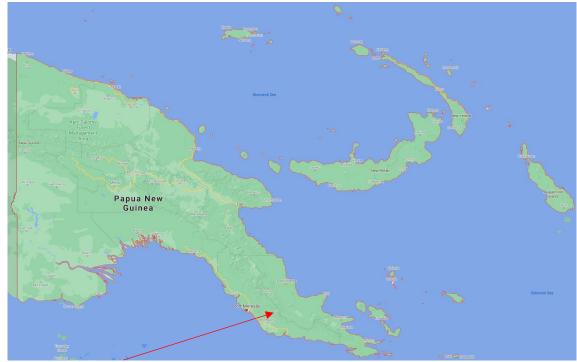
Questions in Doromu-Koki

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1 Introduction

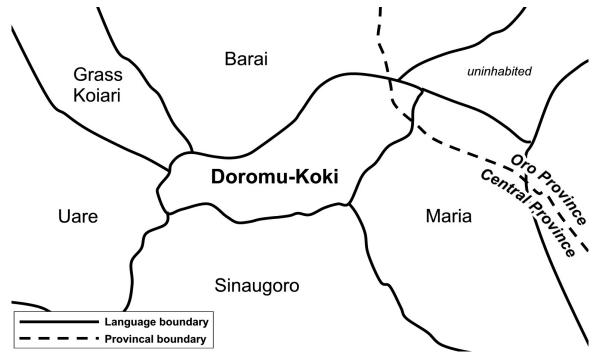
Doromu-Koki is a Papuan language¹ of Central Province, Papua New Guinea, with approximately 2,000 speakers speaking three dialects: Koki, Kokila and Korigo (Bradshaw 2008).² The language community is located approximately 80 kilometres east-southeast of the capital, Port Moresby, as seen in the maps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



Map 1: Doromu-Koki language area (https://www.google.com/maps/place/Papua+New+Guinea/@-6.1778942,148.4660429,7.25z/data=!4m5!3m4!1s0x6859e8afbf0e9eaf;0xdaf0e50d8e9c127a!8m2!3d-6.314993!4d143.95555)

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 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 discussion or to highlight topicalised or foregrounded material in the free translation; in other situations it will be specified in the text.



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

2 Salient typological features

Typologically, the Doromu-Koki language exhibits some typical characteristics for a Papuan language:

• External pre-head relative clauses

Doromu-Koki often exhibits external pre-head relative clauses. They are juxtaposed to the head (1) and restrictive.

(1) $[[Geiti nari.re-do]_{RC}]$ amiye]_A yaku geiti eboka.re-yo-ma look.after.do-3SG.PRS person open.do-3SG.PST-SQ.DS gate DSM gate dui rei bo-si mina bouti tora ide=ri gui.rei go.over-SQ.SS this boat big inside=at ride.on bo-yaka. go.over-1SG.PST 'The gatekeeper (lit. 'person who looks after the gate') opened the gate and I entered

and went inside the big boat.' [11.09]

When an intervening optional demonstrative relativiser *mina* 'this one' is used as an anaphoric referent (2), then a post-head non-restrictive RC is formed to add extraneous information.

```
(2) [Dona [ide=ri
                           vare-do]_{RC}
                                            mina<sub>s</sub>,
                                                       koe.ni-si
                                                                           nui
     pig
               inside=at sleep-3SG.PRS
                                            this.one squeal.say-SQ.SS
                                                                           sty
     ukisivo.re-si
                                        di-yo.
                             ori
                                        go-3SG.PST
     startle.do-SQ.SS
                             fear
     'The pig that was (lit. 'is') sleeping inside squealed and was startled in the sty and fled
     (lit. 'went in fear').' [2.12]
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Common arguments include common or proper nouns, pronouns or demonstratives, or headless adjectives when used in a non-restrictive relative clause; in a restrictive relative clause only common nouns are permissible.

• Little nominal affixation/some verbal affixation

There are no affixes on nouns and relatively few on verbs, such that there is no indication of inalienable possession, gender, animacy, shape, object, controlled/uncontrolled distinction, or number classes. The only productive strategy for indicating plurality of nouns is through reduplication, such as *mida* 'child' becoming *mida.mida* 'children'. It is limited to three small subclasses of countable culturally important notions (eg. *sina.sina* 'many stories'), mass degree/intensity nouns (eg. *maina.maina* 'searching and searching') and distributive nouns (eg. *ida.ida* 'different ways/roads').

A maximally inflected verb would fill five slots: stem+mood+aspect+tense+switch reference as in the following example:

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(3) Guaka vare-bo-bi-giya-ma ni-gam-aka... sickness sleep-POT-F.CNT-2SG.FUT-SQ.DS say-P.CNT-1SG.PST 'I was saying that you might continue to sleep being sick...' [66]
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There is very limited noun and verb classification, in spite of the claims of Wurm, Voorhoeve and McElhanon (1975:169) that these are '...wide-spread amongst Trans-New Guinea...languages.' The only number distinction on nouns is found in kinship terms. Two limited subsets have distinct plural forms, the larger one has *-ni* for singular and *-yaka* for plural (eg. *dubuini* 'brother' versus *dubuiyaka* 'brothers') while the smaller set has *-Ø* for singular and *-kai* for plural (eg. *aufa* 'grandparent/child' versus *aufakai* 'grandparents/-children'). All other nouns have no affixation, such that number is only indicated in the verb morphology, except in the case of those nouns that can take reduplication, as already noted above.

• Small verb class

There are only 199 simple verbs in the language, divided into two subclasses. However, the language does have the robust ability to form new complex verbs with a borrowed complement + associated verb. The majority of verb stems contain two syllable (52.5%), followed by three (25.1%), and then followed by one (17.3%), and a few with four (5%), which are mainly compound forms. Class I consists of those verb stems ending in ar, and amounts to approximately 11% of Doromu-Koki verbs. The apico-alveolar rhotic r is only realised when the root is inflected with suffixes beginning with a vowel, as seen in the examples below (with retained r in bold):

(4)	a.	slap-3SG.PST	fama-do slap-3SG.PRS	fama r -agadu slap-HYP
	b.	'he slapped' ukoka r -afa	'he slaps' ukoka-sifa	'should slap' <i>ukoka-gifa</i>
		peel-1PL.PST 'we peeled'	peel-1PL.PRS 'we peel'	peel-1PL.FUT 'we will peel'

Class II includes all the verb stems with all the remaining vowels (e, i, o and u), and comprises 87% of the verbs in the language. A few are shown below:

(5)	a.	re-yaka do-1SG-PST 'I did (it)'	rei-da do-1SG.PRS 'I do (it)'	re-gida do-1SG.FUT 'I will do (it)'	re-Ø do-2SG.IMP 'do (it) [sg]'
	b.	di-yo come-2SG.PST 'you (sg) came'	di-sa come-2SG.PRS 'you (sg) come'	di-giya come-2SG.FUT 'you (sg) will come'	di-gasa come-SIM.SS 'whilst coming'
	c.	bo-yo go-3SG.PST 'he went'	bo-do go-3SG.PRS 'he goes'	bo-go go-3SG.FUT he will go'	bo-si go-SQ.SS 'go(es) and then'
	d.	oku-yafa break-1PL.PST 'we broke (it)'	oku-sifa break-1PL.PRS 'we break (it)'	oku-gifa break-1PL.FUT 'we will break (it)'	oku-nadi break-1PL.IMP 'let's break (it)'

There are a handful of uninflected verbs, which have been classified as verbs of intention and of cognition/volition. The first subclass only has one member (*va* 'try') whilst the second has three (*diba* (HM)³ 'know', *toto* 'do not know, forget' and *ura* (HM) 'want, wish, like').

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³ HM=Hiri Motu; to indicate borrowings' origin from the common trade language used in the southern region of the country.

• Switch-reference

The switch-reference system consists of four forms: -ri 'simultaneous different subject' (6), (9), -ma 'sequential different subject' (1), (3) [p.3], -ga(sa) 'simultaneous same subject' (5b), (7) and -si 'sequential same subject' (1), (2).

- (6) Re-si koru=ri vare-yo-ri aruma yaku ina fafau do-SQ.SS water=at sleep-3SG.PST-SIM.DS snake DSM 3 on.top.of

 de-yo.
 come.down-3SG.PST

 'Then at the river while he was sleeping, a snake came down on top of him.' [3.04]
- (7) *ida=u de-gasa bi abou no re-yaka* road=by come-SIM.SS TOP fall bad do-1S.PST 'while coming on the road I had a bad fall (lit. 'fell badly')' [83]

The non-final verbs are those which take switch reference marking, such that they link clauses in temporal relations. When the subject is the same between clauses, only the switch reference is indicated, carrying the relative TAM-transitive/intransitive subject marking as indicated on the final verb. When the subjects are different, then TAM-transitive/intransitive subject marking is indicated on the non-final verb, corresponding to the first subject on the initial clause non-final verb, and the second subject has its own distinct TAM marking on the final verb.

• Complex verbs

Complex verbs in Doromu-Koki consist of a complement and an associated simple verb. These complex verbs mainly make use of the associated verbs re- 'do', ni- 'say/become', ri- 'make' and to a lesser extent 26 others: ae- 'put', ari- 'arrange', bae- 'come', bo- 'go', dadi- 'get up', di- 'go (around)', fere- 'leave', gurau- 'suffer', imi- 'pierce', iri- 'eat', mar- 'give', moi- 'get', ne- 'go down', nimar- 'commend', nioku- 'testify', nugar- 'cut', ode- 'break', ori- 'burn, cook', oure- 'be first', u- 'hit', vadi- 'weave', vai- 'burn', vari- 'plant', ve- 'see' and voufeide- 'surrender'. New members can be created through borrowings, which most often make use of the associated verb ve- 'do', but can also use others dependent on the semantics.

There are two subclasses; the larger (\sim 70%) encompasses grammaticalised forms in which the complements cannot be used on their own without the associated verb (8), and the smaller subclass (\sim 30%) in which the complements are nouns (9), adjectives (10) or postpositions (11) which can be used on their own in other contexts.

(8) *Ini* ura (HM) bi rumana vene be **abidi.re-**go.
3.POSS want TOP man people some designate.do-3SG.FUT 'He wanted to choose some men.' [Bradshaw, In progress]

(9) Ni.vauna-vauna.re-yo-ri, miya, aura ma **abata** re-yadi. say.venerate-RED-3SG.PST-SIM.DS rain wind and flood do-3PL.PST 'When he said a sorrow chant then it rained, and wind came and it flooded.' [Bradshaw, In progress]

In the complex verb in (10) the adjective *bere* 'nice and straight', functioning here as a complement, together with the verb *re*- 'do' means 'filled up', as in now the stomach is full.

- (10) *Iruku iri-si* **bere** re-yaka. food eat-SQ.SS nice.and.straight do-1SG.PST 'I ate food and was full.' [Bradshaw, In progress]
- (11) *Ini muye-na bi negau ni-yo*.

 3.POSS die-NMLZ TOP near become-3SG.PST 'His death was drawing near.' [Bradshaw, In progress]
 - Postpositional clitics

The three postpositional clitics =ri 'in, at', =sa 'with', and =u 'by, on, in, with' can be bound to other postpositions (12), nouns (13), adjectives (14), demonstratives (15), pronouns (16), temporal elements (17), and verbs (18), as seen below.

- (12) Dura bi [yabo adina]=**ri**.
 string.bag TOP tree next.to=at
 'The string bag is next to the tree.' [Bradshaw, In progress]
- (13) Na [nai rema mida]=sa bi buni ame-sifa.

 1S 1SG.POSS woman child=ACCM TOP good stay-1PL.PRS

 'I am living well with my wife and children.' [61]
- (14) [Amiye tau]=sa gubuyo re-yo-ma...
 person all=ACCM anger do-3SG.PST-SQ.DS
 'He got angry along with all the people and...'
- (15) ...nai sisina bai-yo mina=**ri** koina ni-yo mini. 1SG.POSS story come-3SG.PST this.one=at finish become-3SG.PST here '...my story came this far and now it finished.' [17.12]
- (16) Na bi ina=**sa** ago ni-da. 1S TOP 3=ACCM word say-1SG.PRS 'I am talking with him.'
- (17) Na [mirona fura]=ri bo-gida.

 1SG that week=at go.up-1SG.FUT

 'I will go up next week.'
- (18) Yi amei-bo-bi-giya=**ri** moke na bi yi baba. 2.POSS stay-POT-F.CNT-2SG.FUT=at think 1SG TOP 2.POSS father 'As you continue living your life remember that I am your father.' [66]

The postposition =u 'by, on' is quite limited, only occurring on 17 words in the corpus; the majority are nouns [eg. vana=u (hand=by) 'by hand'].

• Past tense/days in the past

Doromu-Koki only has one past tense, and yet has a rich distinction between words of days in the past: *didoka* 'five days before today,' *maitoka* 'four days before today,' *neureka* 'three days before today,' *aineka* 'day before yesterday,' and *agiya* 'yesterday.' ⁴

• Basic number system

The Doromu-Koki number system is a five-based system. ⁵ Because of this fact, higher numbers can be cumbersome, such that English numbers are used. Thus we find *yokoi* 'one,' *remanu* 'two,' *regode* 'three,' *vana raro* 'four (lit. hand line)' and *vana berou autu* 'five (lit. empty side hand)'.

• Verbs of motion/directional demonstratives and locatives

Direction is very important, given the mountainous terrain of the area; with verbs of movement, demonstratives and locatives as illustrated in the tables below.

Table 1: Verbs of movement

Come	Go	
	bo-	Up
bae-	di-	Over
de-	ne-	Down

Table 2: Demonstrative pronouns

	Specific	Generic	Greater distal
Elevated			isena
			'that (one) up over there'
Distal	yo-mirona	mirona	yo-rona
	'that (one) right there'	'that (one)'	'that (one) over there'
Proximal	yo-mina	mina	, ,
	'this (one) right here'	'this (one)'	

⁴ These all have equivalent realisations in the future, i.e. *didoka* also means 'five days from now', *maitoka* 'four days from now,' *neureka* 'three days from now,' *aineka* 'two days from now (i.e. day after tomorrow),' and *agiya* 'tomorrow.'

⁵ With qualification – There is only a lexical distinction for 'one,' 'two,' 'three' and 'four/five,' as these last two are variations on *vana* 'hand'; the same applies to 'ten' as *vana ufo* 'hand clap'.

Table 3: *Locatives*

	Specific	Generic	Greater distance	Further still
Elevated	yo-iseni	forero	iseni (HM)	isefu
	'right up over there'	'up there'	'up over there'	'away up over there'
Distal	yo-mironi	mironi	yo-roni/soroni	
	'right there'	'there'	'over there'	
	yo-mirodu		mirodu	yo-isefu
	'right over there'		'over there'	'away right over there'
Proximal	yo-mini	mini	midu	gaima
	'right here'	'here'	'over here'	'far away'

There are also directional postpositional phrases: *anema ro* 'upstream', *ema ro* 'downstream', *egona ro* 'towards a lower place/below' and *vairu ro* 'above'.

3 Word classes

Doromu-Koki has five open word classes: nouns, complex verbs, adjectives, simple verbs and adverbs. (These last two are semi-open classes.) The noun class has far more members than any other class in the language – 50.9% of all entries and subentries in Bradshaw (In progress) are classified as nouns, not taking into consideration some of the other types of nouns, those being personal and place names, of which over 500 are listed in the appendix to the dictionary. The next largest class is complex verbs, at 32.1% of the dictionary entries (Bradshaw In progress). Adjectives comprise 8.0%, simple verbs 6.6% and adverbs 1.8% respectively (Bradshaw In progress), leaving less than 1% in the closed classes. The open classes can accept new members through borrowings or derivations.

The closed word classes include pronouns, demonstratives, locatives, postpositions, interrogatives, polar question markers, affirmative, negatives, degree adverbs, conjunctions, interjections, vocative and discourse markers.

Verbs may be divided into (in order of frequency) transitive, intransitive, ambitransitive and ditransitive. Approximately 66.5% of Doromu-Koki verbs are transitive, 26.1% are intransitive, 4.0% are ambitransitive (with a caveat – see below) and 3.4% are ditransitive. The verb *rafe*- 'wash, bathe, swim' is reflexive without an overt object [cf. (85), p. 22 below]. There is no indication of transitivity on the verb. More often than not, a third person transitive object is implied (19):

(19) Ina yaku iruku ori-yadi mina be **0** mar-o.

3 DSM food cook-3PL.PST this some give-3SG.PST 'He gave (her) some of the food that had been cooked.'

For other persons, the object pronoun is provided (20).

(20) Ya yaku remanu **na** mar-o. 2 DSM two 1SG give-3SG.PST 'You gave me two.'

Doromu-Koki is able to make a transitive verb "ambitransitive" (S=A) through reduplication of the stem, in which case it is then being used as a complex verb nominal with the verb re- 'do'. To date seven such occurrences have been attested (21) – (27). It is presumed that it could be a regular process whereby many more could be generated. The seven are given here:

- (21) Karaga ri-yadi vene di **feide-feide** re-yafa. tent make-3PL.PST people GEN cook-RED do-1SG.PST 'We cooked for people who built the tent/shelter (or 'we did the tent making people's cooking').' [Bradshaw In progress]
- (22) ... vari-na de re-yo sana=ri **goe-goe** rei-sa.
 plant-NMLZ NEG do-2SG.PST place=at dig-RED do-2SG.PRS
 '.you harvest/reap (lit. 'you do digging') where you did not plant.'
 [SUAR 2017:61:25.24]
- (23) *Iri-iri* koina ni-yo-ri vare-gi ne-yo.
 eat-RED finish become-3SG.PST-SIM.DS sleep-PURP go.down-3SG.PST
 'When the eating was finished he went down to sleep.' [SUARBB 2011]
- (24) *vari-vari* re-gedi meda moi-yo-ri plant-RED do-3PL.FUT day get-3SG.PST-SIM.DS 'when the day that they would do planting came' [15.02]

At times the reduplicated verb behaves just like a noun (25) and can take a nominal case (26), so that it is a nominalisation strategy [cf. (30), p. 10 *moke-na* (think-NMLZ) 'thinking'].

- (25) ...ma dona auna di moke-moke. and pig dog GEN think-RED '...and animals thinking.' [SUAR 2017:91:7.22]
- (26) yi neide-neide rofu bi taotao dada 2.POSS hear-RED for TOP dull because 'you are so slow to understand/ uninterested (lit. 'your understanding/obeying/listening is dull')' [SUAR 2017:472:5.11]

Again in (27), the reduplicated verb stem behaves as a noun being modified with a possessive pronoun and the postpositional clitic =ri (and with other elements like di 'GEN' as seen in (21) and (25) above):

(27) Nai ve-ve=ri bi buni ide.

1SG.POSS see-RED=at TOP good NEG

'My sight (lit. 'seeing') is not good.' [Bradshaw In progress]

Both transitive and intransitive subject are indicated by NPs or optional pronouns (which function as both subject and object) and portmanteau transitive/intransitive subject personnumber-tense marking on the verb.

Transitivity alternation can also be indicated through the use of the transitive verb *moi* 'get, take' (D.CAUS=direct causative); as the first component of an SVC it makes an intransitive verb transitive, so a type of transitive increase.

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(28) ...moi amei-nu re-yo.
D.CAUS stay-STAT do-3SG.PST
'...he made him sit down.' [SUAR 2017:410:1.20]
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(29) ...ini oki-yadi vene=sa di uka **moi** ada 3.POSS arrive-3PL.PST people=ACCM GEN stomach get happiness **re**-yo.

do-3SG.PST

"...she pleased him and his guests (lit. 'made their stomachs [ie. hearts] happy")." [SUAR 2017:88:6.22]

There are five ditransitive verbs, *mar*- 'give', *nimar*- 'commend' (lit. 'say-give'), *nioku*- 'testify, inform' (lit. 'say-break'), *nioteimar*- 'teach' (lit. 'say-tell') and *oteimar*- 'tell, show'. Four of them have to do with speech, three being *ni*- 'say' compounds. A couple are exemplified below:

- (30) Nai moke-na bi mina ago ya ni.oku-gida.

 1SG.POSS think-NMLZ TOP this word 2 say.break.open-1SG.FUT

 'I thought (lit. 'my thinking was that') I would inform (lit. 'say break open this word to') you.' [Bradshaw In progress]
- (31) Ida buni goina bi ura (HM) rei-sa mina ya way good which TOP want do-2SG.PRS this 2

oteima-go.

tell-3SG.FUT

'She will tell you which method is good that you want to do.' [Bradshaw In progress]

4 Constituent order

Constituent order is as seen here:

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

Temporals and locatives have more flexibility, for pragmatic effects, while the other elements (indicated in bold above) do not.

Predicate structure involves not only the simple and complex verbs we have already seen above, but also compound verbs and serial verb constructions.

The phonological system is described in the appendix.

5 Interrogative words

Doromu-Koki has eleven interrogative words as seen in the table below. Most (64% - in right column) begin with go^{-6} , though it has no known meaning. Other formative parts correspond to those terms they relate to, as seen in the Table 5.

Table 4: *Interrogative words*

Item	Gloss(es)	Relates to	Item	Gloss(es)	Relates to
kaere	'who'	N/PRO	gokai	'how'	N
beika	'what'	N/PRO			(instrument/means)
beika resi ⁷	'why'	N (reason)	gokai resi	'why, how'	N
				•	(instrument/means)
			gokaisanu	'how	ADJ (quantity)
				many/much'	
beikadinare	'when'	N	goivaka	'when'	N (temporal)
		(temporal)			
			goina	'which (one)'	DEM
			goidu	'where	N/LOC
				(direction)'	
			goini	'where	N/LOC
				(location)'	

⁶ Four with *goi*- and three with *gokai*-.

⁷ re-si is literally 'do-SQ.SS', so this could be glossed as 'doing what' and similarly *gokai resi* as 'doing how'; note a similar construction with *mina resi* 'therefore' [lit. 'doing this'] (Bradshaw, In progress).

Table 5: *Interrogative formation*

Item	Gloss(es)	Related items	Gloss(es)
gokaisanu	'how many/much'	noibanu	'whole, a lot, all, entire, many'
		regodenu	'three'
		remanu	'two'
		vanu	'every'
goina	'which (one)'	isena	'that (one) up over there'
<u> </u>		mina	'this (one) here'
		mirona	'that (one)'
		yomina	'this (one) right here'
		yomirona	'that (one) right there'
		yorona	'that (one) over there'
goidu	'where (direction)'	midu	'over here'
<u> </u>		mirodu	'over there'
		yomirodu	'right over there'
goini	'where (location)'	iseni	'up over there'
_		mini	'here'
		mironi	'there'
		soroni	'over there'
		yoiseni	'right up over there'
		yomini	'right here'
		yomironi	'right there'
		yoroni	'over there'

The most common interrogative in the language is *kaere* 'who/whom' (functioning as A/S, OBL, O, E and VCC), at 42.8% of interrogatives used. (Note however that *kaere* also serves as relative and impersonal pronouns as discussed in §9, p. 20 below.)

(32) Ya [kaere rofu]_E ago ni-sa?
2 who to word say-2SG.PRS
'To whom are you speaking?'

Like open class words, it also undergoes reduplication, with an idiosyncratic (pronominal use) meaning of 'whoever/whomever' as seen in (33).

(33) *Mina* dogo bi kaere.kaere nai Baba vaku ina rofu 1SG.POSS father this TOP who-RED DSM preparation re-yo maka. do-3SG.PST only 'This is only for whomever my Father has prepared it.' [SUAR 2017:48:20.23]

Other uses of *kaere* include those of an impersonal pronoun and of a relative pronoun, as seen in subject slot in (34), and in transitive object slot in (35).

- (34) *Koki* mida **kaere** vene bi rumana, bi rema, gua (name) people TOP woman man child who TOP now "Doromu" vo.ni-dedi. vene (name) people call.say-3PL.PRS 'The Koki people are women, men and children who are now called "Doromu" people.' [8.02]
- (35) *kaere* Sei yaku... oma=ri afei bo-yo whom God DSM sky=from take go-3SG.PST 'whom God took from heaven' [SUAR 2017:249:1.11]

The second most commonly used interrogative is *beika* 'what' (functioning as O, E and VCC), at 38.8% of interrogatives used, as seen in the following example.

(36) *Mina bi* **beika**? this TOP what 'What is this?'

It can also be used as head of a relative clause.

(37) **Beika** bura ri-yaka bi kamini bura ri-yaka. what writing make-1SG.PST TOP and then writing make-1SG.PST 'What I have written I have written.' [Bradshaw In progress]

Quite often, it is used in an alliterative construction, *beika baika*, meaning 'whatever (things)', a sort of similative plural.

(38) Tora vene yaku beika.baika re-gam-adi bi una yaku big people DSM whatever do-P.CNT-3PL.PST TOP 1PL DSM toto.re-nadi. imitate.do-1PL.IMP

'Let's imitate whatever (things) the elders were doing.' [Bradshaw In progress]

Two others are formed from *beika: beika resi* 'why' and *beikadinare* 'when' (both functioning as OBL). *Beika resi* derives from *beika* + *re-si* 'what + do-SQ.SS' – grammaticalisation of a medial clause.

(39) **Beika.resi** yoga.ni-dedi? why laugh.say-2PL.PRS 'Why are you (pl) laughing?'

Dutton (1970:980) has proposed that *dinare* is possibly derived from Motu *dina*⁸ 'day' + re 'at, on', so that *beikadinare* would be 'on what day'. However, re means 'do', while =ri 'at, on' is more likely what was meant, since some speakers claim this is *beikadinari*, which would be what+day+on (ie. 'at what time'). This seems a plausible explanation, especially in light of examples such as (40) and the claims of some speakers.

(40) **Beikadinare** ya vata.ni-yo? when 2 be.born-2SG.PST 'When were you born?' [Bradshaw In progress]

However, this form is seldom used; much more common is *goivaka* (functioning as OBL, CC), as seen below.

(41) *Goivaka* mina yava ri-yo? when this house make-2SG.PST 'When did you build this house?'

Gokai functions as OBL, CC as seen below.

(42) *Dura* **gokai** *vadi-yo*?

net.bag how make-3SG.PST

'How did she make the net bag?' [Bradshaw In progress]

Gokai can also be used with re-si 'and then' (functioning as OBL) in a statement:

(43) Uniye nikaite-yafa **gokai** re-si makai ni-do.

1PL.REFL ask-1PL.PST how do-SQ.SS like.this say-3SG.PRS

'We asked ourselves how it is happening like this.' [Bradshaw In progress]

⁸ From Hiri Motu *dina* 'day, sun' (Dutton and Voorhoeve 1974:191).

Also seemingly derived from *gokai* is *gokaisanu* 'how many/much' (possibly from *gokai* 'how' + -*nu* [from adjectives] – functioning as OBL, VCC, CC).

(44) Ma yi ada iye tau vakoi ka **gokaisanu** ame-do and 2.POSS head leaf all together also how.many stay-3SG.PRS duaiya(HM).re-yo. count.do-3SG.PST
'And even how many are all the hairs on your head has been counted.'
[SUAR 2017:22:10.30]

Goina functions as S, VCS, OBL, O.

(45) Ya bi **goina** gutuna=ri bai-yo?
2 TOP which one from=at come-2SG.PST
'From which (place) did you come?' [Bradshaw In progress]

There are two ways of describing 'where', *goidu* (functions as OBL, CC) and *goini* (functions as VCC); the first is to indicate movement direction (46) and the second stationary location (47).

- (46) Ya goidu di-sa?
 2 where.DIR go-2SG.PRS
 'Where are you going?'
- (47) Mina amiye bi goini? this person TOP where.STAT 'Where is that man?'

Position of interrogative words typically corresponds to the position of the word(s) they relate to. A few example responses show this [from (32), p. 13 to (48); from (36), p. 13 to (49); from (39), p. 14 to (50); (41), p. 14 to (51); (42), p. 14 to (52); (46), p. 15 to (53) and (47), p. 15 to (54)].

- (48) Na [Roseanne rofu]_E ago ni-da.

 1SG (name) to word say-1SG.PRS
 'I am speaking to Roseanne.'
- (49) *Mina bi* **bani**. this TOP yam 'This is a yam.'

Note that in (50), the order can be changed for pragmatic effect to *Yoga nisifa*, *ada resifa dada*. 'We are laughing because we are happy.'

- (50) Ada re-sifa dada yoga.ni-sifa. why do-1PL.PRS because laugh.say-2PL.PRS 'Because we are happy we are laughing.'
- (51) Agiya mina yava ri-yaka. yesterday this house make-2SG.PST 'I built this house yesterday.'

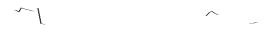
Again, to focus on the instrument, (52) could instead be stated as *Maena dudu dura vadiyo*. 'With string she made the net bag.'

- (52) Dura maena dudu vadi-yo.
 net.bag string INS make-3SG.PST
 'She made the net bag with string.'
- (53) Na rautu=ri di-da.

 1SG village=to go-1SG.PRS
 'I'm going to the village.'
- (54) Mina amiye bi yomironi. this person TOP right there. 'That man is right there.'

6 Polar question markers

Dutton (1970:920) says: 'Yes-no questions seem to be distinguished from statements of the same form by intonation only.' This intonation is a raised pitch (versus a downward contour for a statement) as shown in (55) below.



(55) Ina Arizona=ri ame-do? 3 (place.name)=at stay-3SG.PRS 'Does he live in Arizona?' [39.05]

Dutton's claim can indeed be the case, although more commonly the tags ba 'eh', and somewhat less eni 'eh' (which only co-occurs with ba (56-57) or vo.ni 'tell' (59), which adds emphasis and becomes von in rapid speech), are used to indicate a polar question, in which case the intonation is downward (56) as also is the case with content questions (cf. §10).



(56) Neide-yo ba? hear-2S.PST Q 'Did you hear?' [117] (57)Ya bi mirona amiye di diba (HM) maina ni rei-sa TOP 2 that person GEN say know looking.for do-2SG.PRS ba? amiye yokoi, eni person one eh Q 'Are you (or 'is it you who is') the one looking after that person?' [Bradshaw In progress]

These two (eni ba) can also be reversed (58), perhaps as an afterthought.

- (58) Bi dudu ka de re-gida ba, eni?

 TOP again also NEG do-1SG.FUT Q eh

 'Won't I do it again with you, eh?'
- (59) a. Ya bi ne-giya, eni vo.ni?
 2 TOP go.down-2SG.FUT eh tell
 'You are going down, aren't you?
 - b. Yo, na bi ne-gida. yes 1SG TOP go.down-1SG.FUT 'Yes, I am going down.' [Bradshaw In progress]

Perhaps it is the case that *eni* (*vo.ni*) functions as a contrastive element, stressing the previous constituent, conveying 'is it (really) so/the case?'

7 Affirmative answer

The affirmative answer is indicated by the morpheme yo 'yes'.

(60) **Yo** ni-yafa. yes say-1SG.PST 'We said yes.'

In Doromu-Koki 'yes' and 'no' are used to confirm or deny the content of the question, rather than the response, as in English.

- (61) a. *Ya bi di-giya ba?*2 TOP go-2SG.FUT Q
 'Will you go?'
 - b. **Yo**, na bi di-gida. yes 1SG TOP go-1SG.FUT 'Yes, I will go.'
- (62) a. Ya bi de di-giya ba?
 2 TOP NEG go-2SG.FUT Q
 'Won't you go?'
 - b. Yo, na de di-gida. yes 1SG NEG go-1SG.FUT 'No, I won't go.'

Yo 'yes' can also be used simply to give further affirmation to a statement (63).

(63) [Robert]_{ADD}, [[buni tora gade]_O vo ya.ni-da [uni good big very tell DSM.say-1SG.PRS 1PL.POSS

oure-na Iesu Keriso ini roka $=ri]_{OBL}]_{CL1}$. $[\emptyset]_{VCS}$ \emptyset be.first-NMLZ Jesus Christ 3.POSS name =in (this) (TOP)

Rama yo]_{VCC}! true ves

'Robert, I bless you in the name of our firstborn Jesus Christ. Yes indeed (lit. 'yes this is true')!' [24.01]

Often *yo* serves to acknowledge that the listener is hearing what the speaker has said, as in (83), p. 22 below.

8 Negatives

A predicate is negated when preceded by *ide* 'negative', which in rapid speech becomes *de* (64). *Ide* is also used in answer to a question (66).

(64) Ya-ya diba (HM) nai vabara bi tora ide. 2-RED know 1SG.POSS light TOP big NEG 'You know that my light is not great.' [43]

In a complex verb, the negative is typically found between the complement and the simple verb or sometimes between verbs in serial verb constructions (65), dependent on the intended scope of negation (versus *de usi dido*).

(65) Ina bi tutubena di ida usi **de** di-do.

3 TOP ancestor GEN way follow NEG go-3SG.PRS 'He does not follow the ways of the ancestors.' [94]

The full form *ide* is always used as a response (66).

- (66) a. Ya buni ba? 2 good Q 'Are you well?'
 - b. *Ide*, na buni de. NEG 1SG good NEG '' No, I am not well.'

In cases in which the verb is elided (re- 'do' below), the negative is then found at the end of the clause.

(67) Na bi gauka de Ø.
1SG TOP sickness NEG (I.did)
'I am not sick.' [Bradshaw In progress]

The negative can negate other word classes than just simple and complex verbs, including adjectives (68), beginning of verbless complement clauses (69) and a whole clause (70); where

it is located determines its scope. [Note also the postpositional clitic =ri on the headless NP in (68).] The negative can negate other items besides verbs: interrogatives, nominalised verbs, NPs, headless NPs (68), verbless complement clauses (64) and as a negative response (66).

- (68) Doba de=ri bo-gam-adi-ri...
 long NEG=at go-P.CNT-3PL.PST-SIM.DS

 'Not long after they were going...' [Bradshaw In progress]
- (69) Na=sa bi [de iniye yo]_{VCC}.
 1SG=ACCM TOP NEG very yes

 'There is really nothing with me/I really don't have anything.'
 [Bradshaw In progress]
- (70) **De** mina rei tavoi re-yo.

 NEG this do in.vain do-3SG.PST

 'He did not do this in vain.' [Bradshaw In progress]

Another negative, used only on clause level, is *dia* in (71-73), as opposed to *ya raka de niyaka* 'I did not call you':

- (71) **Dia** na yaku ya raka.ni-yaka.

 NEG 1SG DM 2 call.say-1SG.PST

 'It is that I did not call you.' [Bradshaw In progress]
- (72) ...adina ya bi dia nai mamoe (HM) dada. for 2 TOP NEG 1SG.POSS sheep because '...because you are not my sheep.' [SUAR 2017:222:10.26]
- (73) R.A. dia beika gauka ago siau dudu ate rei (name) NEG what sickness word power INS receive do varei-sa. sleep-2SG.PRS 'R.A., it is not with some sickness' powerful words that you got that you are sleeping.' [50]

Other negatives include: ga 'prohibitive' (74-75), kode 'not yet' (76) and koina 'nothing, finish' (77). The prohibitive, like the negative, more commonly occurs before the final simple verb of a complex verb or in a serial verb construction, as it must in (74), since it cannot occur adjacent to na me'; but at other times it changes position, as in ori ga re or ga ori re 'don't be afraid, and even for a non-compositional complex verb such as keu.ri- 'ascend', presumably due to a difference in the scope of negation.

(74) Rafe-bi-gida-ri bai-si na eru re-na ga wash-F.CNT-1SG.FUT-SIM.DS come-SQ.SS 1SG trick do-NMLZ PROH re-fa.
do-2PL.IMP
'While I will be washing don't come and trick me.' [Bradshaw In progress]

(75) *De-si* moi-gedi-ri mida ni-giya iruku moi come-SQ.SS get-3PL.FUT-SIM.DS child say-2G.FUT food get bo-gedi-ri moi forovai.re-yagane. ga go-3PL.FUT-SIM.DS **PROH** confuse-3PL.IMP get 'When they will bring it, tell the child that when they bring it, not to get confused.' [61]

- (76) sioni =ka oki-na kode=ri...
 white.skin =also arrive-NMLZ not.yet=SIM.DS
 'when white people had not yet arrived...' [19.01]
- (77) Iruku ri-si mar-o koina ni-yo-ri...
 food make-SQ.SS give-3SG.PST finish become-3SG.PST-SIM.DS
 'when she had finished making and giving out the food...' [20.06]

When negatives are found in a question, they are usually of the type below '...or not' questioning the veracity of a proposition.

[Jacobo nikaite-yaka, "[[Aruma yaku]_A ya aki.re-yo ba (name) ask-1SG.PST snake **DSM** bite.do-3SG.PST or *ide*]_{CC}]_{CL1}?" [*To* [ina ya]_S $[[\emptyset]]$ "Bi]_A deni-yo, na **NEG** but 3 DSM say-3SG.PST (3) TOP NEG 1SG aki.re-yo]cc," $vo.ni-yo]_{CL1}$. bite.do-3SG.PST tell.say-3SG.PST

'So I left my work and ran to my son, but the snake had gone away, and so I came and asked Jacobo, "Did (or didn't) the snake bite you?" And he said that, 'It did not bite (me)," he said.' [3.06-07]

Two of these others (*dia* and *ga*) do not occur in questions, while the remaining two (*kode* and *koina*) can do so in tag forms such as *koina ni-yo ba*? (finish become-3S.PST Q) 'was it finished?'

9 Impersonal pronouns

There are two words used together and sometimes separately as impersonal pronouns: the noun *amiye* 'person' and the interrogative *kaere* 'who'. When used on its own, *kaere* 'who' means 'whoever/whomever' or 'the one who'.

beika.baika (79)Kaere ini re-do rofu nima-do, ma TOP 3.POSS do-3SG.PRS who whatever commend-3SG.PRS to and kaya kota (HM) re-gi di adina nufa de, bi self do-PURP GEN reason with NEG TOP court good big gade moi-go! get-3SG.FUT very 'The one who is commended in whatever he/she does, and does not have any reason to be judged, will be blessed (lit. 'receive very great goodness')! [SUAR 2017:346:14.22]

When both are used together, *kaere* qualifies *amiye*, as in (80), which could otherwise be interpreted as referring to a particular person, rather than 'the one' or 'whoever/whomever'.

(80) *Mina* amiye kaere yaku va vei mama ina make-3SG.PST this person who DSM 2 see fully gade rofu bi buni tora ma-go! **TOP** good big very give-3SG.FUT to 'Blessed (lit. 'receive very great goodness') be the one (lit. 'this person') who took notice (lit. 'made to see fully') of you!' [SUARBB 2011]

Note also the use of *beika* 'what' in (37) and (38) above.

10 Prosody

Asking a question, either information-seeking or rhetorical, is filled with an interrogative word and has a downward pitch contour with a final sharp rise as in (81).



(81) Robert, ya goina Cairns kona **beika**=ri ame-dedi? (name) 2 where corner what=in stay-2PL.PRS 'Robert, in what corner of Cairns do you (pl) live?' [40.02]

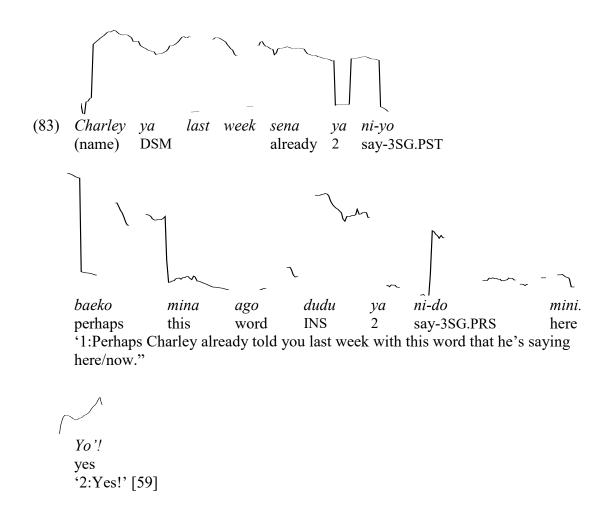
In other instances, only a word expressing uncertainty will give a clue to the interrogative nature of the utterance, as in (82), with a quasi-questioning form, and yet no final rising pitch contour.



(82) ...cowboy movie ibounai (HM) mirona=ri act re-dedi baeko? all there=at do-3PL.PRS perhaps '...maybe all the cowboy movies are filmed (lit. 'acted') there?' [39.13]

It was most likely too late in the speaker's conversation to make a change, so he simply added the word *baeko* 'perhaps'.

As an emphatic response, *yo* 'yes' has a rising contour with a glottal stop at the end. As an immediate answer it is level. This is the only word in the language to exhibit such a feature. Following is a statement, with the corresponding general downward contour, ending in a 'yes' response. Note that there is no implicit question, and so no upward contour at the end.



11 Non-information-seeking contexts

Some questions can and do receive answers, but they do not have to, simply because the speaker already knows the answer; they serve as phatic greetings. In (84), the typical greeting upon first encountering someone is seen.

In (85), the context is one carrying soap and a towel down to the river; it is obvious the person is going to wash, so the question serves as an expected greeting.

No examples of questions with command meanings have been observed.

12 Clauses and discourse features

An interrogative can occupy the slot of the verbless clause complement as in (86).

```
(86) [Koki vene]<sub>VCS</sub> bi [kaere]<sub>VCC</sub>? (name) people TOP who 'Who are the Koki people?' [8.01]
```

Interrogatives retain the same constituent order as an equative (or declarative) clause, as also in *yi roka bi beika*? (2.POSS name TOP what) 'what is your name?' or *baiya bi goini*? (bush.knife TOP where) 'where is the bush knife?' versus *baiya bi mini* (bush.knife TOP here) 'the bush knife is here' (cf. §5, pp. 15-16 for further examples).

Interrogatives are common as a strategy for initiating a conversation as well as for turn taking, as seen here in (87).

```
(87) 3: [[Ina]<sub>S</sub> Arizona=ri ame-do]<sub>CL1</sub>?
3 (place.name)=at stay-3SG.PRS
'Does he live in Arizona?'
```

```
2: Yo, [\emptyset]_S Arizona = \emptyset \emptyset]_{CL1}.
yes (3) (place.name)(=at) (stays) 
'Yes, (he lives in) Arizona.'
```

1: So what is the climate, climate like there? Is it cold, or?

In (88) the object precedes the transitive subject (A) as it is foregrounded. 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.

```
(88) [[[[Doi iye]o [aura yaku]<sub>A</sub> moi raudai.re-do]<sub>CL1</sub> mina]<sub>CC</sub> reed.sp leaf wind DSM get lie.down-3SG.PRS this

ve-gika ba]<sub>CL2</sub>?

see-CON Q

'A reed being blown down by the wind, was that what you were trying to see?'

[SUAR 2017:24:11.7]
```

In (89) we see a non-rhetorical question.

```
(89) [[Aruma yaku]<sub>A</sub> ya aki.re-yo ba ide]<sub>CL1</sub>? snake DSM 2 bite-3SG.PST or NEG 'Did the snake bite you?' [3.06]
```

As well as in declarative clauses, *bi* 'topic maker' can occur in interrogative clauses (90a): between verbless clause subject and verbless clause complement (cf. also (86) and (90b) for declarative clauses). Here in (90a), the *bi* has been written as one word with the pronoun, reflecting its clitic nature, and that it is an established topic. In the previous context the writer

wrote: 'Good, but my nose cold is lasting longer and I'm lying (lit. sitting) around sleeping!' It can also be used with negation (90b)⁹.

```
(90) a. [Mo \quad [ya]_{VCS} = bi \quad [\emptyset]_{VCC}]_{CL1}?
and 2=TOP
'And (what about) you?' [107]
```

```
b. [ini safi de]_{VCS} bi [\emptyset]_{VCC} 3.POSS taste NEG TOP 'it is tasteless' [65]
```

The marker *yaku* is often used to add prominence to the intransitive/transitive subject, particularly in answer to a question (91b), such that here *yaku* marks contrastive focus; the question asked would most likely be (91a).

```
(91) a. [[Kaere bi]<sub>A</sub> iruku Ø mar-o]<sub>CL1</sub>? who TOP food 3 give-3SG.PST 'Who gave (him) the food?'
```

```
b. [[Na yaku]<sub>A</sub> iruku Ø mar-aka]<sub>CL1</sub>.

1SG DSM food 3 give-1SG.PST

'I (versus someone else) gave (him) the food.'
```

Rhetorical questions (92) are another way of focussing on a proposition; in fact in this case, the real intent behind the question is even spelt out to further highlight the incredulity of the action by the hearers. The speaker did not do the correct thing, so he was being chastised.

```
(92) [[Uka
                    esika
                            dudu<sub>OBL</sub>
                                        rautu
                                                  oki-si]<sub>CL1</sub>
                                                                   [[beika re-yaka]<sub>RC</sub>
        stomach
                    pain
                                        village
                                                  arrive-SQ.SS
                                                                     what
                                                                             do-1SG.PST
                            INS
                                                         gokai.resi re-yo]cc?"
              nioteimar-aka-ma<sub>CL2</sub>,
                                          "[[Ya
       mina
                                                  bi
       this
               tell-1SG.PST-SQ.DS
                                             2
                                                  TOP
                                                         why
                                                                       do-2SG.PST
       ni-vadi]<sub>CL3</sub>,
                         "[rei
                                                  maka
                                                             de
                                                                       re-vo
                                                                                        ba<sub>CL4</sub>."
                                   mona
                                                             NEG
                                                                                        INTR
       say-3PL.PST
                          do
                                  properly
                                                  only
                                                                       do-2SG.PST
       'With a heavy (lit. painful) heart (lit. stomach) I arrived in the village and told them
       this story of what I had done and they asked (lit. told) me, "Why did you do (that), you
       didn't do it right.' [2.14-.15]
```

⁹ This could also be realised as *ini safi bi de* (3.POSS taste TOP NEG) 'it has no taste', which follows the canonical VCS *bi* VCC structure, and produces a slightly different meaning.

In (93), the speaker knows and supplies the answer to the question, but wants to emphasise the answer by asking the question.

'Who are the Koki people? The Koki people are men, women and children who are now called "Doromu" people.' [8.01-.02]

Answers to questions are a further means of adding cohesion to a text, as a response refers directly back to the question asked. Other particles/fillers are used as well, such as *buni* 'good', *e* 'oh' and the English *um* or *okay*.

13 Areal features

Like Doromu-Koki, the Hiri Motu (Dutton and Voorhoeve 1974) trade language and the neighbouring Sinauḡoro (Oceanic; Tauberschmidt 1995) language also have 'what' + another element to form 'why', as shown below. This could be a calque, most likely from Hiri Motu, into Doromu-Koki.

Interestingly, similar constructions are not found in the neighbouring Uare and Barai (Papuan) languages. Also comparative forms between interrogatives and demonstratives or locatives (lower section in the table below) is similar to Hiri Motu.

Table 6:	Comparison	with other	languages
10010 0.	C C	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00.0000000

Doromu-Koki	Hiri Motu	Sinaugoro	Gloss
beika	dahaka	kara	'what'
beika resi	dahaka	kara dainai	'why'
	badina/dainai/totona		
mina/mirona – goina	inai/unai – edana (?)		'this/that (one)' - 'which'
mini/mironi – goini	iniseni/unuseni - edeseni		'here/there' - 'where'

14 Concluding remarks

Discussion of Doromu-Koki questions has included salient typological features as well as word classes and constituent order.

The 11 interrogative words can be classified in four distinct groups. Formation as to the words they relate to include ones from only two of these groups (in right column of Table 4, p. 11), relating to adjectives of quantity, demonstratives and locatives. Nearly all of the interrogative words in Doromu-Koki can also be used in non-interrogatives senses as

impersonal or relative pronouns, head of RCs, similative plural, etc. Position of these interrogative words corresponds to the words to which they relate.

Polar questions are quite common, and can serve both as information and non-information seeking. The language has only one form for affirmative answers, but several types of negative words. Intonation for a question is typically rising finally, but falling for a polar question.

Interrogative clauses can be found in equative verbless clause complements, negated complement clauses, and as rhetorical questions. The differential subject marker *yaku* occurs in interrogative clauses to indicate contrastive focus. Interrogatives are regularly used for conversation initiation and turn taking. There do not appear to be any constraints on asking questions in Doromu-Koki.

Е

F

FC

FUT

GEN

НМ

extended

argument

focal clause

Hiri Motu

future

future genitive

PRO

PROH

PURP

PRS

PST

Q

Abbrevi	ations				
1	first person	HYP	hypothetical	RC	relative clause
2	second person	IMP	imperative	RED	reduplication
3	third person	INS	instrument	REFL	reflexive
A	transitive subject	INTR	interrogative	S	intransitive subject
ACCM	accompaniment	LOC	locative	SC	subordinate clause
ADJ	adjective	NEG	negative	SG, sg	singular
CAUS	causative	NMLZ	nominaliser	SIL	Summer Institute of
01102	causative	111122	Hommanser	212	Linguistics
CC	aamnlamant	N	20112	SIM	simultaneous
CC	complement clause	11	noun	SIM	simultaneous
CL		NP			
	clause		noun phrase	CO	1
CON	connative	0	object	SQ	sequential
CNT	continuative	OBL	oblique	SS	same subject
_		_	argument		
D	direct	P	past	SUAR	Sei di Uka Ago Ruaka
					'God's New Covenant'
DEM	demonstrative	PL	plural	SUARBB	Sei di Uka Ago Ruaka
					di buka bedakai 'Some
					books of God's New
					Covenant'
DIR	directional	PNG	Papua New	SVC	serial verb construction
			Guinea		
DS	different subject	POSS	possessive	STAT	stative, stationary
DSM	differential	POT	potential	TAM	tense-aspect-mood
	subject marker		1		1
_	3				

pronoun

purpose

present

question word

past

prohibitive

TOP

VCC

VCS

topical marker

verbless clause

verbless clause subject

complement

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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}		\mathbf{k}^{h}
Voiced plosives	b		d		g
Voiceless fricatives		f	S		
Voiced fricative	β				
Nasals	m		n		
Rhotic			ſ		
Semi-vowel				j	

Table A.2: *Vowel phonemes*

	Front unrounded	Back rounded
High	i	u
Low-mid	3	O
Low		a

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 $['b\epsilon q^h u 're^i]$ / $b\epsilon k^h u r\epsilon^i$ /

beku> 'push (it)'; 2) **Low-mid front unrounded vowel raising**, in which the low-mid front unrounded vowel / ϵ / is raised to the mid front unrounded vowel [e] word finally $[r\epsilon'gode]$ / $r\epsilon god\epsilon$ / <regode> 'three'; and 3) **Vowel nasalization**, in which a vowel becomes nasalised when it follows a nasal consonant $['\beta\epsilon n\tilde{\epsilon}]$ / $\beta\epsilon n\epsilon$ / <vene> 'people'.

2. Syllable structure

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

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	<u> </u>	Gloss(es)	
1	/a ^u /	'lime'	
2	$/\alpha^{i}.t^{h}\alpha/$	'lightweight'	
3	$/\alpha^{i}.n\epsilon.k^{h}\alpha/$	'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.ri.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 /	/thotho/	'forgotten'	
$/\mathbf{k}^{\mathbf{h}}/$	$/k^h a k^h a /$	'red, ripe'	
/b/	/baba/	'father'	
/d/	/dada/	'so'	
/g/	/gagani/	'place'	
/ f /	/fafa ^u /	'on top of'	
/ _S /	/sisik ^h a/	'smell'	
/β/	/βαβα/	'hot'	
/m/	/mimani/	'Kemp Welsh River'	
/n/	/nono/	'mother'	
/ r /	/ruru/	'divination'	
/ j /	/jojαβα/	'seedling'	

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

Table A.5: Vowel phoneme distribution

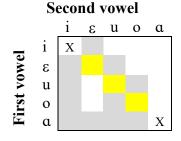
Phoneme	Example word	Gloss
/i/	/inik ^h i/	'long-tailed parrot'
/٤/	/egeregere/	'okay' 10
/u/	/unugu/	'banana sp.'
/o/	/odoro/	'above'
/a/	/abat ^h a/	'flood' 11

4. Vowel sequences and diphthongs

Every combination of vowel sequence is possible in the language, including some limited identical vowels ($/\epsilon$ /, /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



5. Prosodic features

Prosodic features in the language include stress and intonation.

¹⁰ From Hiri Motu *hegeregere* 'equal, adequate, fair, sufficient' (Dutton and Voorhoeve, 1974:195).

¹¹ From Hiri Motu *abata* 'flood, tide' (Dutton and Voorhoeve, 1974:187).

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.

[ˈnɑ̃]	/na/	<na></na>	'I'
['bunĩ]	/buni/	<buni></buni>	'good'
[du'bu ⁱ nĩ]	/dubuini/	<dubuini></dubuini>	'brother'
[bara'ginã]	/baragina/	<baragina></baragina>	'Eclectus Parrot'
[akʰumõˈroɾo]	/ak ^h umororo/	<akumororo></akumororo>	'spider sp.'
[badamĩsi'rik ^h a]	/badamisirik ^h a/	<badamisirika></badamisirika>	'Wallace's Fairy-Wren'
[ˈjɑβɑ=ɾi]	/jaβa=ri/	<yavari></yavari>	'in/at the house'
['nĩ-bo-bi-gɛdi-mã]	/nibobigedima/	<nibobigedima></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.