

Doromu-Koki differential subject marker

Between syntax and pragmatics

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1 April 2020

1. Introduction

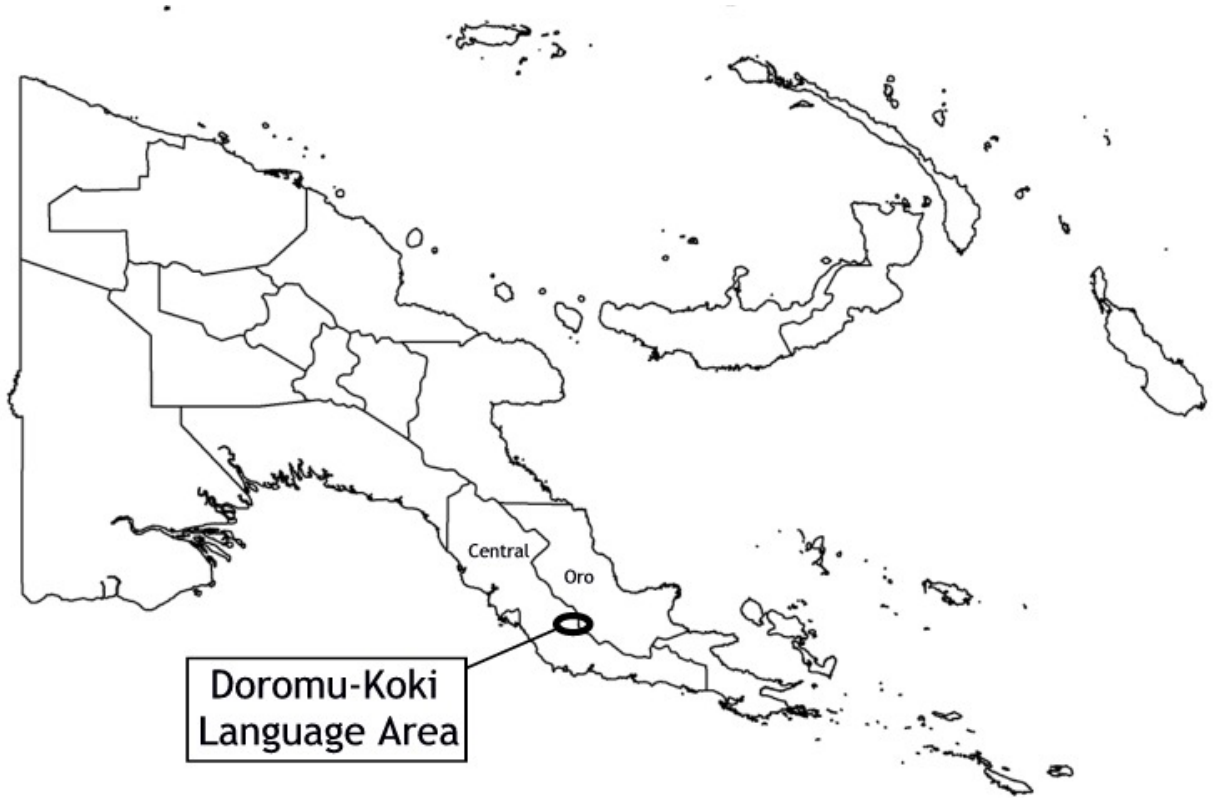
In many languages, especially in Papuan languages of New Guinea, marking of grammatical relations such as subject may depend on, or relate to pragmatic functions of the participant. Similarly in some languages differential subject and object marking also occurs (cf. Duranti 1990, Bossong 1991, Blake 2001 and Aissen 2003, inter alia). The Doromu-Koki marker *yaku* was originally identified as a marker of grammatical relation: ‘subject marking’ (Dutton 1970:918-9). Then later it was identified as having a pragmatic function: ‘development marker’ (Bradshaw 2012:170-1). I would like to investigate its functions with the aim of demonstrating that it is used to mark subjects having specific pragmatic properties.

Doromu-Koki is a Papuan language¹ of Central Province, Papua New Guinea, with about 2,000 speakers speaking three dialects: Koki, Kokila and Korigo (Bradshaw 2008).² The language community is located approximately 80 kilometres east-southeast of the capital, Port Moresby, as seen in the maps below.

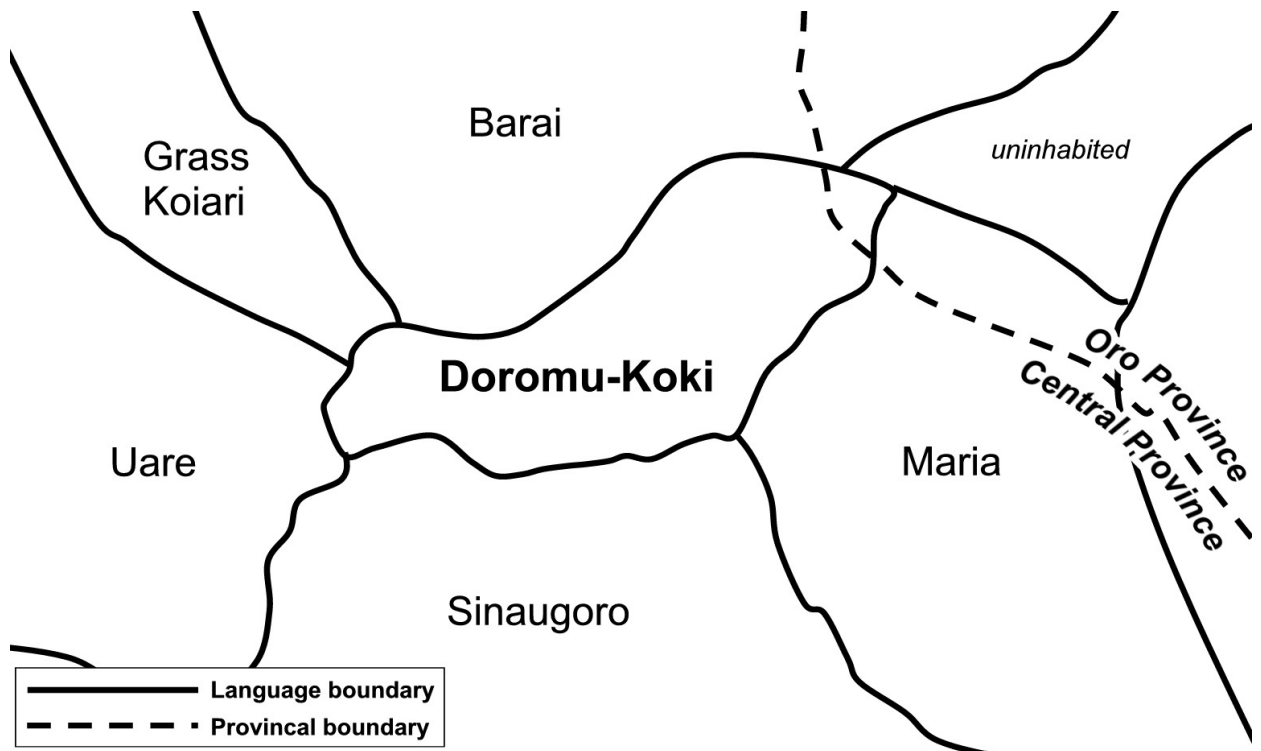
Discussion will begin with typological properties of the language (§2), which will include discussion of Doromu-Koki intransitive/transitive subject marking (§2.1) and discourse markers (§2.2). Subject marking will include discussion on constituent order (§2.1.1) and verbal morphology (§2.1.2). Discourse markers discussed will be topic marker *bi* (§2.2.1) and *yaku* (§2.2.2). After these preliminaries, discussion will continue with the question of optional subject marking (§3) and then move onto differential subject marking in cross-linguistic perspective (§4) and finally give some concluding remarks (§5). A brief description of the Doromu-Koki phonological system is included in the appendix.

¹ Manubaran, Southeast (cf. Eberhard et al 2019; Pawley 2005:94; Wurm 1982:163-4, 1975:614 and Dutton 1970:882).

² Data collected after nearly 19 years of language development include letters, firsthand narratives, legends, drama, behavioural, procedural and expository material, songs, mobile and Facebook Messenger texts and Facebook status from over 100 adults (approximately 30% female and 70% male) of various ages and backgrounds, some from the other two dialects (Kokila, Korigo), but most from the Koki dialect. Written or transcribed are over 100 pages of text. Audio recordings transcribed to date amount to over five hours. In addition there is copious annotated written and audio Scripture translation. Data collection has primarily been in the main Doromu-Koki village of Kasonomu, with some in the villages of Amuraika, Mamanu and Oduika, as well as with Doromu-Koki communities in Port Moresby. The full stop (.) is used to indicate complex non-compositional verbs (e.g. *yaga.re-* [consisting of complement *yaga* + simple verb *re-* ‘do’] ‘shake’). Bold in examples is used to indicate the morpheme under discuss or to highlight topicalised or foregrounded material in the free translation; in other situations it will be specified in the text.



Map 1: *Doromu-Koki language area within Central Province (SIL-PNG)*



Map 2: *The language in relation to neighbouring languages (SIL-PNG)*



Map 3: *Doromu-Koki dialects (District map – Rigo Central Province, 2000)*

2. Typological properties of the language

The following typological properties of Doromu-Koki will be discussed: intransitive/transitive subject marking devices (§2.1) and discourse markers (§2.2).

2.1 Intransitive/transitive subject marking devices

Doromu-Koki is a nominative-accusative language which has two primary devices for marking intransitive/transitive subject: 1) constituent order (§2.1.1) and 2) verbal morphology (§2.1.2).

2.1.1 Constituent order

Constituent order is fairly rigid as follows:

- (Temporal oblique)
- (Transitive/intransitive subject)**
- (Oblique noun phrase)
- (Object noun phrase)**
- (Extended argument noun phrase)**
- Verb phrase**

Temporals and locatives have a bit more flexibility in ordering, for pragmatic effects, while the other elements (A/S, NP_O, NP_{EXT} and VP indicated in bold above) normally do not. Because of that, it is fairly

easy to identify a noun phrase or pronoun acting as an intransitive or transitive subject. Such a clause with all arguments can be seen in (1).

- (1) [yokaru]_{TEMP} [na]_A [yava=ri]_{OBL} [iruku]_O [nai nono]_{EXT} [ma-gi
 one.day 1SG house=to food 1SG.POSS mother give-PURP
 di-yaka]_{VP}
 go-1SG.PST
 ‘one day I went to the house to give my mother some food’

As discussed above, some elements can occur in a non-prototypical position, such as an object being topicalised and foregrounded as in (9), (32) and (45). Since the transitive/intransitive subject slot is optional, and quite often absent (being determined by previous context), verbal morphology carries more weight in determining the intransitive/transitive subject of the clause.

2.1.2 Verbal morphology

As can be seen in (1) above, Doromu-Koki also indicates intransitive/transitive subject through final verb non-spatial setting: *di-yaka* (go-1SG.PST) ‘I went’. Tense and intransitive/transitive subject are expressed in portmanteau morphemes, as indicated in Table 1 below. There is neutralisation of second and third person singular in the past, and second and third person plural in all three tenses.

Table 1: *Tense morphemes*

Number	Past		Present		Future	
	Singular	Plural	Singular	Plural	Singular	Plural
1	-aka	-afa	-da	-sifa	-gida	-gifa
2	-o	-adi	-sa	-dedi	-giya	-gedi
3			-do		-go	

The only other marking of intransitive/transitive subject is in the imperative moods, seen here in Table 2. The polite imperative only has suffixes for second person.

Table 2: *Imperative morphemes*

Number	Imperative		Polite imperative	
	Singular	Plural	Singular	Plural
1		-nadi		
2	-∅	-fa	-vo	-fo
3	-aine(di)	-agane(di)		

One other distinction, only in number, occurs with ‘possible’ epistemic modality: *-adu* ‘singular possible’ and *-aidu* ‘plural possible’, as seen in (2) and (3); context is necessary to determine person.

- (2) [[Algebra]_O [moi-yagadu]_V bi]_{CL1} [mo mina gokai re-na vei
 get-HYP TOP at.once this how do-NMLZ see
 mama re-yadu]_{CL2}.
 properly do-SG.POSB
 ‘If (I/you (sg)/he) had taken algebra, at once
 (I/you (sg)/he) could have seen how to do this properly.’ [30 April 2010]

- (3) [[*Kita.re-yagadu*]_V *bi*]_{CL1} [*muro mo nufa ni-yaidu*]_{CL2}.
 move-HYP TOP garden at.once with become-PL.POSB
 ‘(We/you (pl)/they) ought to move, and at once (we/you (pl)/they)
 could/should have a garden.’ [From Bradshaw In progress]

All of the remaining modalities lack person and number distinctions: indicative (marked by tense morphemes), conative (32); hypothetical (2)-(3), potential (8), (25) and (46); and purposive (1), (30), (39) and (44). Discussion will continue with discourse marking devices.

2.2 Discourse markers

There are two discourse markers found in Doromu-Koki, *bi* ‘topic marker’ and *yaku*, for now labelled as ‘development marker’, as at the time it was analysed as indicating advancement along an agent-action axis; that is that it tracks the major participants in a discourse (Bradshaw 2006, Levinsohn 1976:122). They are quite frequently used in the language; for example *bi* occurs 12,466 times and *yaku* is estimated to occur over 5,000 times³ in the Doromu-Koki New Testament translation (*Sei di Uka Ago Ruaka* 2017). *Bi* marks a topic in any syntactic function, whereas *yaku*, in addition to its discourse function, is restricted to marking subject (A, S and VCS), except as noted below.

2.2.1 Topic marker

The topic marker is quite prevalent throughout Doromu-Koki texts. Regardless of frequency in other clauses, it always occurs in verbless clauses functioning as the marker of VCS as in (4b), and otherwise marks another argument as topic (4a) and (5b-c), independent of syntactic function. Here in (4), the writer wants to highlight his wife’s health, subtly making a request for assistance.

- (4) a. *O*, [*Magdalene*]_S *bi* *toga esiroka.ni-do*,
 oh (name) TOP always cough-1SG.PRS
 ‘Oh, **Magdalene** is always coughing,
 b. *idu* [*ina*]_{VCS} *bi* [*buni*]_{VCC...}
 but 3 TOP good
 but **she** is well...’ [17 August 2015]

In (5a) below we can see the previous context without use of *bi*, which is then found in (5b-c). The main participant, a man named Tau Yagabo, called people to help him plant his garden. As we can see, their arrival was important (5b), which is why the dependent clause is marked with *bi*, as then they got right to work and did specifically what he was wanting: planting **all** the seedlings (5c).

³ It is difficult to determine exactly without manually counting tokens as its rapid speech form *ya* is homophonous with the second person transitive/intransitive subject/object pronoun.

- (5) a. [*Amiye tau vakoi dadi vau re-yadi*]_{CL1}, [*tora vene, rema, rumana, ofi, godua tau vakoi dadi vau re-yadi*]_{CL2}.
 person all together get.up completely do-3PL.PST big people woman
 man young.woman young.man all together get.up completely do-3PL.PST
 ‘Everyone got right up, elders, men and women, young men and young women all together got up.’
- b. [*Kasi ravau bo-si oki-yadi-ri bi*]_{CL1} [*tua de re-yadi*]_{CL2}.
 new.garden clearing go.over-SQ.SS arrive-3PL.PST TOP wait NEG do-3PL.PST
 ‘**When** they went over and **arrived** in the new garden clearing, they did not wait.’
- c. [*Moi bo-gi de-gi*]_{CL1} [*evade.evade [yoyava]_O bi vari vau re-yadi*]_{CL2}.
 get go-PURP come.down-PURP quickly.RED seedling TOP plant
 completely do-3PL.PST
 ‘They went right down and very quickly planted all **the seedlings**.’ [2001]

In other cases it marks intransitive subject (6), transitive subject (7) [here indicated in the verb morphology in the second clause], or oblique argument (8) [within a complement clause], or even topicalised object (9) [as a passive strategy, foregrounding the object; otherwise the transitive subject and verb remain the same]. In the previous context to (6) below, the narrator’s father had just told him: ‘Oh, boy, (there’s) a pig (there); don’t move.’ He is emphasising that he did as he was told.

- (6) [*Na*]_S *bi kami bere maka ni-yaka ini fufuta=ri*.
 1SG TOP enough quiet only become-1SG.PST 3.POSS back=at
 ‘I remained silent there behind his back.’ [28 October 2001]

Example (7) is from the same text; previous to this sentence the narrator had been injured by a pig, and had told his father, ‘Father, the pig is going up and moving up over there.’ His father then responded, ‘Boy, go back.’ And again, he obeyed; however, as soon as he could he wanted to find out the extent of his injury.

- (7) [*Dairi-ga mamu*]_{CL1} [*nai adu avaka.moi-yaka bi*]_{CL2}, [*mi esika re-gam-o*]_{CL3}.
 return-SIM.SS at.once 1SG.POSS jaw touch TOP this pain
 do-P.CNT-3SG.PST
 ‘And then I went back and **touched my jaw** and it was in pain.’ [ibid]

In the previous context for example (8), the writer sets the scene: a man and his son are going to travel to town in the rainy season; the previous day the rivers have flooded and are still swollen; the road to town will be difficult.

- (8) [[*Taoni ida*]_{OBL} *bi* [[*koru yokoi maka [mina]*]] *uru remanu ba regode dakai uga-ga*]_{CL1} [*re-giya*]_{CL2}.
 town road TOP water one only this time two or three
 place cross.over-SIM.SS do-2S.FUT
 ‘On the road/way (to) town, one river you will cross over two or three times.’ [31 May 2009]

The following sentence is from a preface to the Trial Spelling Guide produced in the March 2002 Doromu Alphabet Design Workshop (Borogo et al 2002). The writer was expounding on the purpose of the book: to describe the Doromu-Koki alphabet, together with a small dictionary, and to discuss how the language will be written. Then he continues below, to contrast the language with this book's goals; that is to now highlight the language itself.

- (9) [Uni Doromu ago]_O **bi** [1,500 makai kana amiye]_A yaku
 1PL.POSS (name) word TOP like.wise like person DM
ni-dedi.
 say-3PL.PRS

'Our Doromu language is spoken by about 1,500 people.' [21 March 2002]

The topic marker can also occur without an accompanying noun or pronoun (ellipsis), as seen in (10). This example is from the same story seen in examples (6) and (7) above. Prior to this sentence, the narrator's father had tried to spear the pig, but now we see the outcome due to his lack of success.

- (10) [∅]_{VCS} **Bi** [egere de]_{VCC}, [ini ada kamini kevo ni-yo]_{CL2}.
 TOP okay NEG 3.POSS head enough bend become-3SG.PST
 'But it (the shooting of the pig) was not right (successful),
 as then it (the pig) bent its head around.' [28 October 2001]

The topic marker occurs in both main (6) and dependent (12) clauses. It can be used to topicalise both animate (7) [the story teller, or animals] and inanimate (11) intransitive/transitive subject, or **any other arguments**. From the same story in examples (6), (7) and (10), below just a bit further on, the narrator is mentioning his jaw bone, as in the previous clauses he states: 'it turned around and just got a hold of my jaw bone.'

- (11) [nai adu nena]_{VCS} **bi** [ka miron]_{VCC}
 1SG.POSS jaw bone TOP also there
 'my jaw bone was also there' [ibid]

It can occur twice in one sentence (12), but rarely in one clause as in (13), to topicalise more than one item. Again from the same text in (6), (7), (10) and (11) above, we have the story of the boy and the pig. Here in the previous context the father and son had just begun their hunting trip into the bush; they came to one river and then arrived near John's old garden. The current topic is not only that the father **looked** and saw something, but on **where** he looked as well, since what is discovered is the pig, a main participant.

- (12) [Nai baba yaku ne.re-yo-ri **bi**]_{CL1} [odema motona=ri]_{LOC}
 1SG.POSS father DM look-3SG.PST-SIM.DS TOP old.garden garden.bottom=at
bi dona yokoi mini nikura.re-ga]_{CL2} [ame-do]_{CL3}.
 TOP pig one here dig-SIM.SS stay-3SG.PRS
 'When my father looked, at the bottom of the old garden a pig was there digging.' [ibid]

Below the two occurrences in (13b) indicate that the speaker wants to focus on himself, and on what he will be doing. (13a) gives the previous context; the writer was giving a progress report on his

translation work as well as an update on his family and then asking for financial assistance. He wants to convey to the recipient that a response must quickly be forthcoming; ‘I will only be around for a short time.’

- (13) a. *Ma ya fafau ka yi usa-usa ni-sifa uni Baba*
 and 2 concerning also 2.POSS pray-RED say-1PL.PRS 1PL.POSS father
Sei rofu...
 God to
 ‘And concerning you we also say prayers for you (lit. ‘your’) to God our Father...’
- b. *[[Na]_s bi [wiki nokoi maka ame-si bi]_{CL1}, [rautu dairi-gida]_{CL2}.*
 1SG TOP week one only stay-SQ.SS TOP village return-1SG.FUT
 ‘I will just stay one week, and return to the village.’ [3 September 2010]

As well as in declarative clauses, it can occur in interrogative clauses (14a): at the end of a clause (cf. also (2), (3), (7), (12) and (13a-b) for declarative clauses) or sentence. Here in (14a), the *bi* has been written as one word with the pronoun, reflecting the clitic nature of *bi*. In the previous context the writer wrote: ‘Good, but my nose cold is lasting longer and I’m sitting around sleeping!’ It can also be used with negation (10) or (14b). The topic marker, however, does not occur in imperative clauses.

- (14) a. *Mo ya=bi?*
 and 2=TOP
 ‘And (what about) you?’ [24 August 2012]
- b. *ini safi de bi*
 3.POSS taste NEG TOP
 ‘it has no taste (i.e. it is tasteless)’ [28 July 2006]

The topic marker *bi* can mark an antecedent as topic in switch reference medial clause constructions (15c). 15a-b give preceding context; it was his jaw bone that was in focus in the story (15a, b), as it related to the cause of the jaw bone pain, the pig (15b), and then what the speaker did after the incident; how he was affected in getting up (15c).

- (15) a. *[Kero.re-si kamini]_{CL1} [vada nai adu gade mina moi gira*
 turn-SQ.SS enough then 1SG.POSS jaw tooth this get hard
ri-si]_{CL2} [moi-yo maka,]_{CL3} [nai adu nena]_s bi ka miron.
 make-SQ.SS get-3SG.PST only 1SG.POSS jaw bone TOP also there
 ‘It (the pig) turned around then and grabbed a hold of
 just my jaw bone, **my jaw bone** that was there.’
- b. *[Mo [dona]_s bi mini ame-gam-o,]_{CL1} mida keika beika.baika e*
 but pig TOP here stay-P.CNT-3SG.PST child little whatever eh
[nai adu nena]_s bi ka miron esika rei di-yo.]_{CL2}
 1SG.POSS jaw bone TOP also there pain do go-3SG.PST
 ‘And **the pig** was staying right there, whatever (it was like
 as a) small child, **my jaw bone** was also in pain there.’
- c. *[Kamini dadi-yaka bi]_{CL1} [[esika re-yo]_{CL2}]_o [amute-si,]_{CL3} aiyo-o-o-!*
 enough get.up-1PL.PST TOP pain do-3SG.PST feel-SQ.SS wow---
 ‘Then **I got up** and felt the pain (that it was giving) and, wow---!’ [28 October 2001]

The topic marker can occur in a relative clause serving as a location (16) as well as with reported speech (17). In the text for example (16), the writer gives a brief history of the Doromu-Koki people,

and just prior to this sentence he writes: ‘We are forgetting the language called Koki language which our ancestors appeared and spoke. Our Koki language will disappear I fear unless we stay in our villages and do the work to translate God’s word.’ And below he once again highlights their Koki blood, and with it, the inherent responsibility for them to remember their roots.

- (16) [Ya [kaere.kaere Koki dava i rovaita=ri **bi**]_{RC} ya
 2 who.RED (name) blood 2.POSS body=in TOP 2
 bi]_{VCS} [Koki mida, rema bona rumana]_{VCC}.
 TOP (name) child woman and man
 ‘**You who have Koki blood in your bodies** are
 Koki children, women and men.’ [14 September 2004]

(17) below comes from a story by a father about a close call his son had with a snake. Previous to this the author said: ‘When we arrived in the village I told the story to his mother and she was already angry, and so she asked me if the snake had bitten him’; now he focusses on his response.

- (17) ...to [[na]_A yaku ni-yaka]_{CC} **bi** [de aki.re-yo]_{CL2}
 but 1SG DM say-1SG.PST TOP NEG bite-3SG.PST
 ‘...but what **I told (her)** was that it did not bite (him)’ [21 March 2002]

In verbless clauses it is obligatory, as in (18) and (19), but in other clauses it is not, since it can vary as to which argument is the topic in verbal clauses, as seen in various examples above.

- (18) [Nai rautu]_{VCS} **bi** [Oduika omuna odoro=ri]_{VCC}.
 1SG.POSS village TOP (place.name) mountain above=at
 ‘**My village** is on Oduika mountain.’ [ibid]
- (19) [Mina dona]_{VCS} **bi** [ini]_{VCC}.
 this pig TOP 3.POSS
 ‘**This pig** is his.’ [From Bradshaw In progress]

One example occurrence would be as in (20) below [cf. (21)], as opposed to when *yaku* is used as in (22b)⁴; *bi* in place of *yaku* would indicate the transitive subject NP as the topic (20), whereas *yaku* seeks to foreground the sentence in a discourse (cf. §3). The scope of the topic marker can be a pronoun (6), a noun phrase (5c) or clause (7).

- (20) [Tau]_A **bi** [ini vene]_{EXT} [raka.ni edadi-yo]_{SVC}.
 (name) TOP 3.POSS people call wake.up-3SG.PST
 ‘**Tau** called out waking up his people.’

The unmarked would be as in (21):

- (21) [Tau]_A [ini vene]_{EXT} [raka.ni edadi-yo]_{SVC}.
 (name) 3.POSS people call wake.up-3SG.PST
 ‘Tau called out waking up his people.’

⁴ Example (22) gives the actual story as recorded with preceding context. The sentence being compared with (20) and (21) is found in (22b).

The highlighting in (22b) is to show the part of the text which is being compared with (20) and (21) above.

- (22) a. *Yokaru* [[*amiye yokoi*] [*roka Tau Yagabo*]_{RC}]_A **yaku** *ini rautu*
 one.day person one name (name) (name) DM 3.POSS village
vene omar-o ini muro vari-yaganedi.
 people invite-3SG.PST 3.POSS garden plant-3PL.IMP
 ‘**Once upon a time a man named Tau Yagabo**
 invited his village people to plant his garden.’
- b. [*Vari-vari re-gedi meda moi-yo-ri bi*]_{CL1}, [*uriyaku*
 plant-RED do-3PL.FUT day get-3SG.PST-SIM.DS TOP morning
gorogoro [Tau]_A yaku [ini vene]_{EXT} [raka.ni
 early.morning (name) DM 3.POSS people call
e-dadi-yo,]_{SVC}]_{CL2} “*Nai rautu vene gua bi nai*
 CAUS-get.up-3SG.PST 1SG.POSS village people now TOP 1SG.POSS
meda, dada ya usa ni-da] dadi vau re-fo.”
 day so 2 ask say-1SG.PRS et.up completely do-2PL.PO.IMP
 ‘**When the day they would do the planting came**, early in the morning
Tau called out waking up his people, “My village people, **today** is the
 (lit. ‘my’) day, so I ask you to all get up.” [1999]

The following example (23) from Dutton (1970:920), while permissible, is seldom observed. Perhaps it was more common 50 years ago when it was recorded. This could indicate that *bi* has grammaticalised as a copula-like marker for these otherwise verbless complement clauses, such that *bi* now has a polysemous function. This appears to be the case with *yaku* as well (cf. §3). Example (24) shows the more common utterance. The topic marker *bi* establishes something as relevant to the discussion at hand.

- (23) [*Mina*]_{VCS} [*amiye de*]_{VCC}, [*mina*]_{VCS} [*fore*]_{VCC}.
 this person NEG this stone
 ‘This is not a man, this is a stone.’
- (24) [*Mina*]_{VCS} **bi** [*amiye de*]_{VCC}, [*mina*]_{VCS} **bi** [*fore*]_{VCC}.
 this TOP person NEG this TOP stone
 ‘**This** is not a man, **this** is a stone.’

Actually it is much more common for *mina bi*, as seen here in (24), to be reduced to *mibi* ‘this is,’ particularly in rapid speech; an indication of grammaticalisation accompanied by an on-going phonological reduction process (Kuteva et al 2019:110). *Bi* can be considered a clitic, as it is phonologically bound to the preceding constituent, and is sometimes written as one word [cf. (14a) above].

As seen in (17) above, and again here in (25), *bi* can mark a complement clause, or a verbless complement subject slot (24).

- (25) [*Mina vegu re-yo*]_{CC} **bi** [*ni-bo-bi-gedi*]_V.
 this practice do-3SG.PST TOP say-POT-F.CNT-3PL.FUT
 ‘**This practice that he does** they might be talking about it.’ [30 April 2010]

In fact, clauses can be embedded in such a verbal (topical) clause (26), in which relative and complement clauses are formed. Previous to (26) the speaker said: ‘One day my two boys went out with their diving glasses. They went up to the headwaters with their diving glasses, believing they went with their diving glasses in the basket. But **they** didn’t have the diving glasses. They swam and felt the sun as they were sitting on a rock.’ The one prior use of *bi* is indicated in bold above, highlighting a problem, which below contributed to the speaker’s issue, now brought into focus.

- (26) [[*Na*]_A *yaku* [*moke-yaka*]_V]_{CC} ***bi***, [[[[*Mironi aka*]_O
1SG DM think-1SG.PST TOP there prawn
[*u-dedi*]_V]_{VP}]_{CL2}, ” [[*bao.ni-yaka*]_V]_O]_{CL3}.
kill-3PL.PRS assume-1SG.PST
I thought, “They are there killing prawns,” I assumed.’ [10 April 2002]

We have seen that there are only a few limitations on the use of *bi*: not in imperative clauses, not normally co-occurring with *yaku*. Though note that there are exceptions like (9), (12), (17) and (26) above used to topicalise the entire clause, or in the case of (9) to mark the transitive subject which is now in a non-prototypical position due to the object foregrounding. It likewise does not normally occur twice in one clause, except in (12) and (13b) to expand the topic. Its use is optional, except in verbless clauses.

2.2.2 The functions of *yaku*

Like *bi* ‘topic marker’, *yaku* is pervasive throughout all discourse genres, and yet there are also (mainly shorter) texts in which it is not used at all; they are not of any particular type or genre. When it does occur, it forms a constituent with the subject as seen in (9), (17), (22a-b), and (26) and many others following.

It can follow an intransitive subject (27), a transitive subject (28) or even an extended argument (29), which has been foregrounded, resulting in a passive-like effect, reflected in the translation. (*Ya* is the rapid speech variant of *yaku* – either form is acceptable in any contexts.) These first two examples are dictionary entry examples; *yaku* is used to indicate the prominence of the particular lexical entry for which it was given: *badamisirika* ‘Wallace’s Fairy Wren’ in (27).

- (27) [*Badamisirika* *erena keika.keika*]_S ***yaku*** *doi odoro=ri*
Wallace’s.Fairy.Wren bird small.RED DM cane above=at
raka.ni-gam-adi.
call-P.CNT-3PL.PST
‘Small Wallace’s Fairy-Wrens were singing on the cane. [From Bradshaw In progress]
- (28) [*Nai baba*]_A ***ya*** *karai erena ueta vadi-do*
1SG.POSS father DM Sulphur.crested.Cockatoo bird feather weave-3SG.PRS
adena di.
dance GEN
‘My father is weaving Sulphur-crested Cockatoo feathers for dancing.’ [ibid]

Example (29) is an excerpt from a conversation about preparations for school children for an Independence Day celebration. Several women are discussing what needs to be done and who will do it, when below a man interjects into the conversation the following, emphasising that things are progressing well.

- (29) [[*rautu vene*]_{EXT} *ya* [*dogo re-yo*]_V *mina*]_{CC} [*ni-yadi*]_V
 village people DM preparation do-3SG.PST this say-3PL.PST
 ‘**they said that this was prepared for the village people**
 (lit. village people (it) was prepared, this they said)’ [5 September 2019]

Yaku can be used headlessly, though this is quite rare (30); here repeated as part of a discourse which can be found in (44) below. It seems the speaker did not repeat the subject, as it was already clear from the previous clause (as well as from the final verb morphology). Here the speaker wished to emphasise that the two participants were going to commence their travels.

- (30) ...*yaku geiti etofaro bi nana uyai re-gi bi kora bi usa.usa*
 DM gate outside TOP walk cross do-PURP TOP begin TOP ask.RED
ni-yafa ma kamin bo-yafa.
 say-1PL.PST and enough go-1PL.PST
 ‘...**outside the gate as we were beginning to walk**
across we prayed and then went on.’ [13 September 2019]

Yaku occurs in main clauses (27)-(28) and dependent clauses (12) and (30). Furthermore *yaku* occurs with animate (27) and (29) or inanimate subjects (31). In the previous context the writer was emphasising that the reader does not need to worry about anything needed to live, and now here the futility of doing so.

- (31) ...[*mina moke-na*]_A *yaku ini vegu moi doba re-go ba?*
 this think-NMLZ DM 3.POSS life get long do-3SG.PST Q
 ‘...**can these thoughts lengthen his/her life?**’ [2017]

Yaku can be used in declarative (29) and interrogative (32) clauses. In (32) the object precedes the transitive agent as it is foregrounded, similarly to (9) with its use of *bi*; here, however, *yaku* continues to follow the subject. In (33) we see another interrogative. *Yaku* is not found in imperative clauses.

- (32) [*Doi iye*]_O [*aura*]_A *yaku moi raudai.re-do mina ve-gika ba?*
 reed.sp leaf wind DM get lie.down-3SG.PRS this see-CON Q
 ‘Were you trying to see a reed being blown down by the wind?’ [ibid]

The author below previously questioned the audience about what they came to see, and so this rhetorical question emphasises that they were not just looking for the wind, but a person.

- (33) [*Aruma*]_A *yaku ya aki.re-yo ba ide?*
 snake DM 2 bite-3SG.PST or NEG
 ‘Did the snake bite you?’ [21 March 2002]

It can be used in negative clauses (34); notice that *yaku* occurs in both clauses here. The context is about worrying about how to respond to accusations; the hearer is encouraged not to be concerned, that the needed defence will be supplied when the situation eventuates.

- (34) *Adina* [*mina kaere*]_A ***yaku*** *ago* *ni-go* *bi* [*ya*]_{VCS} ***yaku*** [*de*]_{VCC}
 for this who DM word say-3SG.FUT TOP 2 DM NEG
 ‘For it is not you who will be speaking’ [2017]

And also in complement clauses (17), (26) and (29). However, it cannot be used if an event is not controlled (35), since the subject is not in focus, but instead the verbal action.

- (35) **[Miya]*_S ***ya*** *de-do* *ba?*
 rain DM come.down-3SG.PRS Q
 ‘*Is it raining?’

It can precede reported speech (17) to foreground the speaker’s speech act, and in limited situations *yaku* and *bi* co-occur in one clause (36), probably giving further emphasis, or because the transitive subject is part of a relative clause meaning ‘the one who makes’. Previous to this response, the speaker was being questioned about divorce; the response begins with the creation of men and women.

- (36) ...*ini* *adina=ri* *gutuna* [*Ri-yo* *amiye*]_A ***yaku*** ***bi*** *rema* *ma*
 3.POSS beginning=at from make-3SG.PST person DM TOP woman and
rumana *ri-yo*
 man make-3SG.PST
 ‘...from the beginning **the Creator** made men and women’ [2017]

However, there are cases in which *yaku* is not found after the subject, but instead following an instrument (37). Note that the usual *dudu* ‘instrument’ or =*u* ‘by’ postpositions are also deleted; with *dudu*, (37) would be *misin koina dada vadaini na vana dudu ya turiya reida*.

- (37) *Misin* *koina* *dada* *vadaini* [*vana*]_{INS} ***ya*** *turiya.rei-da*.
 machine finish so already hand DM sew-1SG.PRS
 ‘Since the machine no longer works (lit. is finished), **so I’m sewing by hand.**’ [5 September 2019]

Other instances of such occur after *sosogi* ‘spear’ (38) and *koru.gena* ‘gun’ (39) as prototypical instruments. The previous context (with subjects marked with *yaku* in bold) follows: ‘**Waxy** killed a big pig with a dog. **Waxy** got his spear and his dog and went up to the bush to hunt. When they arrived in the middle of the bush **his dog** smelled a pig. **The dog** chased the pig and then Waxy ran with him (the dog).’ In (38), the subject in focus will now be Waxy again, with his spear.

- (38) *Meki* *re-yo* *rofu* [*sosogi*]_{INS} ***yaku*** *imi-yo* *ini* *getona=ri*.
 chase do-3S.PST so.that spear DM shoot-3S.PST 3.POSS lower.back=in
 ‘He chased it and shot it with a spear in the lower back.’ [24 May 2002]

In the previous context to (39), the father tells the son not to move, which he does.

- (39) *Nai baba dadi-yo ini sosogi mina moi odoro*
 1S.POSS father get.up-3S.PST 3.POSS spear this get above
ri-si [koru.gena]_{INS} yaku dona fidi.re-gi re-dedi kana
 make-SQ.SS gun DM pig shoot-PURP do-3P.PRS like
re-yo.
 do-3S.PST
 ‘My father got up and raised his spear and did like what is done with a gun (lit. ‘water bamboo’) to shoot pigs.’ [28 October 2001]

Table 3 below summarises the grammatical contexts in which *yaku* occurs, which can be found with both animate and inanimate, transitive or intransitive subject, in mostly main, but also in dependent clauses, with either declarative or interrogative function, either positive or negative. In some cases *yaku* can be used with an extended argument or instrument, but these are limited to situations in which some strategy such as a passive construction or foregrounding are used, in which case the intent is promotion to a subject-like role or as an extension of the subject. Much like *bi* ‘topic marker’, *yaku* has only a few limitations: similarly not in imperative constructions or uncontrolled events and not twice in one clause, but in complement clauses and some unspecified heads. *Yaku* follows both common and proper nouns, noun phrases, pronouns and relative clauses. Unlike *bi*, it never occurs twice in one clause. Neither can be used in imperatives. And *yaku* and *bi* can occur together in one clause (36).

Table 3: *Grammatical contexts for yaku*

Context	Occurring
Subject (A/S) of verbal clauses	Yes
Main clauses	Yes
Dependent clauses	Yes
Complement clauses	Yes
Relative clauses	Yes
Declaratives	Yes
Interrogatives	Yes
Imperatives	No
Negatives	Yes

In the excerpt from a story below (40) containing 44 clauses, only three (or 6.8%) of those contain *yaku*: one (40b) is with *nai baba* (1S.POSS father) ‘my father’ as A, while in the next sentence (40c), the same NP is not marked with *yaku*, and then three sentences on (40f) *nai baba* is again marked with *yaku*. In the first occurrence (40b), the NP is marked [even though previously mentioned without use of *yaku* (40a)] because the focus is on what the father was telling the son (the narrator) concerning where they would be going. In the second unmarked occurrence (40c), we only receive background information and further continuation along the storyline. However, in the third occurrence of this same NP (40f), marked with *yaku*, the focus is on the fact that the father looked and saw a pig, a primary participant in the story. This accounts for two of the three occurrences of *yaku* in the text; the final occurrence (40j) is

after the instrument *koru gena* (water bamboo) ‘gun’, which is an extension of the transitive subject *nai baba* ‘my father’. Again he is in focus because he is trying to shoot the pig. Bolding in the free translation indicates foregrounding through the use of *yaku*.

- (40) a. *Yokaru vo.ni bo na aita=ri, nai baba bona na sufa-sufa*
 one.day happen go 1SG light=at 1SG.POSS father and 1SG bush-RED
di-yafa.
 go-1PL.PST
 ‘One day when I was young (lit. ‘at light weight’), my father and I went deep in the bush.’
- b. *Nai baba ya na ni-yo, “Koima-o, Vi koru ma*
 1SG.POSS father DM 1SG say-3SG.PST leech-VOC (name) water and
bo-gifa.”
 go-1PL.FUT
 ‘**My father said to me**, “Oh, boy (lit. leech), we will go to the Vi river.”’
- c. *Nai baba no kana bi ini varuka mina gagaba=ri maka*
 1SG.POSS father bad like TOP 3.POSS clothing this waist=at only
iru.ri-si, sosogi uakai-si, baiya vana=u moi-yo-ma na
 wear-SQ.SS spear carry-SQ.SS bush.knife hand=by get-3SG.PST-SQ.DS 1SG
bi dura kori yokoi kirokai-yaka.
 TOP net.bag old one carry.on.shoulder-1SG.PST
 ‘My father was bad as he only wore clothing around his waist,
 and carried a spear and took a bush knife in his hand and I
 carried one old net bag on my shoulder.’
- d. *Vi koru ma kami bo-yafa.*
 (name) water and enough go-1PL.PST
 ‘Then we went to the Vi river.’
- e. *Bo-yafa-ma John di muro odema adina kami*
 go-1PL.PST-SQ.DS (name) GEN garden old.garden near enough
oki-yafa.
 arrive-1PL.PST
 ‘We went and arrived near John’s old garden.’
- f. *Nai baba yaku ne.re-yo-ri bi odema motona=ri*
 1SG.POSS father DM look-3SG.PST-SIM.DS TOP old.garden garden.bottom=at
bi dona yokoi mini nikura.re-ga ame-do.
 TOP pig one here dig-SIM.SS stay-3SG.PRS
 ‘**When my father looked**, there was a pig digging at the bottom of the old garden.’
- g. *Nai baba kero.re-si kimo ka kimo ka kami na*
 1SG.POSS father turn-SQ.SS carefully also carefully also enough 1SG
ni-yo, “Koima-o, dona e; kita ga re.”
 say-3SG.PST leech-VOC pig eh movement PROH do
 ‘My father turned around and quietly and carefully
 said to me, “Oh, boy (lit. leech) , a pig (there); don’t move.”’
- h. *Na bi kami bere maka ni-yaka ini fufuta=ri.*
 1SG TOP enough quiet only become-1SG.PST 3.POSS back=at
 ‘I remained silent there behind his back.’

- i. *Nai baba dadi-yo ini sosogi mina moi odorori-si*
 1SG.POSS father get.up-3SG.PST 3.POSS spear this get above make-SQ.SS
koru.gena yaku dona fidi.re-gi re-dedi kana re-yo.
 gun DM pig shoot-PURP do-3PL.PRS like do-3SG.PST
 ‘**My father** got up, took his spear and did like what
 they do **to shoot a pig with a gun.**’ [28 October 2001]

In isolation, a sentence would be considered perfectly grammatical with or without *yaku*, since the whole sentence can be considered to be in focus when there is no surrounding context. (Native speakers cannot identify a specific English equivalent meaning for *yaku*.) However in a text, it is the pragmatic factors which determine if it is or is not obligatory. The default is to be unmarked; the majority of subjects do not require it (93.2% in the above mentioned full text), such that its use is reserved for indicating prominence of a subject slot participant.

3. Optional subject marking?

The marker *yaku* marks subjects, but only select ones: the most salient participants in a discourse. The relative use of *yaku* for various genres in a collection of 60 texts is shown in the table below. The most prevalent use occurs in legends and then in other narratives, while the least in letters, notes and messages. But even in (40) above, only 6.8% of clauses have *yaku*, which is fairly typical. This would lead us to believe that *yaku* is quite optional.

Table 4: *Use of yaku*

Genre	Average per text	Maximum attested per text
Legends	6.1	9
Narrative	3.5	6
Conversation	1.0	2
Letters/notes/messages	0.1	1

In the narrative below (41), which has a relatively high frequency of occurrences, we can see how *yaku* serves to keep the focus on the different participants.

- (41) a. *Dona keika yokoi ini roka bi Mareka.*
 pig little one 3.POSS name TOP (name)
 ‘There was a piglet named Mareka.’
- b. *Mareka bi ina keika iniye=ri [rema tora yokoi]_A yaku dura=ri*
 (name) TOP 3 little very=at woman big one DM net.bag=in
adodi-si de-yo nai rautu Amuraika=ri.
 carry-SQ.SS come-3SG.PRS 1SG.POSS village (place.name)=to
 ‘When Mareka was little, **one older woman** carried (it)
 around in a net bag and brought (it) to my village Amuraika.’
- c. [*Nai nono*]_A *yaku ne.rei ve-si ni-yo-ma moi bai-yadi*
 1SG.POSS mother DM look see-SQ.SS say-3SG.PST get come-3PL.PST
uni yava=ri.
 1PL.POSS house=to
 ‘**My mother** looked and saw (it) and told (her) to bring (it) into our house.’

- d. [Nai nono]_A **yaku** mina rema tora nikaite-yo, “Mina dona keika
 1SG.POSS mother DM this woman big ask-3SG.PST “this pig little
 bi sero.rei-sa ba amiye ai-da ya ni-yadi-ma moi
 TOP sell-2SG.PRS or person help-1SG.PRS 2 say-3PL.PST-SQ.DS get
 di-sa?” vo.ni-yo.
 go-2SG.PRS tell-3SG.PST
 ‘**My mother** asked this older woman, “Are you going to sell this piglet so I can help
 people or are you taking it away?” she said.’
- e. Ma [mina rema tora]_S **yaku** yomakai ni-yo, “Mina dona keika
 And this woman big DM like.this say-3SG.PST this pig little
 bi sero.rei-da,” vo.ni-yo.
 TOP sell-1SG.PRS tell-3SG.PST
 ‘**And this older woman** said this, “I am selling this piglet,” she said.’
- f. Nai nono ini uka bi ka ni-yo.
 1SG.POSS mother 3.POSS stomach TOP also become-3SG.PST
 ‘My mother’s heart was happy.’
- g. Doba de nai nakimi amiye ini yava ide-ma yaku
 long NEG 1SG.POSS in-law person 3.POSS house inside-and go.out
 de-yo.
 come-3SG.PST
 ‘Not long one of my in-laws came out of his house.’
- h. De-si kamini mina rema tora nikaite-yo, “Mina
 come-SQ.SS enough this woman big ask-3SG.PST this
 dona keika bi gokaisanu dudu sero.rei-sa,” vo.ni-yo.
 pig little TOP how.much INS sell-2SG.PRS tell.3SG.PST
 ‘He came and asked this woman, “For how much are you selling this piglet?” he said.’
- i. [Mina rema tora]_S **yaku** bi yomakai ni-yo, “Fifti kina
 this woman big DM TOP like.this say-3SG.PST fifty
 dudu sero.rei-da,” vo.ni-yo.
 INS sell-1SG.PRS tell-3SG.PST
 ‘The **older woman** said this, “I’m selling it for fifty kina,” she said.’
- j. [Nai nakimi amiye]_A **yaku** ini fore moi yaku-si mina
 1SG.POSS in-law person DM 3.POSS stone get take.out-SQ.SS this
 rema tora mar-o re-si nai nono
 woman big give-3SG.PST do-SQ.SS 1SG.POSS mother
 ni-yo, “De-si yi dona moi,” vo.ni-yo.
 say-3SG.PST “come.down-SQ.SS 2.POSS pig get tell-3SG.PST
 ‘**My in-law** took out his money (lit. ‘stone’) and gave it to this older
 woman, and then told my mother, “Come get your pig,” he said.’
- k. Nai nono bi [ada]_S **yaku** rivai.re-yo.
 1SG.POSS mother TOP happiness DM be.overcome-3SG.PST
 ‘**My mother was overcome with joy.**’

1. *Nai nakimi amiye ro taniku ni-si raga ne-si*
 1SG.POSS in-law person to thank.you say-SQ.SS run go.down-SQ.SS
ini dona keika binu.ma-si yava ide=ri dui rei bo-yo.
 3.POSS pig little hug-SQ.SS house inside=to entering do go.over-3SG.PST
 ‘She said thank you to my in-law and ran and hugged
 the piglet and took it back into the house.’ [28 February 2009]

There are seven occurrences of *yaku* in the story; their corresponding free translation subjects are bolded. With each occurrence the focus shifts (or is otherwise maintained): 1) To focus on the older woman with the prized pig, 2) then on the narrator’s mother who wants the pig, 3) then to maintain the focus on the mother, 4) then back on the older woman, 5) then to maintain the focus on the older woman again, 6) to shift now to the new participant, the in-law who provided the money to acquire the pig and 7) finally to the mother’s happiness in the acquisition. (Her happiness is the subject, as it is an extension of the person.) Out of 35 clauses, just five contain *yaku*, occurring after four transitive subjects and three intransitive subjects. In this way participants can be contrasted; if the marker were simply optional, that distinction would be lost.

The marker *yaku* is often used to emphasise the intransitive/transitive subject, particularly in answer to a question (42b), in which case the question asked would most likely be (42a):

- (42) a. [*Kaere*]_A *bi iruku Ø mar-o?*
 who TOP food 3 give-3SG.PST
 ‘Who gave (him) the food?’
 b. [*Na*]_A ***yaku*** *iruku Ø mar-aka.*
 1SG DM food 3 give-1SG.PST
 ‘I (versus someone else) gave (him) the food.’

Again, the use of *yaku* is a method to pragmatically differentiate between one participant and another. (To state (42b) as **yaku iruku mar-aka* (DM food give-1SG.PST) ‘I gave (him) food’ would be ungrammatical, since the focus *na* ‘I’ is then missing.)

Quite often, the subject is not overtly stated in a clause, as the final verbal morphology gives that indication. However, when *yaku* is used, the subject is almost always stated as in (43), as a means of disambiguation. In the previous context, the older young woman had shamed the boy, and so now he goes to his mother to tell her what happened, and thus the young woman is now the focus of his conversation.

- (43) [*oure-na rema ofi*]_A ***yaku*** *na ni no re-yo...*
 be.first-NMLZ woman young.woman DM 1SG say bad do-3SG.PST
 ‘the older young woman cursed me...’ [12 September 2001]

In a retelling of an incident in which the speaker was robbed of his phone, he used *yaku* only two times, once in setting the scene (44), in which he emphasises that they stopped and prayed before going on, and then in the climax of the story (45), to emphasise that the incident did not harm him physically.

The first instance is unusual in that it does not have a preceding overt subject; the previous context tells us that first person plural remains the subject here.

- (44) [*Agiya uriyaku bai.fa, Robert =sa*]_{CL1}, [*ma buka, uni Koki*
yesterday morning come.1PL.PST (name) =ACCM and book 1PL.POSS (name)
‘Yesterday morning we came, with Robert, and the books, when we came and got our Koki
ago buka moi-gfa]_{CL2} [*bai-ga*]_{CL3}, [*to idu, ida biri re-yadi*]_{CL4} [*dada*
word book get-1PL.FUT come-SIM.SS but but road block do-3SG.PST so
language books, but well, on the way we were prevented so no (we weren’t able to)...
ide... bi radio maka moi-yafa bi kami]_{CL5}... [*yaku geiti etofaro bi*
NEG TOP only get-1PL.PST TOP enough DM gate outside TOP
we were only able to take radios (i.e. audio players)...outside the gate
nana uyai re-gi bi kora bi usa.usa ni-yafa]_{CL6} [*ma*
walk cross do-PURP TOP begin TOP ask.RED say-1PL.PST and
as we were beginning to walk across we prayed and
kamin bo-yafa]_{CL7}.
enough go-1PL.PST
then went on.’ [13 September 2019]

- (45) [*Nai vegu*]_O *bi* [*mina*]_A *ya moi tumu ri-na no ma bi*
1SG.POSS life TOP this DM get short make-NMLZ bad and TOP
kaini.
already
‘This one did not shorten my life.’ [ibid]

Again, the most salient participants are brought into focus through the use of *yaku*. In a conversation in which one speaker was talking about the influence of languages of wider communication (i.e. English, Hiri Motu and Tok Pisin), she used the only occurrence of *yaku* in the whole conversation to highlight her confidence in the permanency of the language due to the recent publication of the New Testament, as seen in (46).

- (46) ...*mina New Testament ae re-yafa mina, mina ago, uni ago*
this put do-1PL.PST this this word 1PL.POSS word
di forovai.re-go to, o, [mina]_s yaku bi mo amei-bo-bi-go
GEN confuse-3SG.FUT but oh this DM TOP but stay-POT-DUR-3SG.FUT
toga.
always
‘...this New Testament which we have written (lit. put down), these words, our language it will be confused/mixed up, but oh, this will remain on forever.’ [5 September 2019]

Conceivably this marker could be derived from the homonymous verb *yaku*- ‘go/come out(side)’, however, there is no supporting evidence. Note use of this verb in (41g) above.

Three alternative interpretations for *yaku* are possible: a) subject argument marking is obligatory, b) the marking is optional or 3) it is obligatory in some contexts and optional in others. The first option is not supported by the data. The second option again is not feasible, since its use does have a function,

which is to focus on a particular participant, having pragmatic uses: to show contrast, foregrounding or increased agentivity. Therefore, the third option is the only reasonable solution.

Yaku should be considered a ‘differential subject marker’ in most of its uses as it combines a syntactic function, marking a subject, and also carries pragmatic overtones or contrastive focus (in its instrumental uses). We now turn to a cross-linguistic comparison of differential subject marking.

4. Differential subject marking in cross-linguistic perspective

Various Papuan languages have markers which have discourse pragmatic functions. The Nungon (Papuan: Finisterre-Huon) language of Morobe Province, Papua New Guinea has a variable ‘focus’ postposition =*ho*. It can serve to mark intransitive/transitive subject, possessor, instrument, manner, topicalised object arguments and focus (Sarvasy 2017:376) [my underlining added to indicate those similar to what occurs with *yaku* in Doromu-Koki; and also below]. Similarly, =*ho* is used for disambiguation, emphasis, specification, clarification and ‘narrative rhythm’, and not used if no focus is needed (ibid:377).

The Yalaku (Papuan: Ndu) language of the East Sepik Province has a differential subject (A/S) marking, which occurs in “highly animate or specific” situations (Aikhenvald 2015:241). It has been identified as ‘highlighted participant case’, used in foregrounding participants, increasing salience (ibid:261). Pennington (2013) also argues for differential subject (A/S) marking in Ma Manda (Papuan: Finisterre-Huon, Finisterre, Erap) of Morobe Province, Papua New Guinea. Guérin (2019) argues as well for differential argument marking in Tayatuk (Papuan: Finisterre, East Finisterre, Uruwa), also of Morobe Province, that it is for contrast and prominence (Guérin 2019:33).

Fuyug (Papuan: Goilalan, Southeast), also in Central Province, has *ge* ‘topic marker’ which seems to behave similarly to *bi*. An early study (Ray 1912:317) said that it may “...indicate reference to a preceding action in the sense of ‘being on the point of,’ ‘ready to.’ With the future it has almost the sense of ‘go.’ ” It is also claimed to always immediately follow the subject (ibid). Furthermore, the Fuyug verb for go is *ge* (go.1/2.IND). Later it was said regarding *ge*, “It overtly marks the most topical participant of a sentence and is used primarily to topicalise the setting or participants (Bradshaw 2007:156).” And as with Doromu-Koki *bi*, it can have a copula function (47) in verbless clauses, or occur after a relative clause (48), such that the topic is as indicated in bold in the free translation:

- (47) [*Ovol*]_{VCS} ***ge*** [*kagavan*]_{VCC}.
 pig TOP strong
 ‘The pig is strong.’ [157:65]

- (48) [*An* [*dal ovol hem-a*]_{RC}]_A ***ge*** *na al-i*.
 man REL pig shoot-3.IND TOP 1SG see-VBR
 ‘**The man who shot the pig** saw me.’ [157:68]

Below is an excerpt from a text, showing how the speaker focussed on the addressee, using *ge* in two different clauses, first with the second person pronoun and then with the first person pronoun. When the speaker wants to highlight the participant he/she uses *ge*, otherwise it is only used consistently in verbless clauses like Doromu-Koki *bi*. This is indeed the case throughout the remainder of the text.

- (49) a. *Gig* [nu]_s *ge* Miku *Honogiti andong ete* [[na]_s *ge bul* ali
 enough 2S TOP (name) in.(name) staying say 1S TOP land see.VBR
 b. *sumemong Woytabiti hindel bol teladi, gan*
 going.walking in.(name) come.out HYP.CMP come.IMM language
 c. *sisiban malem sumadi*_[CC]_{VP}.
 knowledge become.COND walking.IRR
 ‘So **you** were staying at Miku at Ononge saying **I** am going walking
 to come out to Woitape, to walk to learn about the language.’ [14 February 1997]

Just like *yaku*, this ‘topic marker’ had been considered optional, but in fact it appears to be used to mark salient or contrasting subject. It does not have the same instrumental use as Doromu-Koki; clauses can contain both *ge* and *ala* ‘with’ as in *na ge hindiv ala nu itats* (1SG TOP knife with you cut.IRR) ‘I will cut you with a knife’.

Some neighbouring languages have subject (or topic/focus) marking, but it is unclear from the data if they might behave similarly. The neighbouring Uare language (Papuan: Kwalean, Southeast) to the west, has the ‘subject marker’ *a* which: “...often occurs following a switched subject or a new participant or in subordinate clauses” (Kikkawa 1993:94).

Other languages, while ergative, exhibit differential marking. One of these is Yali (Papuan: Dani) of West Papua. The enclitic =*en* is considered an optional ergative marking (Riesberg 2018:19), used to indicate such things as (prominent) subjects (ibid:22), overtly realised subject (ibid:25) or volitional activity (ibid:26). According to Anderson and Wade (1988:10, 14), the use of the Folopa (Papuan: Teberan) of Gulf Province ergative marking (versus non-use) is mainly one of control. In Tayap (Papuan) of East Sepik Province, Kulick and Terrill (2019:109) claim that the ergative case is used optionally primarily for agentivity, control, animacy (ibid:112), affectedness (ibid:114) and intentionality (ibid:118). Compare also Eibela (Papuan: Central and south New Guinea) of Western and Southern Highlands Provinces of Papua New Guinea (Aiton 2014).

Further afield, in the Tariana language (Arawak) of north-western Brazil, the ‘focus S/A’ morpheme *-ne* can be used to indicate contrastive focus, the main participant, or a newly introduced but already known, or for disambiguation (Aikhenvald 2003:141-2). And also, in the same area, the Murui language (Witotoan) of north-western Amazonia has differential S/A marking which depends on pragmatics, through pathways such as topicality or certainty (Wojtylak Forthcoming:198-9).

In summary there is ample precedence from other Papuan languages (as well as from other unrelated languages) for an analysis in which *yaku* is considered to be a ‘differential subject marker’, meaning, that it obligatorily marks subject when the subject is in focus. When it is not, the subject will be left unmarked. It is superfluous in isolated sentences, such that its use is optional, having a neutral effect. However, one unresolved issue is its use after an instrument; these limited instances appear to indicate promotion of the instrument to a subject-like role, such that they function as an extension of the subject.

5. Conclusion

As we have looked at Doromu-Koki, we see that like the topic marker *bi*, *yaku* is quite commonly seen throughout Doromu-Koki texts. Because of the topic marker’s use in a verbless clause however, it is much more prevalent than the differential subject marker. Similarly the differential subject marker appears to be optional, however it has been argued that in fact it is not; is contingent on prominence. As with other languages considered, *yaku* indicates focus and other pragmatic issues much like for example in Murui:

“Differential subject marking implies that the subject (A/S) acquires case-marking if it is in focus, that is, undergoes ‘foregrounding’ as an indicator of its salience (see Cruse, 2006, p. 66 and references there) (Wojtylak Forthcoming:193).”

Indeed *yaku* combines syntactic function, through subject marking, with pragmatic function, through foregrounding salient participants in the discourse.

Abbreviations

1	first person	IMM	imminent	PST	past
2	second person	IMP	imperative	Q	question word
3	third person	IND	indicative	RC	relative clause
A	transitive subject	INS	instrument	RED	reduplication
ACCM	accompaniment	IRR	irrealis	REL	relativiser
CAUS	causative	LOC	locative	S	intransitive subject
CC	complement clause	NEG	negative	SG, sg	singular
CL	clause	NMLZ	nominaliser	SIM	simultaneous
CNT	continuative	NP	noun phrase	SQ	sequential
CMP	completive	O	object	SS	same subject
CON	conative	OBL	oblique argument	SVC	serial verb construction
COND	conditional	P	past	TEMP	temporal
DS	different subject	PL, pl	plural	TOP	topical marker
DM	development marker	PO	polite	V	verb
DUR	durative	POSB	possible	VBR	verbaliser
EXT	extended argument	POSS	possessive	VCC	verbless clause complement
F	future	POT	potential	VCS	verbless clause subject
FUT	future	PROH	prohibitive	VOC	vocative
GEN	genitive	PURP	purpose	VP	verb phrase
HYP	hypothetical	PRS	present		

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Appendix

A brief description of the Doromu-Koki phonological system follows.

Doromu-Koki phonological system

Items discussed include phoneme inventory (§1), with allophonic variation (§1.1); syllable structure (§2); phonotactics (§3); vowel sequences and diphthongs (§4) and prosodic features (§5) with discussion of stress (§5.1) and intonation (§5.2).

1. Phoneme inventory

The Doromu-Koki language (Koki dialect) has 12 consonant phonemes and five vowel phonemes.

Table A.1: *Consonant phonemes*

Active articulator	labio-	apico-	lamino-	dorso-	
Passive articulator	labial	dental	alveolar	palatal	velar
Voiceless aspirated plosives			t ^h	k ^h	
Voiced plosives	b		d	g	
Voiceless fricatives		f	s		
Voiced fricative	β				
Nasals	m		n		
Rhotic			r		
Semi-vowel				j	

Table A.2: *Vowel phonemes*

	Front unrounded	Back rounded
High	i	u
Low-mid	ɛ	o
Low		ɑ

1.1 Allophonic variation

There are three allophonic variations: 1) **Voiceless velar aspirated dorso-velar plosive backing** in which the voiceless aspirated dorso-velar plosive /k^h/ is realised as a voiceless aspirated dorso-uvular plosive [q^h] when it precedes back rounded vowels, and as [k^h] before front unrounded vowels ['bɛq^hu 'rɛⁱ] /bɛk^hu rɛⁱ/ <beku> ‘push (it)’; 2) **Low-mid front unrounded vowel raising**, in which the low-mid front unrounded vowel /ɛ/ is raised to the mid front unrounded vowel [e] word finally [rɛ'gode] /rɛgodɛ/ <regode> ‘three’; and 3) **Vowel nasalization**, in which a vowel becomes nasalised when it follows a nasal consonant ['βɛnɛ̃] /βɛnɛ/ <vene> ‘people’.

2. Syllable structure

In Doromu-Koki there are only two syllable types, which can be represented as (C)V.

V	/ɑ.k ^h ɑ/	‘prawn’
CV	/fu.ru.fu.ru/	‘flowing’

The vowel slot can be filled with a long vowel or diphthong. Consonant clusters and closed syllables are not normally permissible, so borrowed words often insert a vowel between consonants and add a

final vowel when the original word ends in a consonant (e.g., English ‘spoon’ became *sifuni*), except in the case of names (and more recently borrowed terms), which always maintain their original structure and spelling conventions.

Words are between one to six syllables in length. The most common is three, followed by two, then four, then one, then five and lastly six.

Table A.3: *Syllable structure in Doromu-Koki*

Number of syllables	Example word	Gloss(es)
1	/a ^u /	‘lime’
2	/a ⁱ .t ^h a/	‘lightweight’
3	/a ⁱ .nɛ.k ^h a/	‘day before yesterday/tomorrow’
4	/i.sa.go.ɛ ⁱ /	‘scratch (it)’
5	/a.k ^h u.mo.ro.ro/	‘spider sp.’
6	/ba.da.mi.si.ci.k ^h a/	‘Wallace’s Fairy-wren’

3. Phonotactics

All consonant phonemes occur in initial and medial position. No consonants occur in final position because of the syllable structure, except in borrowed words (which sometimes insert an epenthetical vowel) or in other non-standard environments.

Table A.4: *Consonant phoneme distribution*

Phoneme	Example word	Gloss
/t ^h /	/t ^h ot ^h o/	‘forgotten’
/k ^h /	/k ^h ak ^h a/	‘red, ripe’
/b/	/baba/	‘father’
/d/	/dada/	‘so’
/g/	/gagani/	‘place’
/f/	/fafa ^u /	‘on top of’
/s/	/sisik ^h a/	‘smell’
/β/	/βaβa/	‘hot’
/m/	/mimani/	‘Kemp Welsh River’
/n/	/nono/	‘mother’
/r/	/ruru/	‘divination’
/j/	/jojaβa/	‘seedling’

The vowel phonemes all occur in initial, medial and final positions:

Table A.5: *Vowel phoneme distribution*

Phoneme	Example word	Gloss
/i/	/inik ^h i/	‘long-tailed parrot’
/ε/	/εgεrεgεrε/	‘okay’ ⁵
/u/	/unugu/	‘banana sp.’
/o/	/odoro/	‘above’
/a/	/abat ^h a/	‘flood’ ⁶

4. Vowel sequences and diphthongs

Every combination of vowel sequence is possible in the language, including some limited identical vowels (/ε/, /u/ and /o/ only).

Those marked with ‘x’ below indicate non-attested sequences, while those with grey shading indicate those which are interpreted as diphthongs, and yellow highlighting indicate attested identical vowel sequences (or vowel lengthening). The remaining white spaces are those which are separated into differing syllables.

Table A.6: *Attested vowel sequences*

		Second vowel				
		i	ε	u	o	a
First vowel	i	X				
	ε					
	u					
	o					
	a					X

5. Prosodic features

Prosodic features in the language include stress and intonation.

⁵ From Hiri Motu *hegeregere* ‘equal, adequate, fair, sufficient’ (Dutton and Voorhoeve, 1974:195).

⁶ From Hiri Motu *abata* ‘flood, tide’ (ibid:187).

5.1 Stress

Stress in Doromu-Koki always occurs on the penultimate syllable in words of two syllables or more, otherwise on the ultimate syllable. The addition of a clitic or verbal morphology, however, does not move the stress.

[ˈnã]	/na/	<na>	‘I’
[ˈbunĩ]	/buni/	<buni>	‘good’
[duˈbuˈnĩ]	/dubuini/	<dubuini>	‘brother’
[baraˈginã]	/baragina/	<baragina>	‘Eclectus Parrot’
[akˈumõˈroro]	/akˈumororo/	<akumororo>	‘spider sp.’
[badamĩsiˈrikˈa]	/badamisirikˈa/	<badamisirika>	‘Wallace’s Fairy-Wren’
[ˈjaβa=ri]	/jaβa=ri/	<yavari>	‘in/at the house’
[ˈnĩ-bo-bi-gɛdi-mã]	/nibobigɛdima/	<nibobigedima>	‘you (pl) might be saying and then’

5.2 Intonation

Five intonation patterns include: 1) A **declarative** has a generally downward contour for each clause in a sentence, with a falling pitch at the end of the utterance; 2) A content **question**, interrogation, expectation of an impending reply, or rhetorical question has the same general downward contour, with a sharp rise at the end; 3) Anger, disgust, scolding and excitement are signalled by sharply raising the pitch, and still maintaining a final falling contour; 4) **Listing** has a fairly level contour, until nearing the end of the utterance, and then begins its gradual descent; 5) An intense or distant **call** has a raised pitch, ending in a falling pitch, or conclusion to a story.