The adjective class in Doromu-Koki

Robert L. Bradshaw

James Cook University – Language and Culture Research Centre

31 July 2019

1 Introduction

The Doromu-Koki [doˈɾomũ ˈqokʰi] language is a Papuan (or non-Austronesian) language[1] of Papua New Guinea. The language community is located in the inland lowland rainforest of the Owen Stanley ranges in the Rigo District of Central Province, at approximately 80 kilometres by air east-southeast of the capital, Port Moresby (or 136 kilometres by road and track). The language area is approximately 400 square kilometres (Quigley and Quigley 1993:1) and encompasses the Mimani (Kemp Welsh)[2], Uma (Margaret) (a tributary of the Mimani) and Ora (Ormond) river valleys to the west of Mount Brown (Dutton 1970:890). The area is bounded by the Barai language (Koiari/Baraic) to the north and west, Sinaugoro (Oceanic) to the south, Maria (Manubaran)[3] to the southeast, Uare (Kwalean) to the west, Grass Koiari (Koiaric) to the northwest, and an uninhabited area to the east in Oro Province.

The total population of the language community is currently estimated to be 2,000, and is comprised of three dialects: the main central dialect Koki, Kokila to the west and Korigo to the northeast,[4] in 13 villages (cf. Map below). Half of the group is living and/or working in Port Moresby, due mainly to difficult access and subsequent lack of resources in the language area.

---

[1] Classified as Manubaran, Southeast, putative Trans New Guinea; cf. Pawley (2005:94) or Trans-New Guinea, Southeast Papuan, Manubaran (Dutton 1970:882; Wurm 1975:614; Wurm 1982:163-4; Eberhard et al 2019).

[2] Bracketed river names indicate names that are used external to the language community, which will be found on many maps, in lieu of the first names, which are the language community's names.

[3] Or Manubara, the only other language in the "family", for which a brief linguistic description has been written (Dutton 1970: 879-983), comparing the Manubaran and Kwalean languages.

[4] See Bradshaw 2008 for further discussion on dialects.
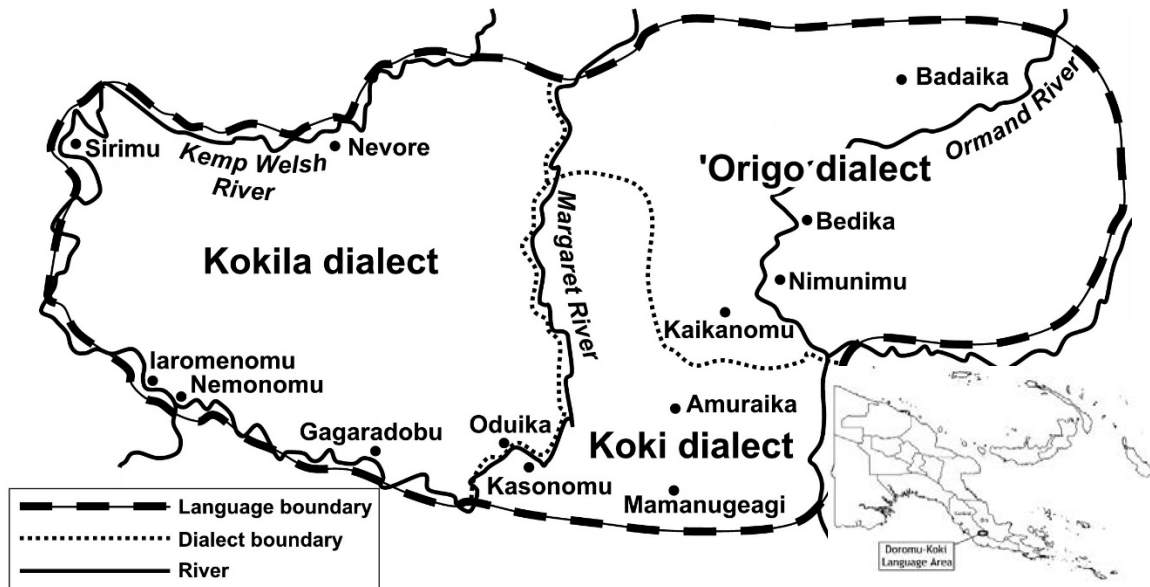
Map: *The Doromu-Koki language area (SIL-PNG)*

The Doromu-Koki language (Koki dialect) has 12 consonant phonemes and five vowel phonemes (Tables 1 and 2).

Table 1: *Consonant phonemes*

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

Table 2: *Vowel phonemes*

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

1.1 Grammatical overview

Doromu-Koki has the following features:

- Two classes of verbs: The first is composed of stems ending *ar*. The *r* is only realised when inflected with suffixes beginning with a vowel, as all syllables are open. The second includes all the remaining verbs (except four others which remain uninflected), ending in the vowels e, i, o and u.

(1) a. *mar-aka*   'I gave (it to him)'   *ma-gida*   'I will give'
     b. *re-yaka*   'I did (it)'   *re-gida*   'I will do (it)'
     c. *ri-yo*   'he/she/it made (it)'   *ri-do*   'he/she/it makes (it)'
     d. *bo-yagadu*   'should go over'   *bo-giya*   'you (sg) will go over'
     e. *maku-yafa*   'we threw (it)'   *maku-sifa* 'we throw (it)

- A maximally inflected verb fills up to five slots: stem + mood + aspect + transitive/intransitive subject person-number-tense + switch reference. There is no indication of transitive object on the verb.
- A switch-reference system with 'simultaneous and sequential same subject' and 'simultaneous and sequential different subject'.
- Complex verbs, using mainly the associated simple verbs *re-* 'do', *ni-* 'say/become', *ri-* 'make' and to a lesser extent 25 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 *youfeide-* 'surrender'. The associated verb is preceded with various complements. There are two subclasses; the larger (~70%) encompasses frozen forms in which the complements cannot be used on their own without the associated verb (which are indicated by a full stop between the components), and the smaller subclass (~30%) in which the complements are nouns, adjectives or postpositions which can be used on their own in other contexts (which are written as separate words).

(2) a. *abidi.re-*   'designate'
     b. *abata re-*   'flood'   'flood (n)' + 'do'
     c. *bere ri-*   'straighten, fill in'   'nice and straight' + 'make'
     d. *negau ni-*   'approach'   'near' + 'become'

- Three postpositional clitics =*ri* 'in, at', =*sa* 'with', and =*u* 'by, on, in, with' which can be bound to other postpositions or nouns, adjectives, demonstratives, pronouns, temporal elements and verbs.

There are five open word classes in Doromu-Koki (in relative order of size from largest to smallest): noun, complex verb, adjective, simple verb (semi-open) and adverb. Certain limited nouns, adjectives and adverbs include forms which can be reduplicated to indicate plurality or intensity while kinship terms have different singular and plural forms.

(3) a. *mida*   'child'   *mida-mida*   'children'
     b. *keika* 'little'   *keika-keika*   'very (many) little'
     c. *evade* 'quickly'   *evade-evade*   'very quickly'
     d. *aufa*   'grandchild' *aufakai*   'grandchildren'

Otherwise verbs receive the most affixation, mainly through suffixes, but also though a few prefixes. Transitive/intransitive subject person-number-tense is referenced on the verb. Default constituent order is AOV/SV.

(4) a. *rei-**da***   *re-**yaka***   *ga-re*
            do-3S.PRS   do-1S.PST   PRHB-do
            'I do (it)'   'I did (it)'   'don't do [it]'
      b. *Raphael na u-yo*   *Lucy vare-do*
            (name) 1S hit-3S.PST   (name) sleep-3S.PRS
            'R. hit me'   'L. is sleeping'

Morphological reduplication in Doromu-Koki is always total, whereas inherent reduplication is more frequently partial. Since morphological reduplication is total, it is difficult to determine direction; inherent partial reduplication can be word-initial or word-final and very rarely word-internal only (due to compounding). Since in a compound noun, the first nominal element is almost always modifying the second, for nouns, the first reduplicand is likewise considered to be modifying the second. This may, following similar reasoning, be the case with manner adverbs, which precede the verb they are modifying. But, as adjectives typically follow the noun, it would appear for them that the second reduplicand modifies the first. Again, this may also be the case for post adjectival degree adverbs. That is, direction is away from the head. There is no suffixal reduplication.

(5) a. *bouna*   'another'   ***bouna**-bouna*   'others'
      b. *akeke*   'special'
      c. ***dudu**bu*   'shelter'
      d. *rave**geragera***   'dangerous'
      e. *ni**mumu**gu*   'grumble'
            ni-mumugu   lit. say-whisper
      f. ***rumana** mida*   'boy/son'   ***esika**-esika*   'lots of pain'
            ***kiya**-kiya bodo*   'he walks very slowly'
      g. *mida keika-**keika***   'little children'   *no iniye-**iniye***   'very very bad'

Reduplication occurs on all open word classes, and even a few closed classes, such as subject/object pronouns with verbs of cognition only (6). Dependent on the semantics, open word classes' reduplication can be used to indicate plurality, intensity and/or distributive parameters, as seen in Table 3. Note that reduplication of complex verbs is primarily limited to the smaller subclass in which the complement can stand on its own, although there are exceptions as in (6) c. Reduplication does not appear to be productive in distinguishing any apparent subclasses.

(6) a. *na-**na***   *diba*[5] *ina*
         1S-1S   know   3
         'I know him'
     b. ***usa**-usa*   'prayers'   ***usa**-usa ni-* 'say prayers'
     c. ***yaga**-yaga.re-*   'shake and shake (earthquake)'

Table 3: *Meanings of reduplication*

	Nouns	Adjectives	Verbs	Manner adverbs
Plurality	+	+	+	+
Intensity		+		+
Distributive	+	+		

Each of these are exemplified below:

(7) a.   *usa-usa*   *buni-buni*   *iri-iri*   *besa-besa*
          'prayers'   'many good (ones)' 'eat and eat'   'more and more'
     b.   *kuni-kuni*   *kimo-kimo*
                            'very tiny'   'very carefully'
     c.   *ida-ida*   *yokoi-yokoi*
          'different ways'   'each one'

2 Adjectives

The adjective class is a large open class, with around 200 members; they can function as copula complement (8) and modify a noun in an NP (e.g. *rema **buni*** 'good woman'). They normally follow the noun they modify, and can themselves be modified (cf. §2.3 Intensification, p. 20):

(8) *Mina*   *bi*   [*buni*   ***tora***   *gade*]NP.
     this   TOP   good   big   very
     'This is very very good.'

Over a dozen are borrowed from English and Hiri Motu[6], mainly colours and numbers. Adjectives share many syntactic properties with nouns, as can be seen in Table 4. They do also share some limited properties with verbs (and manner adverbs); modifier to a verb is due to adjectives' ability to modify a complex verb and verbs' ability to form serial verbs, whilst modifier to another adjective is due to verbs' ability to form both complex verbs and serial verb constructions as seen in (9), (10) and (11).

---

[5] From Hiri Motu *diba* 'to know, understand; knowledge' (Dutton and Voorhoeve 1974:190).

[6] The lingua franca in southern region of PNG.

Table 4: *Syntactic properties of adjectives, verbs and nouns*

Syntactic function	Nouns	Adjectives	Verbs	Manner adverbs
Modifier to a verb		+	+	+
Modifier to another adjective		+	+	
Copula complement	+	+		
Head of NP and argument	+	+		
Modifier in NP	+	+		
Part of a complex verb: complement	+	+		
Head of predicate		+		

Adjective modifying a complex verb:

(9) *Na   bi   beika   nai   moke=na=ri   ame-do   sina*
    1S   TOP   what   1S.POSS   think=NOM=at   stay-3S.PRS   word

   *ya=sa   [**gira**   anarauda   re-gida*]ₐₚ.
    2=ACCM   hard   share   do-1S.FUT
    'I am going to firmly (lit. 'hard') share with you what I'm (lit. 'is in my')
    thinking.' [Charles Ero, 24 August 2012]

Verb serialisation (verb as modifier to a VP):

(10) *Mina   biyo   bi   moi-yo   sana=ri   [**moi**   dairi   ae*]ᵥₚ.
     this   cup   TOP   get-2S.PST   place=at   get   return   put
     'Put this cup back (lit. 'get/take return put') in the place where you got it.'

Verbal compound using an adjective:

(11) *Ina   bi   ada   re-si   ina   vene   [**ni**-gira   re-yo*]ᵥₚ.
     3   TOP   happiness   do-SQSS   3   people   say-hard   do-3S.PST
     'He was happy and encouraged (lit. 'say hard did') them.'

Further, according to Aikhenvald (2015:85)'s word classes and functional slots checklist the following can be observed for Doromu-Koki:

Table 5: *Word classes and functional slots checklist*

Functional slot	Verb	Noun	Adjective	Manner adverb
A. Within a clause				
• Argument		+		
• Copula complement		+	+	
• Head of intransitive predicate	+			
• Head of transitive predicate	+			
B. Within an NP				
• Head of NP		+	+	
• Possessee in NP		+	+	
• Possessor in NP		+		
• Modifier in NP		+	+	
C. Within a VP				
• Modifier of a verb	+		+	+

Again, we see that adjectives have the most in common with nouns. Therefore, in accordance with Doromu-Koki adjectives' grammatical properties, adjectives can be classified as type (b) under Dixon's (2010:67) parameters:

(b) | NOUN | | ADJECTIVE | | VERB |

That is, while adjectives are a separate class, they do have similar grammatical properties to nouns (ibid), in opposition to verbs, where above in Table 5 they only have one item in common (i.e. modifier of a verb).

While in Table 4 adjectives share the first two properties (modifier to a verb and to another adjective) with verbs, this is based on verb serialisation and verbal compounding, not on simple verbs. However, there is yet another feature which adjectives and verbs share: they both allow for the causative prefix, which can occur on postpositions as well (14). Again, this is part of the language's robust ability to generate verbal constructions by means of complex verbs.

Causative on adjective complement:

(12) *Agiya*   *bafu*   [*e-**vava***   *re-yaka*]$_{VP}$.
      yesterday   leftover   CAUS-hot   do-1S.PST
      'I reheated (lit. 'caused to be hot') yesterday's leftover food.'

Causative on a verb:

(13) *Ma*   *mirona* *amiye*   *yava*   *ina*   *fafau*   *yare-si*   *e-**muye**-yo*
      and   that   person   house   3   on.top.of   fall-SQSS   CAUS-die-3S.PST
      bi   *gokai?*
      TOP   how
      'And what about those people on whom a building fell and killed (lit. 'caused to die') them?'

Causative on a postposition complement:

(14) *Mina*   *bi*   *ini*   *vima*   *yaku*   [*e-**negau***   *re-yo*]$_{VP}$.
      this   TOP   3.POSS   spirit   DM   CAUS-near   do-3S.PST
      'This was revealed (lit. 'caused to be/draw near') by his spirit.'

Adjectives can function as head of an NP, as seen with *tora-tora* 'very big' (15), and head of a predicate, as seen with *keika* 'little' (16). [Note also that *tora-tora* is possessee.]

(15) [[*Nai*   *amiye*]$_{NP}$ *di*   ***tora-tora***]$_{NP}$ *di*   *nemoko=ri*   *ya*   *yaku*
      1S.POSS   person   GEN   big-RED   GEN   eye=at   2   DM
      voi   *re-yaine.*
      buy   do-3S.JUS
      'You ought to buy it in the presence (lit. 'in the eyes [sight] of') of my people's elders (lit. 'big ones').'

(16) [*Na keika*]_{VP}=*ri gutuna mina kana vegu   ago   tau vakoi*
     1S   little=at   from   this   like   practice word all   together
    moi   gira   rei   bai-da.
    get   hard   do   come-1.PRS
    'Since I was young (lit. 'at when I little') I have kept (lit. 'firmly held onto') all
    these practices' words.'

Otherwise, a noun phrase can consist of a noun followed by up to one or more adjectives:

NP →   (DEM)   (N) N (ADJP) (NUM)
    (PRO_{POSS})
                  (Bradshaw 2012:59)

The "adjective phrase" can also encompass intensification as seen in (64), (65), (66) and (67) below (p. 21).

Like nouns, reduplication also occurs with adjectives on a limited basis, signalling plurality (17), intensity (18) and/or a distributive meaning (19) according to the semantic properties of the context.

(17) …[*sina   buni-buni*]_{NP}   *ni-yo   dada*
     word   good-RED   say-3S.PST   because.of
    '…because of the many good words/much good talk he was saying'

(18) …*idu ago   gira*=*ri* [*bura   keika kuni-kuni yokoi*]_{NP} *de*
    but   word hard=at   writing little tiny-RED   one   NEG
    roro.ni-gedi
    disappear-3P.FUT
    '…but in this word each of the very tiny written parts, not one will disappear'

Headless NP:

(19) *bi*   [*kamadaiforo   bouna-bouna*]_{NP}   *nufa*
    TOP   colourful   different-RED   with
    'it was very colourful' (lit. 'it had differing/varying colourfulness')

Adjectives perform the two major semantic tasks of further specifying a referent (as we have seen above) and stating a property. In Doromu-Koki, the latter is realised as a head of predicate by means of a copula complement, using the topic marker *bi*:

(20) *Mida bi   tumu.*
    child   TOP   short
    'The child is short.'

As Doromu-Koki has a large open class of adjectives, we would expect to find that they encompass a wide range of semantic types, which indeed is the case. Adjectives can be found in each of the three sets (Dixon 2010:73-4), with the majority in Set B and the

least in Set A. All the categories of each set have some representation, except Difficulty, for which terms of this type are expressed by polysemous words in other categories (Table 6) and Speed,[7] in which case there are instead manner adverbs used (Table 7).

Table 6: *Polysemous adjectives covering the 'Difficulty' semantic type (From Bradshaw, In progress)*

Adjective	Primary gloss	Alternate glosses
amuta	'peaceful'	'smooth, soft, nice, cool, **simple**, comfortable, kind, gentle, calm'
buni	'good'	'well, nice, beautiful, **easy**, reasonable, sensible, rational, logical, worthy'
gira	'hard'	'firm, strong, stiff, solid, thick, **tough** (rough), **difficult**'
toe	'heavy'	'weighty, suffering, judged, problematic, loaded, **difficult**'

Table 7: *Manner adverbs covering the 'Speed' semantic type (From Bradshaw, In progress)*

Manner adverb	Gloss(es)
evade	'**quickly**, hurriedly'
kimo	'carefully, **slowly**, quietly, easily, cautiously'
kiya	'**slowly**, carefully, cautiously'

The category "Physical properties" has by far the greatest membership.[8] Table 8 includes some representation for the sets found in the language:[9]

Table 8: *Adjective semantic types*

Set	Type	Example	Gloss(es)
A	1. Dimension	*doba*	'long, tall'
		rome	'tall and slim'
		romoga	'tall and slim'
		yovirika	'long and smooth'
		kuni	'tiny'
		tumu	'short, little'
		keika	'little'
		giba	'thin'
		kakaita	'narrow, tight, small'
		kibobo	'narrow, tiny'
		tora	'big'
		feara	'flat'
		feya	'flat'
		rafo	'flat, wide'

[7] Bolded glosses cover examples for Difficulty and Speed type.

[8] And it actually has a large subclass of corporeal properties, such as *aita* 'light weight', *faisara* 'naked' and *titi* 'slanted-eyed'. *Faisara* is a frozen compound of *fai+sara* 'trousers (i.e. clothing)+naked' (cf. Bradshaw In progress).

[9] **Note**: When multiple glosses are given, the first is considered primary.

			moka	'deep'
	2.	Age	*autaetae*	'immature, childish'
			orova	'immature, green, unripe'
			kiku	'immature (betel nut)'
			matamata	'young'
			ruana	'young'
			ruaka	'new, clean, fresh, young'
			bomudo	'old, deteriorating'
			buruka	'elderly, old'
			kokiya	'old'
			kori	'old (things)'
			sabedo	'old, worn out'
			ugava	'old (person)'
			marada	'wild, uncultivated'
	3.	Value	*buni*	'good, well, nice'
			yariyari	'good'
			guta	'nice, good'
			dikadika	'very good'
			burefe	'best, very/really good'
			bere	'nice and straight, quiet'
			no	'bad, evil, wicked'
			irava	'poor, destitute, worthless'
			akeke	'special, sacred, holy, taboo'
			kikifa	'honoured, special, holy, taboo'
	4.	Colour	*gabu*	'black, blue, brown'
			braun	'brown'
			blu	'blue'
			vegu	'green, living'
			bora	'yellow, orange'
			kaka	'red'
			feyo	'white'
			nega	'clear, transparent'
			kamadaiforo	'colourful'
B	5.	Physical property	*agubo*	'dull, unclear, dark, gloomy, foreboding'
			isirema	'slippery, oily'
			kevo	'bent, crooked, paralysed'
			mekuna	'round'
			ravegeragera	'dangerous, threatening'
			rigirigi	'furry, hairy'
	6.	Human propensity	*biyo*	'sad, sorrowful, despondent'
			duri	'persistent, unrelenting, seductive'
			murono	'lazy'
			negiyagiya	'proud, arrogant, haughty, insolent'
			vatoru	'stupid'
			vitu	'alone, only, orphaned'
			yora	'understanding, listening, obedient'
C	9.	Similarity	*berou*	'other'
			ere	'other (person)'
			idana	'other, different'

	nokoi	'other, another, various'
	kana	'like, as, similar, about, approximate'
10. Qualification	*egeregere*	'okay, well, alright, enough'
	girau	'straight, right, indeed'
	rama	'right, true, indeed, correct, real, sure'
	kotana	'expert, full, whole, complete'
	kurakura	'a lot, very good/well'
	yaudana	'separate'
	girigiri	'extreme'
11. Quantification	*aida*	'some'
	be	'some (sg)'
	bedakai	'some (pl)'
	bede	'any'
	bouna	'another, different'
	neinei	'each (one)'
	vanu	'every'
	tau	'many, plenty, a lot, all'
	kava	'not one/all'
	roada	'both'
	uba	'both'
	maka	'only, just, right'
	ibonai	'all'
	inauda	'all'
	uda	'all'
	buafu	'whole, entire'
	buaru	'whole, entire'
	idounai	'whole, all'
	noibanu	'whole, a lot, all, entire, many'
12. Position	*negau*	'near, close (by)'
	odoro	'above, over, on, on top of'
	maike	'far (away), long way'
	dabigara	'lower, bordering'
	enana	'left'
	viti	'high'
13. Cardinal numbers	*yokoi*	'one'
	remanu	'two'
	regodenu	'three'
	vana raro	'four'
	tuero	'twelve'

Following are selected examples of the adjectives from each of the various categories:
A1. Dimension: Some adjectives co-occur with others, such as *rome* 'tall and slim' in (21); it always only co-occurs with *doba* 'long', yet *doba* also occurs on its own (e.g. *ida doba* 'long way/road'). There are other cases of adjectives co-occurring [cf. (50) below (p. 18)]; and e.g. *buni vayavaya* 'very good' – *vayavaya* 'very' always only occurs after *buni* 'good'), however most freely occur on their own.

(21) *Riru   yabo   bi   [**doba   rome**]*_{NP}.
      tree.sp tree   TOP   long   tall.and.slim
      'The *riru* tree is tall and slim.'

A2. Age: There are differing terms with a couple of semantic sets; *ugava* or *kokiya* 'old (person)', **bomudo** 'old, deteriorating ', *kori* or *sabedo* 'old, worn out'.

(22) [*Nai   varuka   **bomudo**]*_{NP} *bi   ori   kamu   re.*
       1S.POSS   clothing very.old   TOP   burn   completely do
      'Burn up my very old clothes.'

A3. Value: An interesting semantic set is *akeke* 'special, sacred, holy, taboo, forbidden, requiring honour and pleasing behaviours to be shown, otherwise danger can result', and *kikifa* 'honoured, special, holy, taboo, separated, respected, reverenced, hallowed, fasted from, avoided.' *Buni* is the usual word used for 'good', however *yariyari* 'good' is also available, with as of yet, no apparent difference in meaning.

(23) *Nai   mina sosogi   bi   **yariyari**.*
      1S.POSS   this   black.palm.spear TOP   good
      'This here spear of mine is good.'

A4. Colour: Doromu-Koki colour terms have a wider range than those in English. Original terms include *bora* 'yellow, orange' (24), *feo* 'white', *gabu* 'black, blue, brown', *kaka* 'red, purple, ripe' and the modifying noun *vegu* 'life' meaning 'green, living' (25). Terms borrowed from English include *blu* 'blue' and *braun* 'brown', allowing for further distinction.

(24) *Ari   buni   ni-go,   oma   bi   [**bora   ni-do**]*_{VP}
      day   good   become-3S.FUT   sky   TOP   orange become-3S.PRS
      dada.
      because
      'It will be a good day, because the sky is orange.'

(25) *Miya   de-yo   dada   gagani [**vegu   ni-yo**]*_{VP}.
      rain   come.down-3S.PST so   place   life   become-3S.PST
      'The rain came down so the place became green/living.'

The word *kamaidaforo* 'colourful, attractive, glittery, sparkling' is used pre-nominally, so that conceivably it forms a headless NP in a noun compound meaning 'colourfulness place'.

(26) *Odoro   Amiye   di   rautu   bi   [**kamadaiforo**   gagani]*_{NP}.
      above   person   GEN   village TOP   colourfulness   place
      'The Lord (lit. 'Above person')'s place (i.e. 'heaven') is a colourful (lit. 'colourfulness') place.'

B5. Physical property: This is the most populated category, as previously mentioned.

(27) *una   tau   vanu   bi*   [***kino***   *ni-yafa*]_{VP}   *mini*
      1P   all   every   TOP   dirty   become-1P.PST   here
      'all/every on of us here have become dirty/defiled'

Corporeal properties–A subgroup of physical property: Note the juxtaposition of NPs.

(28) *Kikima*   *ya*   [*yabo*   ***abiye***]_{NP}   *teteka=ri*
      grey.headed.goshawk   DM   tree   dead   branch=at
      raka.ni-do.
      call-3S.PST
      'The Grey Headed Goshawk is calling out on the dead/dry tree
      branch.'

B6. Human propensity: Note that *usi* 'follow' is always followed by a motion verb.

(29) *Buko*   *kana*   [*ada*   ***duri-duri***]_{NP}   *usi*   *ne.*
      fish.sp   like   head   persistent-RED   follow   go.down
      'Keep on (lit. 'go on') persisting (lit. 'continuing [with] very persistent head')
      like the *buko* fish.'

C9. Similarity: Many are quite prolific, such as *kana* 'like, as, similar to, about, approximately' (e.g. …*di sisika **kana*** [GEN smell like] 'like its smell').

(30) *Idu*   [*yokoi*   ***ere***]_{NP}   *yaku*   *ema-gasa*   *ni-yo…*
      but   one   other (person)   DM   rebuke-SIMSS   say-3S.PST
      'But the other one rebuked him saying...'

C10. Qualification:

(31) *Beika*   *bura*   *re-yadi*   *mina*   [***rama***   *ni-yo*]_{VP}.
      what   written   do-3P.PST   this   true   become-3S.PST
      'What was written has been fulfilled (lit. 'become true').'

C11. Quantification: *Be* 'some (sg)' and *bedakai* 'some (pl)' are the only adjectives to distinguish between singular and plural, in the sense that *be* is for uncountable things (e.g. *suga **be** na mafo* 'give me some sugar').

(32) *Uni*   *uka*   *ya*   *vene*   *rofu*   *bi*   *ya*   [*mai*   ***buaru***
      1P.POSS   stomach   2   people   to   TOP   DM   give   whole
      re-gam-afa]_{VP}.
      do-HAB-1P.PST
      'We have opened our hearts wide (lit. 'were giving our stomachs wholly') to
      you.'

C12. Position: *Enana* only means 'left', yet *rama* 'has many meanings: 'right, true [cf. (31)], indeed, correct, real, genuine, sure, exact'. A semantic pair is *maike* 'far, long way' to indicate position, versus *gaima* 'far away, separate from, apart' to indicate movement.

(33) *Ina*   *bi*   *oure-si*   *kono*   *di*   [*soku*   **dabigara**]$_{NP}$ *rofu*
      3   TOP   be.first-SQSS   ground   GEN   valley   lower   to
      ka   *ne-yo.*
      also   go.down-3S.PST
      'He also went down first into the ground's lower valleys.'

C13. Cardinal numbers: For Doromu-Koki, Dutton (1970:924) proposed 1, 2, 2+1, 5-1, 5 (= hand), and later regarding Trans New Guinea Southeast Papuan languages, Dutton (1975:623) says: 'Counting systems are based on two or three (e.g. 1, 2, 2+1, 2+2, 1 hand, or 1, 2, 3, 2+2, 1 hand).'

Doromu-Koki appears more like the latter, having a basic three set of numbers, *yokoi* 'one', *remanu* 'two', and *regode* 'three', although four is not 2+2, but rather a variation on five (= hand), and so a bit more like 5-1: *vana raro* (lit. 'hand line') 'four', sans thumb. Indeed the number 'five' is also built from the word *vana* 'hand'; *vana berou autu* (lit. hand empty side, i.e., 'palm') 'five'. The Doromu-Koki numbers 'one', 'two' and 'three' are regularly used. Doromu-Koki four and five are sometimes used, while beyond that the English equivalents are commonly used, except when someone is speaking in front of a non-Doromu-Koki speaker, and does not want them to be able to understand. As the numbers modify NPs in the same way as other adjectives, they are considered as such. The English loans are used in the same manner, after the noun (e.g. *amiye* **ten** 'ten people'), and can be regularly used for any numbers, even one, two and three. Doromu-Koki numbers are listed in Table 9, with one of them shown in (34). Note that the numbers six through nine are a bit cumbersome, so seldom used, except generally for the reason previously mentioned.

Table 9: *Numbers*

Number	Gloss	Literal meaning
yokoi	'one'	
remanu	'two'	
regode	'three'	
vana raro	'four'	'hand line'
vana berou autu	'five'	'hand side empty'
vana berou autu yokoi maka	'six'	'hand side empty one only', i.e. 5+1
vana berou autu remanu	'seven'	'hand side empty two', i.e. 5+2
vana berou autu regode	'eight'	'hand side empty three', i.e. 5+3
vana berou autu vana raro	'nine'	'hand side empty hand line', i.e. 5+4
vana ufo	'ten'	'hand clap (two hands together)', i.e. 5x2

(34) [*Rema   remanu*]_{NP} *di   roka   bi   Inu   Mamaru   bona*
        woman   two   GEN   name   TOP   (name)   (name)   and
      Dau   Mamaru.
      (name)   (name)
      'The two women's names were Inu Mamaru and Dau Mamaru.'
      [Rapheal Totome, *Keni Raku*, 12 September 2001]

The number *yokoi* 'one' also serves as an indefinite article.

(35) [*Amiye   yokoi*]_{NP} *roka   Tau   Yagabo   yaku   ini   rautu*
        person   one   name   (name)   (name)   DM   3.POSS   village
      vene   omar-o   ini   muro   vari-yaganedi.
      people   invite-3S.PST   3.POSS   garden   plant-3P.JUS
      'A man named Tau Yagabo invited his village people to plant his garden.'
      [Joe Warika, *Oga* 'Planting', 1999]

Reduplication gives a distributive meaning, and here is used as head of an NP.

(36) *Kamini   [yokoi-yokoi*]_{NP} *dadi-ga   rautu   urana   di-yadi.*
      enough   one-RED   get.up-SIMSS   village   toward   go-3P.PST
      'So one by one as they got up they went back toward the village.'
      [Joe Warika, *Oga* 'Planting', 1999]

When used with *maka* 'only' it means 'only/just one, alone'.

(37) *To   [ini   no   yokoi   maka*]_{NP} *bi   oruma   bo-yo*
      but   3S.POSS   bad   one   only   TOP   grass   go.up-3S.PST
      vo.ni-do.
      happen-3S.PRS
      'But the only one bad thing is that weeds come up.'

Note that *maka* 'only' can be used after any NP, including ones with postpositional clitics.

(38) *Kaikai   yaku   nai   vana   raroko=ri   maka   aki.re-yo.*
      scorpion   DM   1S.POSS   hand   finger=at   just   bite-3S.PST
      'The scorpion bit me right/just on my fingers.'

There are a couple of idiomatic expressions iconically representing numbers, such that an individual with limited knowledge of the language would not readily understand; *koru ida* 'six' (lit. 'water way/course') and *viro vara* 'seven' (lit. 'axe handle'). They are mainly used for playing cards, and also include *auna di yuka* 'club' (lit. 'dog's foot'), describing a dog's paw print.

Adjectives in every category available have been observed functioning as complements (about 44%) in complex verbs. Below are representative complex verbs using adjectives from nine of the categories. (Complements can also be nouns and postpositions.)

A1. Dimension:

(39) *oki-si*   *ame-yo*   [***doba***   *ni-yo*]_{VP}
      arrive-SQSS   stay-3S.PST   long   become-3S.PST
      'he arrived and stayed on longer (lit. 'it became long')'

A2. Age: (Note: primary gloss for *ruaka* is 'new'.) Here also there is verb serialisation.

(40) *Ya ura   rei-sa vonisi, ya yaku na* [*moi* ***ruaka*** *ri-giya*]_{VP}.
      2   want do-2S if   2 DM 1S   get   clean   make-2S.FUT
      'If you want, you will cleanse/make new/renew (lit. 'make clean') me.'

A3. Value:

(41) *Ago   rama* dudu   *ina   vene*   [*moi*   ***akeke***   *ri*]_{VP}.
      word   true   INST   3   people   get   holy   make
      'Sanctify (lit. 'make holy') them by the truth (lit. 'true/right word').'

A4. Colour:

(42) *Muye-yo-ri*   *bi*   ini   *roaita*   [***bora***   *ni-yo*]_{VP}.
      die-3S.PST-SIMDS   TOP   3.POSS   body   yellow   become-3S.PST
      'When he died his body was (lit. 'became') yellowed.'

B5. Physical property:

(43) *Rovaita*   [***toe***   re-yo]_{VP},   *adina   ago   no   ni-yo*.
      body   heavy   do-3S.PST   for   word   bad   say-3S.PST
      'He was ashamed (lit. 'his body was weighed down'), because he spoke badly.'

C9. Similarity:

(44) *Yi   moke-na   moi ruaka ri-na   dudu yi   vegu*
      2.POSS   think-NOM   get   new   make-NOM   INST 2.POSS   practice
      [*moi*   ***idana***   *ri-fa*]_{VP}.
       get   different   make-2P.IMP
      'Change your practices/ways by the renewing (lit. 'make different') of your
      thinking/mind.'

C10. Qualification:

(45) [***Egeregere***[10]   *ni-yo*]_{VP}.
       okay   become-3S.PST
       'He felt fine (lit. 'became okay').'

C12. Position:

(46) *Idu kaere iniye* [*moi* ***odoro***   *ri-go*]_{VP}...
      but who   self   get   above   make-3S.PST
      'But whoever exalts (lit. 'make above') himself…'

---

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

C13. Cardinal numbers:

(47) *moi   gogo   ri-si*   [*moi* [**yokoi** *maka*]_{NP} *ri-yo*]_{VP}
      get   together make-SQSS   get   one   only   make-3S.PST
      'he has joined them together making them one'

2.1 Polar adjectives

A small set of adjectives have antonym pairs. (Note: Headings are somewhat arbitrary.)

Table 10: *Polar adjectives*

Positive/lesser	Gloss(es)	Negative/greater	Gloss(es)
ada	'happy'	*sibogi*	'unhappy'
aita	'light weight'	*toe*	'heavy'
amuta	'peaceful, smooth'	*kako*	'rough'
buni	'good'	*no*	'bad'
dabigara	'lower, bordering'	*odoro*	'above, over'
gabu	'black'	*feyo*	'white'
gira	'hard, firm, strong, stiff'	*yau*	'soft, weak, faint'
itu	'cold'	*vava*	'hot'
kakaita	'narrow, tight, small'	*rafo*	'flat, wide'
keika	'little, small'	*tora*	'big'
kiku	'immature'	*kiri*	'dry/mature'
mami	'tasty, delicious, savory'	*ru*	'bitter'
negau	'near, close (by)'	*maike*	'far (away)'
roko	'dry, arid'	*dou*	'wet, damp'
rorobo	'straight, just'	*keov*	'bent, crooked'
ruaka	'new, clean, fresh, young'	*ugava*	'old'
ruana	'young'	*kori*	'old (things)'
tumu	'short'	*doba*	'long, tall'

2.2 Adjective subclasses

There are two subclasses of adjectives: pre-nominal and those that can also function in other word classes.

2.2.1 Pre-nominal

Approximately 11% of the adjectives precede the noun they are modifying; nothing appears to intervene, including *iniye* 'very', they cannot be used as afterthought, nor have they been observed in questions. Often they refer to types of people, or are borrowed colour terms or some physical properties. The typical NP in (48) is interpreted as a compound noun (e.g. 'old one-person'); but in (49) the pre-nominal use could instead be for contrastive emphasis.

(48) *Ina   bi   [**buruka**[11] amiye]*_{NP}.
      3   TOP   elderly   person
      'He is an elderly person.'

(49) [***Braun*** *buka*]_{NP} *na   ma.*
       brown   book   1S   give
      'Give me the **brown** book.'

Both *tuma* 'wild' and *gadeva* 'fierce, ferocious, aggressive, brutal, savage' can occur together before the nouns, in similar fashion to how others occur after. They can both be used separately as in *tuma amiye* 'enemy' (lit. 'wild person') and *gadeva auna* 'fierce dog'. Note also the compound noun *dona auna* (pig dog), a generic term for animals.

(50) *Ina   vene   bi   [**tuma gadeva**   dona   auna]*_{NP} *kana.*
      3   people TOP   wild   fierce   pig   dog   like
      'They are like wild fierce animals (lit. 'pig-dog').'

(51) *Dibura   bi   [**refei** mida]*_{NP}.
      (name) TOP   lazy   child
      'Dibura is a lazy child.'

This last adjective can also occur after the noun; position may be a matter of topicality, such that when it is placed before the noun it is given higher prominence.

(52) *Ya   bi   [mida **refei**]*_{NP} *baeko   ya   vei-da.*
      2   TOP   child lazy   perhaps DM   see-1S.PRS
      'I see that perhaps you are a lazy child.'

Another interesting pre-nominal adjective is *viaigana* 'last born'. All of these type have quite limited occurrences, this being one of only two observed to date.

(53) *Ina   bi   nai   oure   di   [**viaigana**   mida]*_{NP}.
      3   TOP   1S.POSS older   GEN   last.born   child
      'He is my older brother's last born child.'

The noun *vene* 'people' formulates compound idiomatic expressions with nouns and adjectives, as well as with the third person pronoun, to distinguish between singular and plural. The same does not occur with the singular *amiye* 'person'.

(54) a.   *ina vene*   'they'
      b.   *rema vene*   'women'
      c.   *rua vene*   'young people'
      d.   *rumana vene*   'men'
      e.   *tora vene*   'elders'   *amiye tora* 'big person/elder'

---

[11] From Hiri Motu *buruka* '(to be) old' Dutton and Voorhoeve 1974:189.

2.2.2 Multiclass functioning: "Double-duty"

A few adjectives can function as nouns, adjectival modifiers or even manner adverbs modifying verbs. These include *aita* 'light (weight)', *berou* 'other', *buni* 'good', *gira* 'hard', *isivaga* 'powerful', *keika* 'little', *no* 'bad', *toe* 'heavy' and *tora* 'big', and are exemplified below. As proposed earlier, many are functioning as headless NPs.

Adjectives do not modify pronouns, and only host postpositional enclitics as the head of an NP, as here with *aita* 'light (weight)', which is also serving as the head of a predicate:

(55) *Yokaru   na   [**aita**]*_{NP}*=ri   nai   baba   bona   na   sufa-sufa*
      one.day   1S   light=at   1S.POSS   father   and   1S   bush-RED
      di-yafa.
      go-1P.PST
      'One day when I was young (lit. 'at light weight') my father and I went to the deep bush.' [Joseph Toma, *Di bone ka reyaka* 'I was also being lazy', 22 October 2001]

Again, NPs are joined into a possessive construction with the genitive postposition *di*, giving further examples of adjectives as headless NPs.

(56) *Re-si   mina   gagani   di   [**berou-berou**]*_{NP}*=ri   raga*
      do-SQSS   this   place   GEN   other-RED=from   run
      re-gam-adi.
      do-HAB-3P.PST
      'And they were running from side to side (lit. 'from other-another') in this place.'

(57) *ye   amiye   di   [**isivaga**]*_{NP}   *bi   tora*
      so   person   GEN   powerful   TOP   big
      'so people's strength (lit. 'powerfulness') is great'

Keika 'little', while modifying the idiom *koru vava* 'tea', has a meaning here of 'small quantity':

(58) *mina   ye   [[koru   vava]*_{NP}   ***keika**]*_{NP}   *moi-gasa   mina   di   moimai*
      this   so   water   hot   little   get-SIMSS   this   GEN   work
      raga   re-go
      run   do-3S.FUT
      'so that a little tea (lit. 'hot water') will be gotten/received and from this the work will continue' [Charles Ero, 24 August 2012]

No 'bad' is being used to modify the action in a serial verb construction:

(59) *ida=u   de-gasa   bi   [abou   **no**   re-yaka]*_{VP}
      road=by   come-SIMSS   TOP   fall   bad   do-1S.PST
      'while coming on the road I had a bad fall (lit. 'fell badly')'
      [*Aiyo, abou no reyaka* 'Oh, I had a bad fall', 2009]

Toe 'heavy' is amongst a list of nouns:

(60) *Uni   rautu   esika-esika,   [**toe**]*_{NP}*, mukuna=ri   ame-sifa   dada…*
      1P.POSS   village   pain-RED   heavy   darkness=at   stay-1P.PRS   since
      'Since we are living in our village in suffering, heaviness (and) darkness…'
      [Raphael Tuga, 27 April 2010]

Examples (61) and (62) show *tora* 'big' as headless NP, while (63) shows it as a nominal modifier:

(61) *Dubu   ini   [**tora** ere]*_{NP} *di   mosara   muro   bi*
      brother   3.POSS   big   other   GEN   sweet.potato garden   TOP
      rama   ni   tau.tau   re-yo   dada
      true   become   all-RED   do-3S.PST   because
      'because the brother's other big brother (lit. 'his other big one')'s sweet
      potato garden greatly produced' [Rapheal Totome, *Uba dubuisa* 'Two brothers together', 1999]

(62) *…dada Sei   rofu   [buni   **tora**   gade]*_{NP} *mai-da   ma   ya   rofu*
        so   God   to   good   big   very   give-1S.PRS   and   2   to
      ka.
      also
      '…so I thank (lit. 'give very big goodness') God and also you.' [Joseph Toma, 13 October
      2018]

(63) *Grace   di   ini   yuka   bi   [[esika   **tora**]*_{NP} *re-gam-o]*_{VP}
      (name)   GEN   3.POSS   leg   TOP   pain   big   do-HAB-3S.PST
      'Grace's leg was in very great (lit. 'was doing big') pain'
      [*Grace di ini yuka* 'Grace's leg', 5 May 2010]

2.3 Intensification

As seen earlier in (18) [p. 8], adjectival intensification can be indicated by reduplication, or by use of various terms, listed here in Table 11.

Table 11: *Intensification*

Term	Gloss(es)	Uses
gade	'very'	Only occurs after *tora* 'big', with quantitative meaning 'great' as in (8) [p. 5], rather than the usual dimension meaning 'big', or after *tau* 'many'.
iniye	'very'	The most common form of intensification, homophonous with *iniye* 'self'; for non-quantitative meanings.
tau	'many, plenty, a lot, all'	Quantitative intensification, countable items.
tora	'great, much'	Quantitative intensification as in (8), uncountable.
vanu	'every'	Occurs after *tau* 'many', further quantitative intensification.
vayavaya	'very'	Only occurs after *buni* 'good'.

Each of these is exemplified below, unless referred to in a previous example in the table:

(64) *Budoka   sau   u-si   [esiroka   no   **iniye**]*_{NP}   *ni-yaka.*
      dust   odour   inhale-SQSS   cough   bad   very   say-1S.PST
      'I inhaled the dust and coughed very badly (lit. 'said very bad cough).'

(65) *Ye   [amiye   **tau   gade**]*_{NP}   *egogo.re-yadi.*
      so   people   many   very   gather-3P.PST
      'So very many people gathered together.'

(66) *Muro   re-si   vei-da   bi   [buni   **vayavaya**]*_{NP}*.
      garden   do-SQSS   see-1S.PRS   TOP   good   very
      'I work the garden and then I see that it is very good.'

(67) *Mina   sina   ga   ni-yainedi   vo.ni-yaka,   idu   ne-si*
      this   word   PRHB   say-3S.JUS   tell.-1S.PST but   go.down-SQSS
      *[amiye   tau   **vanu**]*_{NP}   *ni-yo.*
       person   all   every   say-3S.PST
      'I told him not to tell this news, but he went down telling it to everyone.'

These can undergo reduplication as well (e.g. *amiye **tora-tora*** 'a crowd' or *amiye tora **gade**-**gade*** 'a large crowd' [cf. Bradshaw 2012:62, 64]).

2.4 Comparison

In order to compare items in Doromu-Koki, the strategy used is to state the positive characteristic for one, and the negative characteristic for the other. This only occurs with adjectives.

(68) *Mina   bani   bi   tora   mo   mirona   bani   bi   keika.*
      this   yam   TOP   big   at.once   that   yam   TOP   little
      'This yam is big and that yam is little.' (i.e. 'This yam is bigger than that yam.')

(69) *Ini   meraini   bi   tora   mo   ina   bi   keika.*
      3.POSS   cousin   TOP   big   at.once   3   TOP   little
      'His cousin is big and he is little.' (i.e. 'He is smaller than his cousin.')

Another method of indicating comparison is through the use of *ebu.re-* 'surpass, beat, win over, conquer, overcome, exceed'. Also note that *doba* 'long' is used in a headless NP meaning 'length/height'.

(70) *[Nai   doba]*_{NP}   *bi   [yi   doba]*_{NP}   ***ebu.re**-yo.*
       1S.POSS   long   TOP   2.POSS   long   beat-3S.PST
      'My height surpassed your height.' (i.e. 'I'm taller than you.')

Nouns and nominalised verbs can be used in these constructions as well.

(71) [*Vegu   ame-na*]ₙₚ *bi*   *iruku* **ebu.re**-*do.*
     life   stay-NOM   TOP   food   surpass-3S.PRS
     'Living life surpasses food.'

Superlative is indicated by using *maka* 'only'. Note also, that it is used with a subject/object pronoun, the only adjective to do so.

(72) *Sikuru   sana=ri   bi*   [*ina* **maka**] *bi*   *ni-do*   *doba.*
     school   place=at TOP   3   only   TOP   become-3S.PRS long
     'At school he alone is tall.' (i.e. 'He is the tallest in the school.')

Doromu-Koki adjectives, although similar to nouns, and in some situations behaving as nouns, have their own unique properties, and so are a distinct word class in the language. As also common to other classes, adjectives can also be used in complex verbs and as verbal modifiers.

Abbreviations

1	first person	P	plural
2	second person	pl	plural
3	third person	PNG	Papua New Guinea
A	transitive subject	POSS	possessive
ACCM	accompaniment	PRHB	prohibitive
ADJP	adjective phrase	PRO	pronoun
DEM	demonstrative	PRS	present
DM	development marker	PST	past
FUT	future	RED	reduplication
GEN	genitive	S	intransitive subject, singular
HAB	habitual	sg	singular
INST	instrument	SIL	Summer Institute of Linguistics
JUS	jussive	SIM	simultaneous
lit	literal	sp	species
n	noun	SQ	sequential
NEG	negative	SS	same subject
NOM	nominaliser	TOP	topic marker
NP	noun phrase	V	verb
NUM	cardinal number	VP	verb phrase
O	transitive object		

References

Aikhenvald, Alexandra Y. 2015. *The art of grammar*. New York: Oxford University Press.

Bradshaw, Robert L. 2008. *Doromu-Koki dialect survey report*. Ukarumpa: SIL-PNG. MS.
(https://www.sil.org/system/files/reapdata/10/65/64/10656432723823367810156 8221433370129957/Doromu_Koki_Dialect_Survey_Report.pdf).

2012. Doromu-Koki grammar sketch in *Data Papers on Papua New Guinea Languages*, Vol. 58. Ukarumpa: SIL-PNG.
(https://www.sil.org/system/files/reapdata/67/55/08/67550853325928258613 845198338232626368/DPv58_final_1_Nov_2012.pdf).

In progress. *Dictionary of the Doromu-Koki language*. Ukarumpa: SIL-PNG. MS.

Dixon, R M W. 2010. *Basic linguistic theory. Vol 2: Grammatical topics*. New York: Oxford University Press.

Dutton, T E. 1970. Languages of the Rigo area of the Central District. *Pacific Linguistics* C-13:879-983. Canberra: Australian National University.

1975. South-eastern Trans-New Guinea phylum languages. In Wurm, Stephen A, ed. Papuan Languages and the New Guinea linguistic scene. *Pacific Linguistics* C-38.613-64. Canberra: Australian National University.

Dutton, T E and C L Voorhoeve. 1974. Beginning Hiri Motu. *Pacific Linguistics* D-24:185-257. Canberra: Australian National University.

Eberhard, David M, Gary F Simons and Charles D Fennig, eds. 2019. *Ethnologue: Languages of the World*. 23rd edition. Dallas: SIL International. Online version: http://www.ethnologue.com.

Pawley, Andrew. 2005. The chequered career of the Trans New Guinea hypothesis: Recent research and its implications. In Pawley et al, eds. *Papuan pasts: Cultural, linguistic and biological histories of Papuan speaking peoples*. Canberra: Pacific Linguistics. 67-107.

Quigley, Ed and Susan Quigley. 1993. *Sociolinguistic survey of the Doromu language group*. Ukarumpa: SIL-PNG. MS.

Wurm, Stephen A, ed. 1975. New Guinea area languages and language study, Vol. 2: Papuan languages and the New Guinea linguistic scene. *Pacific linguistics* C-38. Canberra: Australian National University.

1982. *Papuan languages of Oceania*. Tübingen, Germany: Gunter Narr Verlag.

Rob Bradshaw
robert.bradshaw@my.jcu.edu.au; robert_bradshaw@sil.org