagnostics associated with the syntactic status of the subject NP to establish whether subject markers are agreement affixes or clitic pronoun[2] in a given language (see Yuan, 2021, Kramer, 2014, and Preminger, 2009, for recent discussions).

[1] The glosses follow the Leipzig Glossing Rules, except: REAL = realis mood and INTJ = interjection.

[2] In this paper, I do not follow the dual-nature view, according to which subject markers may be agreement affixes in the present of a subject NP but (clitic) pronouns in the absence of a subject NP (e.g. Bresnan & Mchombo, 1987; cf. Haspelmath, 2013, for a critical discussion).

In this paper, I revisit the status of subject marking in Daakaka, for which the subject marker has previously been described as a clitic personal pronoun (von Prince 2015, p. 155ff). Based on natural corpus data (von Prince, 2013) and data from additional judgment tasks, I show that subject marking lacks restrictions on non-specific and quantified noun phrases which are expected under a clitic analysis (Alexiadou & Anagnostopoulou, 1998, cf. Yuan, 2021, Kramer, 2014, on object marking). Moreover, subject marking can co-occur with focus subjects, ruling out a generalized topic analysis of subjects in Daakaka. Instead, I demonstrate that subjects can appear in two distinct structural positions, associated with subject and topic properties. As both the subject and subject agreement are optional, Daakaka can be classified as a *pro*-drop language with differential subject agreement sensitive to animacy.

This paper is structured as follows: Section 2 presents a brief overview of subject marking and its distribution in Daakaka. Section 3 investigates the morphosyntactic, semantic, and pragmatic properties of subject marking, arguing against a clitic analysis. Section 4 reveals that subjects and topics occupy distinct syntactic positions relative to modal adverbs, providing additional support for an agreement analysis. Section 5 sketches out some implications regarding Daakaka's status as a *pro*-drop language with optional differential subject marking sensitive to animacy. Section 6 concludes.

2 Subject Marking in Daakaka

After a brief typological and methodological background, this section provides a morphosyntactic overview of subject marking in Daakaka, which marks the person and number feature of the subject NP on the verb. However, both subject NPs and subject marking can be optional under certain conditions, such as topicality and animacy.

2.1 Typological and methodological background

Daakaka is a Central Vanuatu language, spoken by approximately 1,000 speakers in the Southwest of Ambrym. Daakaka remains relatively stable, as it is still transmitted to the next generation. It is, however, threatened by the increasing use of Vanuatu's lingua franca, Bislama, and to a lesser degree, English (von Prince, 2015, p. 10f). As typical for Vanuatu, Daakaka speakers are usually multilingual, speaking neighbouring languages and Bislama. Genealogically, Daakaka is closely related to other Ambrym languages, especially the Southwest-Ambrym languages Daakie (Krifka, 2011) and Dalkalaen (von Prince, 2012), as well as North Ambrym (Franjieh, 2012) and the Southeast Ambrym language Vatlongos (Ridge, 2019), with which Daakaka forms a dialect chain.

The basic word order is SVO, with a preverbal subject, mood-prominent TMA marking, and verb-final transitivity marking. Noun phrases are not overtly marked for case, optionally for number and (in)definiteness, and may be dropped if recoverable from the discourse context (Hopperdietzel, 2020a, b; von Prince, 2015).

(3) ***[(Vyaven*** ***(nyoo)*** ***(ente))]***$_{SUBJ}$ ***[<u>ya</u>-m*** *kuk-ane]*$_{VERB}$ *[(dom* *pi~pili)]*$_{OBJ}$.
woman PL DEM 3PL-REAL cook-TR yam RED-red
'The women cooked red yam.'

The data for this study primarily comes from von Prince's (2015) comprehensive grammar of the language as well as a corpus of transcribed oral speech data (68,921 tokens; von Prince 2013). Additional data was collected via judgment tasks based on manipulated sentences during elicitation sessions from 2017–2019 in the village of Emyotungan (Ambrym) and Port Vila (Efate) with three native speakers (all male; age: 23, 30, 61). Unless otherwise indicated, unreferenced examples come from these sessions.

2.2 The subject marker in Daakaka

In Daakaka, the person and number features of the subject are cross-referenced by a subject marker on the verbal complex, where it attaches to the left of the mood marker (see von Prince 2015 for Daakaka being a mood-prominent language). This is illustrated for first (4a), second (4b), and third person dual (4c) with pronominal subject NP below.

(4) a. ***Nye*** ***<u>na</u>-m*** *pwer* *atak* *meerin* *wuk.*
1SG 1SG-REAL stay LOC.PROX long.time already
'I have been here a long time already.' (von Prince, 2015, p. 217)

b. ***Ngok*** ***<u>ko</u>-m*** *maawa-ane* *nye.*
2SG 2SG-REAL spoil-TR 1SG
'You spoiled me.' (von Prince, 2015, p. 401)

c. ***Nya*** ***nokis*** ***<u>ye</u>-m*** *mer~mer.*
3DU both 3DU-REAL be.dead
'They both died.' (von Prince, 2015, p. 187)

While aspectual markers can occur between the verb and the mood marker, nothing can intervene the subject marker and the mood marker. The structure of the verbal complex in Daakaka is given below.

(5) [SM-Mood (Asp) (RED~)Root(-TR)]$_{VERBAL\ COMPLEX}$

As typical for many Vanuatu languages, and Oceanic languages more generally (cf. Lynch et al., 2002), the subject marker in Daakaka distinguishes between four numbers, i.e. singular, plural, dual, and paucal, as well as four persons, i.e. first inclusive and exclusive, second and third person. The full paradigm of subject markers is given in Table 1 below, though the third person singular subject marker does not exhibit an overt realization.[3]

[3] The absence of a subject marker in the context of inanimate verbs, as discussed in section 5.2., may therefore be interpreted as default third person singular marking (cf. Ridge, 2022, on Vatlongos).

Table 1. Paradigm of the subject marker in Daakaka (von Prince, 2015, p. 156).

	Singular	**Plural**	**Dual**	**Paucal**
1.exclusive	*na*	*kinye*	*kana*	*kisi*
1.inclusive	---	*ra*	*da*	*si*
2	*ko*	*ki*	*ka*	*kasi*
3	*ø*	*ya*	*ye*	

Unlike first and second person, third person subject marking is somewhat impoverished with singular being zero and dual and paucal syncretic. The form of the subject marker also influences the form of the adjacent mood marker: If the subject marker is zero (or the verb starts with a vowel), the mood marker appears in its monosyllabic form and is subject to vowel harmony (6b) (von Prince, 2015, p. 233ff).[4] The form of the subject marker remains invariant across morphological contexts.

(6) a. ***Wotop*** ***nyoo*** ***<u>ya</u>-m*** *tesi.*
breadfruit 3PL 3PL-REAL fall.PL
'The breadfruits fell.' (von Prince, 2015, p. 219)

b. ***Wotop*** ***<u>mu</u>*** *mur.*
breadfruit REAL fall.SG
'The breadfruit fell.'

To summarize, the subject marker transparently tracks the person and number features of the subject NP on the verb without any morphophonological interactions.

2.3 Optionality of subjects and number marking

Like in several other Vanuatu languages (cf. Schnell & Barth, 2020; Meyerhoff, 2009, 2000b), the subject may not be overtly expressed, especially if it is recoverable from discourse (von Prince, 2015, p. 259).[5] In such contexts, subject marking is the only indicator of the person and number features of the subject and helps to disambiguate the subject role. Note that referential definite objects are also optional in Daakaka (7a).

[4] Some verbs distinguish between singular and plural root forms, e.g. *mur* 'fall (SG)' and *tesi* 'fall (PL)'. Unlike subject marking which follows a nominative pattern, agreeing with the sole argument of intransitive verbs and the subject of transitive verbs, number suppletion follows an absolutive alignment, as it tracks the number of the sole argument of intransitive verbs and the object of transitive verbs (von Prince, 2015, p. 51, cf. Thornton, 2019, Bobaljik & Harley, 2017). In addition, verbs can be reduplicated to express pluractionality, independently of the number of their arguments (Hopperdietzel, 2020b, von Prince, 2015).

[5] Since von Prince (2015) analyzes the subject marker as a subject clitic pronoun, she does not mention the omission of subjects directly but rather the omission of subject NPs.

(7) a. ***Na-m*** *esi.*
1SG-REAL see
'I see it.' (von Prince, 2015, p. 301)

b. *E,* ***ko-m*** *edi* *wotop* *entak* *ar-ve?*
INTJ 2SG-REAL take.TR breadfruit DEM LOC-which
'Hey, where did you get that breadfruit?' (von Prince, 2015, p. 144)

c. ***Mwe*** *vyan* *bya* *an* *dom.*
REAL go plant 3SG.POSS yam
'He went to plant his yam.' (von Prince, 2015, p. 187)

In addition, third person plural number marking on the verb is not always obligatory, as inanimate plural subjects can appear without overt subject marking (9a), which may also be interpreted as default third person singular marking (cf. Table 1; von Prince, 2015, p. 291ff; see also Ridge, 2022, on Vatlongos). This contrasts with animate subjects for which subject marking is obligatory (8b).[6]

(8) a. ***Deli-sye*** ***nyoo*** ***mwe*** *pwis.*
egg-3SG.POSS PL REAL be.plentiful
'His eggs are plentiful.' (von Prince, 2015, p. 103)

b. ***Vyanten*** ***nyoo*** ****(ya)-m*** *te* *lee.*
man PL 3PL-REAL cut.TR tree
'The men cut trees.'

In certain contexts, both the subject and the subject marker can be dropped simultaneously, for example, when a discourse prominent third person plural inanimate subject is dropped, which is not cross-referenced on the verb.

(9) *Mwe* *tesi.*
REAL fall.PL
'They (the eggs) fell.' (von Prince, 2013, p. 2180)

Therefore, Daakaka allows the subject and the subject marker to be dropped, adding further complexity to the subject marking system.

3 Distinguishing Subjects from Topics

In this section, I investigate the morphosyntactic status of subject marking as either agreement or clitic (doubling). Examining semantic effects on specificity and quantification as well as

[6] In addition, number marking on nouns is optional on both animate and inanimate nouns, often with interpretative consequences related to definiteness (von Prince, 2015, p. 291 for a detailed discussion).

pragmatic restrictions, I provide novel evidence that subject marking in Daakaka qualifies as agreement, in which the overt subject functions as the true subject of the clause.

3.1 Pronominal clitics vs. agreement

As mentioned in section 1, two types of argument marker are traditionally discussed, namely agreement affixes and pronominal clitics (Baker 1996, Jelinek, 1984, see also Odango, 2014, on Lukunosh Mortlockese and Meyerhoff, 2000b, on Bislama): If the subject marker functions as an agreement affix, it realizes the person and number feature of the subject on the verb (10a); if the subject marker is a pronominal clitic, the clitic itself is the subject of the clause with co-referential NPs showing topic properties (10b).[7] However, the discrimination between the agreement and pronominal clitics is notoriously difficult without a systematic investigation, as potentially reflected by the conflicting analyses of subject marking in Southwest-Ambrym languages (see von Prince, 2015, for a clitic analysis of subject marking in Daakaka and Krifka, 2011, for an agreement analysis of subject marking in Daakie).

(10) a. $NP_{SUBJECT}$ $SM_{AGREEMENT}$-TMA VERB
b. NP_{TOPIC} $SM_{SUBJECT.CLITIC}$-TMA VERB

Nevertheless, due to the distinct status of the subject NP in both constructions, agreement and clitics can be distinguished based on semantic effects and pragmatic restrictions on topics (Lemon, 2024, on subject marking in Uab Meto, Austronesian, cf. Yuan, 2021, Kramer, 2014, and Evans, 2002, on object marking). Firstly, topical indefinite NPs often receive a specific interpretation, whereas non-topical indefinite NPs also allow for non-specific interpretations (Alexiadou & Anagnostopoulou, 1998, and references therein). A similar specificity constraint has been observed for clitic doubling more generally, which has been linked to the pronominal status of the clitic (cf. Yuan, 2021; Evans, 2002). For agreement, no interpretational effects on subject NPs are expected, since subjecthood is not directly related to topicality but merely a valuation of *φ*-features (Chomsky, 2001). The specificity effect is illustrated by Greek below, where the indefinite NP *ena pedhi* 'a child' obligatorily receives a specific interpretation in the preverbal topic position (11a) but not in the post-verbal subject position (11b).

(11) a. ***Ena*** ***pedhi*** *diavase* *to* Paramithi horis Onoma.
a child read the Fairytale without a title
'A certain child/one of the children read *Fairytale without a title*.'
(Alexiadou & Anagnostopoulou, 1998, p. 506)

b. *Diavase* ***ena*** ***phedi*** *to* Paramithi horis Onoma.
read a child the Fairytale without a title
i. 'A child read *Fairytale without a title*.'
ii. 'A certain child/one of the children read *Fairytale without a title.*
(Alexiadou & Anagnostopoulou, 1998, p. 506)

[7] The morphosyntactic and information structural properties of the subject may differ in clitic left dislocation and clitic doubling, since the subject is not necessarily located in the designated topic position. Yet, both structures exhibit similar restrictions on arguments as both require them to be referential across languages (see Yuan, 2021).

Secondly, quantified NPs differ in their scope properties, depending on their status as syntactic topics (Alexiadou & Anagnostopoulou, 1998). If the subject NP is in a (derived) subject position (A-position), it allows for both wide and narrow scope readings; if it is in a topic position (A'-position), it is usually restricted to wide scope. Again, this is illustrated by Greek, where quantified NPs necessarily take wide scope over the universal quantifier in the preverbal topic position (12a), but allow for additional narrow scope in the post-verbal subject position (12b).

(12) a. ***Kapios*** ***fititis*** *sithiothetise* *kathe* *athro.*
some student file every article
'Some student filed every article.' (Alexiadou & Anagnostopoulou, 1998, p. 505)

b. *Sithiothetise* ***kapios*** ***fititis*** *kathe* *athro.*
file some student every article
i. 'Some students (together) filed every article.'
ii. 'Every article was filed by at least some students.'
(Alexiadou & Anagnostopoulou, 1998, p. 505)

Finally, due to their topical status in the presence of pronominal clitic subjects, focus expressions are ruled out as subject NPs (Bresnan & Mchombo, 1987). This is illustrated by Québécois French (Roberge, 1990, Cournane, 2010), where subject clitic doubling is generally optional but ungrammatical in *wh*-questions.

(13) a. La sirène (a) chante chaque matin.
the mermaid she sing every morning
'The mermaid sings every morning.' (Cournane, 2010, p. 4)

b. * Qui Il est allé?
who he is gone
Intended: 'Who went?' (Roberge, 1990, p. 118)

To summarize, pronominal clitics can be distinguished from agreement based on interpretational effects on indefinite and quantified subject NPs as well as pragmatic restrictions.[8] In the following, I apply these diagnostics to subject marking in Daakaka.

3.2 Specificity

Von Prince (2017) shows that Daakaka exhibits two sets of indefinite articles that differ in their specificity: While *swa* 'a' and *wuoswa* 'some' gives rise to specific interpretations (14a), *tuwsa*

[8] Traditionally, agreement and pronominal clitics are often distinguished by their morphophonological properties, with agreement being potentially more likely to be subject to allomorphy or to display morphological irregularities than clitics (cf. Zwicky & Pullum, 1983). However, as discussed by Yuan (2021), these are rather tendencies and do not necessarily follow from the morphosyntactic status of the argument marker.

'a' and *tisyu* 'some' to nonspecific ones (14b), which usually, but not necessarily, occur in negative assertions, questions, and conditionals.[9]

(14)	a.	*Wotop*	***swa***	*to*	*pwer.*
		breadfruit	SPEC	REAL.NEG	stay
		'A (certain) breadfruit is not there.' (adapted from von Prince, 2017, p. 127)			
	b.	*Wotop*	***tuswa***	*to*	*pwer.*
		breadfruit	NSPEC	REAL.NEG	stay
		'A breadfruit is not there.' (i.e. there is no breadfruit; von Prince, 2017, p. 127)			

Crucially, not only non-specific singular subjects can appear in the preverbal subject position, but also non-specific plural subjects marked by *tisyu* can be found pre-verbally in the presence of the plural subject marking on the verb.

(15)	*Ka*	***nyoo***	***tisyu***	***ya***-*t*	*me*
	SUBJ	3PL	NSPEC.PL	3PL-DIST	come
	te	*saka*	*ko-n*	*sóró*	*myane.*
	CONJ	NEG.MOD	2SG-NEC	speak	with
	'If any of them comes, don't talk to them.' (von Prince, 2015, p. 190)				

Given that no interpretational restrictions on indefinite subjects that co-occur with the subject marker can be observed, Daakaka subject marking behaves like agreement.[10] If the preverbal NP would have topic status, NPs marked by the non-specific articles *tuswa* and *tisyu* would be banned from this position, contrary to fact.

3.3 Quantification

Likewise, universally quantified plural subjects can take both wide and narrow scope in the presence of the subject marker (cf. von Prince, 2015, p. 185), as illustrated below. Under a narrow scope reading (¬ > ∀), the negative realis marker *to* scopes over the quantified NP *temeli*

[9] A reviewer wonders whether the clauses in (14) are thetic clauses. Von Prince (2015, p. 277f) notes that Daakaka marks thetic clauses by a designated construction, involving the focus marker *sa* in immediate preverbal position and either the distal or proximate demonstrate *=te/=tak* in clause final position.

[10] Potential support comes from plural generics, which can also co-occur with the plural subject marker. In (i), the generic subject NP *base'e nyoo* 'birds' is mentioned the first time in the discourse context and is thus unlikely to be interpreted as a topic. However, since a specific interpretation cannot be ruled out, I focus on examples that are marked by a non-specific article.

(i) 'When somewhere, there is a plant of it [a Banyan tree] and it bears fruit, …

Base'e	*nyoo*	*ya-m*	*vyan*	*tevy-an.*
Bird	3PL	3PL-REAL	go	side.of-3SG.POSS

'Birds go there.' (von Prince, 2013, p. 2880)

nyoo kevene ‘all children’, i.e. not all children came home; under a wide scope reading instead (∀ > ¬), negation is in the scope of the quantifier, i.e. not a single child came home.[11]

(16)	*Temeli*	*nyoo*	***kevene***	***ya***	***to***	*me*	*teenem.*
	child	3PL	every	3PL	REAL.NEG	come	home

i. ‘All children did not came come home.’ (wide scope)

ii. ‘Not all children came home.’ (narrow scope; von Prince, 2015, p. 185)

The scope ambiguities of quantified plural subjects and negation therefore support an agreement analysis of subject marking in Daakaka.

3.4 Focus subjects

To mark constituents as new information, Daakaka uses the focus marker *sa* which occurs at the right edge of the focused element, including subjects (von Prince, 2015, p. 274ff), as for example on wh-elements that are obligatorily in focus.

(17)	***Si***	***sa***	***mwe***	*gene?*
	who	FOC	REAL	do

‘Who did this?’ (von Prince, 2015, p. 275)

Crucially, focus marking and subject marking co-occur. In (18), the plural subject NP *waawu nyoo sa* ‘the ancestors’ is marked by *sa* in the presence of the plural subject marker *ya*.

(18)	***Waawu***	***nyoo***	***sa***	***ya*-*m***	*tis-kate*	*sye*	*ente.*
	grandparent	3PL	FOC	3PL-REAL	write-tight	something	DEM

‘The ancestors wrote this down.’ (von Prince, 2013, p. 2263)

As focus marking is incompatible with subject NPs having topic status, their co-occurrence provides further evidence for an agreement analysis of subject marking in Daakaka.

To summarize, the application of semantic and pragmatic diagnostics uniformly identifies subject marking in Daakaka as subject agreement (Table 2). Accordingly, the subject NP functions as a neutral subject, as it does not show semantic or pragmatic restrictions associated with topical elements.

[11] I follow the orthographic conventions for Daakaka proposed by von Prince (2015, p. 45f). Accordingly, the subject marker is written together with the mood marker only, when both markers form a morphophonological unit, i.e. the mood marker appears in its phonologically reduced form. The difference in writing conventions, however, does not reflect a difference in the underlying morphosyntactic status of either subject marker or mood marker.

Table 2. Properties of NPs in agreement, pronominal clitics, and subject marking in Daakaka.

Diagnostics	Agreement	Clitics	Daakaka SM
Specificity restrictions	no	yes	no
Scope restrictions on quantification	no	(yes)	no
Focus subjects	yes	no	yes

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4 Two Positions for Subjects and Topics

Although subjects do not necessarily need also to be topics, I now demonstrate that pre-verbal subjects can nevertheless occupy a clause-initial topic position, distinct from the preverbal subject position. Crucially, in this position they show the expected semantic restrictions.

4.1 Topicalization of objects

In Daakaka, topicalization can both target objects (19a) and PP-internal NPs (19b), which move to a clause-initial position – the latter involving preposition stranding (von Prince, 2015).

(19) a. ***Bwili*** ***wye*** ***ente$_i$*** *vyanten* *nyoo* *ya-m* *du* *tas* *kyu* *___$_i$*
hole.of water DEM person 3PL 3PL-REAL stay sit surround

b. ***Lebekuu*** ***ente$_i$*** *wye* *mwe* *pwer* *yen* *___$_i$*
palmtree DEM water REAL stay in
'This palm tree, water was inside.' (von Prince, 2015, p. 272)

As predicted, topicalized objects exhibit the semantic restrictions discussed in section 3.1, e.g. only specific objects, but not non-specific ones, can appear in the topic position. This is illustrated below, where objects headed by a demonstrative or the specific indefinite article *swa* can function as topics, whereas objects headed by the non-specific article *tuswa* cannot.[12]

(20) a. ***Vyanten*** ***ente*** *ya-m* *tiye* *___$_i$* *wuk.*
person DEM 3PL-REAL fight already
'This man, they already fought him.' (von Prince, 2015, p. 273)

b. ***Vyanten*** ***nyoo*** ***ente*** ***swa*** *ya-m* *tiye* *___$_i$* *wuk.*
person PL DEM SPEC 3PL-REAL fight already
'One of these men, they already fought him.' (von Prince, 2015, p 273)

[12] Von Prince (2015, p. 273) provides an example in which a topicalized indefinite object is ungrammatical in topic position, despite being marked by *swa*, which seems surprising if *swa* is always interpreted as specific. However, *swa* is also homophonous with the numeral 'one'. As no further context is given, it might be the case that *swa* is interpreted the numeral in this context, as numerals allow for non-specific readings.

c. * ***Vyanten*** ***tuswa*** *ya* *to* *tiye* *___i*
person NSPEC 3PL NEG.REAL fight
'Any man, they did not fight him.'

Therefore, we can identify the clause-initial position as a designated topic position. Moreover, topics in Daakaka are indeed subject to the same semantic and pragmatic restrictions, observed in other languages.

4.2 High modal adverbs

Because of the SVO order in Daakaka, the distinction between subjects and topics is not always straightforward, as they usually appear in clause-initial position. Crucial evidence that topicalized subjects are indeed in the designated clause-initial topic position comes from higher modal adverbs like *wisewe* 'probably', which can either precede (21a) or follow the subject (21b) (von Prince, 2015, p. 153).

(21) a. *Wisewe* ***trak*** *mwe* *vyan* *wuk.*
probably truck REAL go already
'The truck has probably left already.' (von Prince, 2015, p. 153)

b. ***Wye*** *wisewe* *mu* *puo.*
water probably REAL be.plentiful
'There is probably a lot of water.' (von Prince, 2015, p. 153)

However, pre- and post-adverbial subjects differ in their interaction with specificity: Post-verbal subjects can be either specific or non-specific, as indicated by the grammaticality of both the specific indefinite article *swa* (22a) and the non-specific indefinite article *tuswa* (22b).

(22) a. *Wisewe* ***vyanten*** ***swa*** *to* *pwer.*
probably person SPEC REAL.NEG stay
'Probably, someone is not here.'

b. *Wisewe* ***vyanten*** ***tuswa*** *to* *pwer.*
probably person NSPEC REAL.NEG stay
'Probably, there is no one here.'

In contrast, pre-adverbial subjects can only be specific (23a), as non-specific subjects become ungrammatical in this position (23b).

(23) a. ***Vyanten*** ***swa*** *wisewe* *to* *pwer.*
person SPEC probably REAL.NEG stay
'Probably, someone is not here.' (specific)

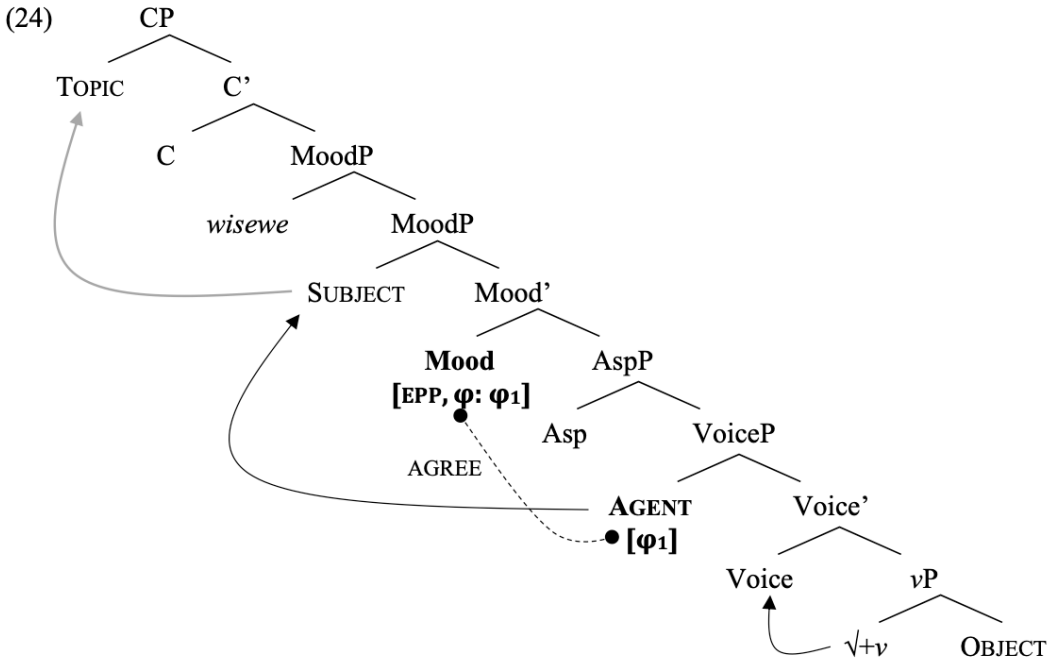
b. * ***Vyanten*** ***tuswa*** *Wisewe* *to* *pwer.*
person UNSPEC probably REAL.NEG stay
'Probably, there is no one here.'

Like non-specific objects, non-specific subjects cannot appear clause-initially. Thus, the post-adverbial subject position must be distinguished from the designated clause-initial topic position. However, in the absence of modal adverbs, the surface structure is potentially ambiguous.

4.3 Clause structure

Adopting Hopperdietzel's (2020b) analysis of the clause structure in Daakaka, I assume that subjects are born within the verbal domain, i.e. either as AGENTs in Spec, VoiceP in the context of transitive and unergative verbs or as PATIENTS in the complement of *v* in the context of unaccusative verbs (cf. Alexiadou et al, 2015, Kratzer, 1996). From there, the subject moves across optional aspectual phrases to the subject position in Spec, MoodP to satisfy the Extended Projection Principle (EPP), which requires Spec, MoodP to be filled (cf. Doner, 2019 for a recent discussion). If topicalized, the subject is merged in the topic position in Spec, CP, either via movement or base-generation, being resumed by a (silent) resumptive pronoun in Spec, MoodP, though the exact operation is beyond the scope of this paper (see Alexiadou, 2017, for an overview). For transitive verbs, this structure is schematized in (24). The verbal head undergoes head-movement to Voice, accounting for the pre-verbal nature of aspectual, mood, and subject marker, which obey the mirror principle (cf. Cinque, 1999, Baker, 1985, Travis, 1984).

(24)



Given Daakaka's status as a mood-prominent language and the morphophonological interaction of mood marking with subject agreement, I locate subject agreement on the Mood head (cf. Julien, 2002, on subject agreement being parasitic on inflectional heads). The unvalued *φ*-probe on Mood then finds the highest argument (here: the agent argument in Spec, VoiceP) in its c-command domain with which it agrees (Chomsky, 2001, 2000).

Moreover, the distinct structural position of subjects and topics also allow a type of left dislocation in Daakaka, where the topic is externally merged in Spec, CP and resumed by a pronoun in the subject position in Spec, MoodP. In (25), the topic *pus myane tomo* 'the cat and the rat' co-occurs with a co-referential third person dual pronoun *nya* in subject position and an additional dual subject marker *ye* on the verb. Such constructions are used to express a contrastive topic (von Prince, 2015, p. 272), coherent with what have been observed for contrastive left dislocation in other languages (see Alexiadou, 2017, for an overview of different types of left dislocation).

(25)	***[Pus***	***myane***	***tomo]$_i$,***	***nya$_i$***	***<u>ye</u>***	*t-i*	*bivian*	*tu*	*vu*	*ten.*
	cat	with	rat	3DU	3DU	DIST-COP	friend	DIST	good	very

'The cat and the rat, they used to be very good friends.' (von Prince, 2013, p. 4597)

To summarize, the agreement analysis of subject marking in Daakaka accounts naturally for the distribution of subject and topics in the language, as it not only unifies semantic and pragmatic restrictions on topicalized subjects and objects but also accounts for further interpretative effects of left dislocated subjects, such as contrastivity, under a cross-linguistic perspective.

5 Outlook: On Null Subjects and Differential Subject Marking

In closing, I briefly note that subject agreement in Daakaka shows properties typical of non-canonical agreement (cf. Corbett, 2006), as both the subject and the agreement marker itself can be omitted under certain conditions associated with topicality and animacy.

5.1 Null subjects

Subjects and objects are frequently dropped, leaving the subject agreement marker without an overt subject NP, if the participant can be recovered from discourse (Hopperdietzel, 2020a, von Prince, 2015), as often noted for Vanuatu languages (e.g. Schnell & Barth, 2020, Meyerhoff, 2009, 2000a).

(26)	a.	***Vyanten***	***<u>ya</u>-m***	*ta*	*mwelili-ane*	***lee.***
		person	3PL-REAL	cut	be.small-TR	tree

'The man cut trees small.'

	b.	***<u>Ya</u>-m***	*ta*	*mwelili-ane.*
		3PL-REAL	cut	be.small-TR

'They cut them.'

This groups Daakaka with other *pro*-drop languages, like Italian or Mandarin, respectively, in which subject drop is licensed by rich agreement morphology or topicality (see Thampoe, 2016, D'Alessandro, 2015, and Holmberg, 2005, for a typology of null-subjects languages). On the one hand, Daakaka exhibits familiar pragmatic effects on overt subject pronouns, similar to those observed in Italian-type *pro*-drop languages (Mayol, 2010), in that overt pronouns in subject position typically express contrastivity or switch reference (von Prince, 2015, p. 158).

(27) a. ***ngok*** ***<u>ko</u>-p*** *pwe* *tas* *(...)* *a* ***nye*** ***<u>na</u>-p*** *vyan* *(...)*
2SG 2SG-POT PROG sit and 1SG 1SG-POT go
'*You* stay (…) and *I* go (…).' (von Prince, 2015, p. 158)

b. ***Myanmyantung$_i$*** ***<u>mwe</u>*** *siwir* *a* ***nge$_{j/\#i}$*** ***<u>mwe</u>*** *kueli* *(...)*
swordfish REAL dive and 3SG REAL return
'The swordfish dived and he (the crab) went back (…)' (von Prince, 2015, p. 158)

On the other hands, Daakaka *pro*-drop exhibits properties of Mandarin-type *pro*-drop as it is not restricted to subjects, as referential objects are also frequently dropped (7a) (cf. Neeleman & Szendrői, 2007, on radical *pro*-drop). Daakaka therefore seems to exhibit a hybrid form of the two traditional types of *pro*-drop, similar to Tamil (cf. Thampoe, 2016). Future research on Daakaka may therefore also inform the typology of null subject languages more generally.

5.2 Differential subject marking

Moreover, subject agreement appears to be optional in the context of inanimate subjects with a preference for third person default marking (von Prince, 2015). In contrast, animate subjects usually trigger agreement.

(28) a. ***Temeli*** ***tisyu*** ***<u>ya</u>*** *to* *me* *teenem?*
children some.NSPEC.PL 3PL NEG.REAL come home
'Didn't some children come home?' (von Prince, 2015, p. 189)

b. ***Wotop*** ***tisyu*** ***<u>mu</u>*** *du?*
breadfruit some.NSPEC.PL REAL stay
'Are there any breadfruits (left)?' (von Prince, 2015, p. 189)

Differential subject marking sensitive to the animacy hierarchy (29) is a well-established phenomenon across languages (see Corbett, 2006, for an overview, cf. Silverstein, 1976), with the closely related Vanuatu languages Daakie and Vatlongos showing a similar pattern (Krifka, 2022; Ridge, 2022). Accordingly, the cut-off point for differential subject agreement in Daakaka is between animate and inanimate subjects.

(29) ***The animacy hierarchy*** (Silverstein, 1976, p. 122)
speaker > addressee > 3rd person > proper name > human > animate > inanimate

However, subject agreement is still possible with inanimate subject. In the example below, all four versions with and without number marking on the noun and subject agreement on the verb are available (von Prince, 2015).[13]

(30)	***Wotop***	***(nyoo)***	***{<u>ma</u> /***	***<u>ya</u>-m}***	*tesi?*
	breadfruit	3PL	REAL	3PL-REAL	fall.PL

'The/several breadfruits fell?' (von Prince, 2015, p. 294)

Animacy-based differential argument marking is well known to interact with other semantic and pragmatic parameters, including definiteness and specific (cf. Aissen, 2003), suggesting that superficial optionality of differential subject marking in Daakaka might be governed by additional factors. However, a careful examination of those potential factors is beyond the scope of this paper.

6 Conclusion

In this paper, I have investigated the morphosyntactic properties of subject NPs and subject marking in Daakaka. By the application of semantic and pragmatic diagnostics, I have argued for an agreement analysis of subject marking, as subject NPs lack the restrictions expected under a clitic analysis. These findings have further implications for the typological classification of Daakaka, which qualifies as a *pro*-drop language with differential subject marking sensitive to animacy. Yet, future research is needed to better understand the conditions of pro-drop and differential subject marking in Daakaka, especially since its mixed properties may inform the typology of null subject languages. As similar patterns have been reported for other Vanuatu languages, the current study does not only contribute to our understanding of subject marking across the language family but may also reveal significant microvariation, which has been proven very informative in the analysis of the phenomenon of differential subject marking (e.g. Cournane, 2010, on Romance languages).

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[13] Note that number marking on nouns is optional. Yet, von Prince (2015, p. 291ff) observes that in the absence of (optional) demonstratives or definite articles, number marking on (animate) NPs renders them specific.

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