Versatile postpositions in Doromu-Koki:

The case of rofu

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Abstract: In Bradshaw (2012:126-7) the Doromu-Koki *rofu* was classified as a non-local postposition, glossed as 'to, for, from, in order that'. A couple of variations were noted at that time, but some areas were not clear. This is an attempt to further refine understanding about this nominal postposition; firstly, to expand on its typical postpositional uses, and secondly to explain its other uses as a clause chaining device. In addition, I will discuss how some other Doromu-Koki postpositions behave in the same manner.

Doromu-Koki is a Southeast, Manubaran, putative Trans New Guinea language[1] of the Central Province of Papua New Guinea, spoken by about 2,000 people, approximately half of whom are living in the Inland Rigo District to the east-southeast of Port Moresby and the other half in Port Moresby itself. As with other Trans New Guinea languages, it has a robust postposition inventory of 13 location, five directional and ten non-local varieties as well as three postpositional clitics. In some texts, the postposition *rofu* occurs quite infrequently. For example, in an 11-minute narrative audio recording, there were no occurrences. This has required, in some cases, looking at isolated sentences produced during a dictionary development workshop and in Bible translation activities to find further examples.[2]

The most common gloss for *rofu* is 'to', in which it points to an addressee or goal. Addressees are tied in with the verb *ni-* 'say' (1) and goals, or as a directional, with verbs of motion such as *bo-* 'go (over/up)' for direction away (2) or *bae-* 'come' for direction toward (3).

(1) [*ina* ***rofu***] *makai* *ni-yo*
3S to likewise say-3S.PST
'he spoke likewise to him'
[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:5]

[1] Cf. Eberhard et al 2019; Pawley 2005:94; Wurm 1982:163-4, 1975:614 and Dutton 1970:882.
[2] Sources for texts are indicated in subscripted brackets. Where not indicated, the text is most likely a common utterance.

(2) *Sealark* *=ri* *sokau.re-si* [*nai* *tobaini* *tora* ***rofu***] *bo-yaka.*
(ship.name) =on jump-SQSS my sister big to go-1S.PST
'I got off of the Sealark and went over to my big sister.'
[Philip Bomena, *Sealark gui reyaka* 'I rode on Sealark', 28 February 2009]

As a postposition it follows an NP (2) or pronoun (1) and (3).

(3) *idu* *ya* *bi* [*na* ***rofu***] *baiyo*
but 2 TOP 1S to come.2S.PST
'but you came to me'

And in some cases they follow a VP or clause, expressing purpose, yet still as a goal.

(4) *mina* *mida* *maina* *rei* *mona* *re-gedi* ***rofu***
this child looking.for do well do-2P.FUT in.order.to
'in order to look properly for this child'

The second most common gloss is 'for', also as a nominal case, in which it has a benefactive role in (5) and (6) or again to indicate purpose in (7).

(5) [*ini* *vene* ***rofu***] *moi* *rama* *ae-yo*
3.POSS people for get right put-3S.PST
'he fulfilled (lit. 'put right') it for his people'
[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:1]

(6) *Kamini* [*ini* *baba* ***rofu***] *moi* *de-si* *mar-o.*
enough 3.POSS father for/to get come.down-SQSS give-3S.PST
'Then he brought it down and gave it to his father.'

(7) *Mina* *muramura*[3] *bi* [*malaria* ***rofu***] *bi* *buni.*
this medicine TOP malaria for TOP good
'This medicine that is for malaria, is good.'
[From Bradshaw, In progress]

As well, *rofu* can have a source directional connotation glossed as 'from, on' in (8):

(8) [*Sei* *di* *gubuyo* *bae-go* *mina* ***rofu***] *ori* *di-yaganedi*
God GEN anger come-3S.FUT REL from fear go-3P.JUS
'you should flee from/be afraid of God's coming anger'
[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:6]

Rofu can also have a meaning of 'in' or 'with', again indicating source direction:

(9) *kaere* *bi* [*ina* ***rofu***] *ada* *tora* *gade* *rei-da.*
who TOP 3S in happiness big much do-1S.PRS
'in whom I am well pleased/with whom I am very happy'[ibid]

It can also be realised as 'on' in (10) and (11).

(10) [*meda* *dadi-do* *eta* ***rofu***] *ve-si*
sun come.up-3S.PRS side on see-SQSS
'they saw it on the east (lit. 'sun coming up') side and...'[ibid:3]

[3] From Hiri Motu *muramura* 'medicine' (Dutton & Voorhoeve 1974:200)

The clitic =*ri* 'at' can be bound to the end of an NP constituent, including another postposition, so that in (11) it is bound to *rofu*.

(11) [*Koru* *seri* *gagani* *tau* ***rofu***]=*ri* *di-gasa* *ago*
water shore place all on=at go-SIMSS word
nirausi.re-gam-o.
proclaim-HAB-3S.PST
'Whilst he was going along all the river's shore places he was proclaming.' [ibid:128]

Rofu can be glossed 'at, from' (here not a physical location), expressing an extension or interval of time.

(12) *ini* *lagani* *remanu* *ma* *egona* ***rofu***
3S.POSS year two and below at
'from two years old and under'[ibid:4]

This is different from the clitic =*ri* 'at', which does refer to location only here in (13), and (11) above.

(13) [*Mida* *keika.keika* *faisara* *koru*]=***ri*** *rafe-gam-adi.*
child little-RED naked water=in wash-HAB-3P.PST
'Little children were swimming naked in the river.' [From Bradshaw, In progress]

There are other instances of *rofu* which behave quite differently. They can be the head of an NP followed by *di* 'GEN', in which case *di* is governed by the whole NP as seen in (14) – (16), as a type of "double case".

(14) *Mina* *oteima-na* *vene* yaku *ni-yadi,* *bi* [[*moi* *vegu* *re-na*
this tell-NOM people DM say-3P.PST TOP get life do-NOM
rofu] *di* *buni* *yokoi* *de*
in GEN good one not
'These teachers (lit. 'teaching people') said that there is no benefit in salvation (lit. 'getting life').'[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:196]

(15) [[*meda* *yokoi* *dadi-yaka*] ***rofu***] *di* *nai* *mida* *Adam*
day one get.up-1S.PST on GEN 1S.POSS child (name)
ni-yaka…
say-1S.PST
'On one day's getting up I said to my son Adam…' [Luke Bomena, 27 April 2006]

Here *rofu* is governing the transitive object *Sei* 'God', yet the whole NP is governed by *di*.

(16) *yi* [[*moke-na* *vari* *gira* *ae-na*] *Sei* ***rofu***] *di* *sina*
2.POSS think-NOM plant strong put-NOM God in GEN word
'the news of your faith (lit. 'strongly implanting thinking') in God'
[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:434]

In other cases, *rofu* appears without *di*, seemingly as another strategy for connecting clauses aside from using the traditional switch-reference system. A typical switch-reference construction can be seen below:

(17) *Ma* [*di-**si***] *mina* *gagani=ri* *ame-gam-adi.*
and go-SQSS this place=at stay-HAB-3P.PST
'And they went and were living in that place.'
[*Sei di Uka Ago Ruaka di buka bedakai* 'Some books of God's New Covenant', 2011]

As well, *rofu* functions as a clause-chaining device, connecting clauses which share the same subject, and here in (18) indicating consequence.

(18) [*Uriyaku* *yokoi* *dadi-yaka*] ***rofu*** *nai* *mida* *e-dadi-yaka.*
morning one get.up-1S.PST so.that my son CAUS-get.up-1S.PST
'One morning I got up so that I woke up my son.'

This clause chaining use is quite regular, replacing the expected switch-reference markers, which instead indicate sequentiality.

(19) *Uriyaku* *yokoi* *dadi-si* *nai* *mida* *e-dadi-yaka.*
morning one get.up-SQSS my son CAUS-get.up-1S.PST
'One morning I got up and (then) I woke up my son.'

This use of *rofu* as a clause linker was previously analysed as indicating purpose (Bradshaw 2012:127). However, a more extended investigation shows that its use along with other postpositions in clause chaining is quite extensive and fully acceptable in a variety of meanings. The use of the same morpheme within NPs and as a clause chaining device can be described as an instance of heterosemy, whereby "…two or more meanings or functions…deriving from the same ultimate source, are borne by reflexes of the common source element that belong in different morphosyntactic categories." (Lichtenberk 1991:476).

This heterosemy of *rofu* allows for it to behave as a cause-effect clause chaining device. This phenomenon is not uncommon in Papuan languages of New Guinea (e.g. Pennington 2018:246, 337-8 on Ma Manda, Aikhenvald 2011:28-38 on Manambu and p.c. on Yalaku, and Merlan & Rumsey 1991:340-2 on Ku Waru). Below, the Ma Manda benefactive is used to combine clauses (Pennington 2018:246):

(20) *Kunum* *flong* *tata* *kaalin* *attak* ***wala*** *nûndû* *wadûgût*
heaven ALL custom good be-PRS-3SG that=BEN 1NSG also
kame *flong* *tawangka* *aatûkugû…*
earth ALL follow-SS remain-DUR
'In heaven there are good customs, so we also must keep following him on earth until…'

And in Manambu (Aikhenvald 2011:32) the objective-locative case indicates completive aspect:

(21) *wun* [*də-kə-m*] ***wukəmar-ə-m***
I he-LK-OBJ/LOC forget-LK-OBJ/LOC
'I completely forgot him'

In Ku Waru, ergative/instrumental is used to indicate cause-effect (Merlan & Rumsey 1991:340):

(22) *koi-n* *tim-**n*** *gai-yl* *okum*
(name)-ERG do-PRF-3sg-ERG sweet.potatoes-DEF come-PPR-3SG
'because of what Koi did, the sweet potatoes are growing (lit. 'coming')'

Likewise, in Doromu-Koki *rofu* is behaving as a cause-effect clause chaining device (23) – (26), which replaces switch reference.

(23) *Ma* *di-yadi* ***rofu**,* *mina* *gagani=ri* *ame-gam-adi.*
and go-3P.PST so.that this place=at stay-HAB-3P.PST
'And they went so that they were living in that place.'

(24) *Doketa* *ya* *iriyeduka* *re-go* ***rofu*** *ya* *imi-go.*
doctor 2 sorrow do-3S.FUT so.that 2 pierce-3S.PST
'The doctor will feel sorry for you so that he will give you a shot.'
[From Bradshaw, In progress]

(25) *Giro,* *baiya* *re-yadi* ***rofu**,* *sufa* *urana* *di-yadi.*
axe bush.knife do-3P.PST so.that bush toward go-3P.PST
'They got their axes and bush knives, so that they went out to the bush.'
[Rapheal Totome, *Uba dubuisa* 'Two brothers together', 1999]

In (26) *rofu* expresses a goal/directional (in order to) meaning.

(26) *Ye* *ya* *kaya* *mida* afe-si *de-giya* ***rofu*** *Siau* *di*
so 2 REFL child return-SQSS come-2S.FUT so.that (name) GEN
yava=ri *moi-gedi.*
house=at get-3P.FUT
'So you yourself will bring the child in order that they will get him at Siau's house.'
[Seba, 26 April 2006]

In the following sentence one would not normally encounter use of the development marker *yaku* in a second clause, and the postpositional phrase at the end of the sentence. I believe the author was emphasising the weapon and its target; the postposition *dudu* 'instrument' is not indicated on the noun *sosogi* 'spear', such that it is almost being promoted to subject, while the locative has been moved to after the verb, from its usual position before. This might also further account for the other use of *rofu* as a marker of consequence in (28).

(27) *Meki* *re-yo* *rofu* *sosogi* ***yaku*** *imi-yo* *ini* ***getona=ri.***
chase do-3S.PST so.that spear DM shoot-3S.PST 3S.POSS back=in
'He chased it so that he shot it in the back with a spear.'
[Peter Paul, *Sumari some diyo* 'He hunted in the bush', 24 May 2002]

As Dixon (2002:238) says about Australian languages "…one recurrent feature is that nominal affixes are generally used to mark types of subordinate clause", such is the case with Doromu-Koki. In (28) =*ri* is seen bound to a noun and in (29) to a verb with a conditional reading.

(28) [*Nai* *baiya* *mina* *kono=**ri*** *fere-yaka*] ***rofu*** *ve-gi*
1S.POSS bush.knife this ground=on leave-1S.PST so.that see-PURP
bo-yaka.
go-1S.PST
'I left this bush knife of mine on the ground so that I could go see it.'
[Joseph Toma, *Di bone ka reyaka* 'I was also being lazy', 22 October 2001]

(29) *Samuel* *de* *di-yagadu=**ri*** *bi* *aruma* *ve-yagadu.*
(name) NEG go-HYP=at TOP snake see-HYP
'If Samuel had not gone, he would have seen the snake.'
[Rapheal Totome, 19 February 2008]

As can now be seen, often *rofu* is a non-location postposition, but in other cases it is a clause chaining device (cf. Aikhenvald 2011:25, Blake 1999). And it is not alone – others that behave likewise are listed below. Six out of 31 postpositions have two functions, displaying heterosemous patterns, dependent on the grammatical context. They function as exponents of grammatical roles of nouns with the NP and as clause linking devices, following the pattern described as "versatile cases" in Aikhenvald (2011:8): "If a case morpheme occurs on an inflected verb, it is most likely to be used as a clause-linking device."

Table: *Heterosemous forms*

Form	Postpositional meaning	Clause linking meaning
adina	'beside, close/next to'	'because, meaning of'
dudu	'instrument, with'	'according to, thus'
fafau	'above, on (top of)'	'concerning, basis of, about'
=ri	'at, in, on'	'simultaneous different subject (while)'
rofu	'for, at, to, with, from'	'in order to, so that'

Following are examples for these with both sets of meanings (excepting *rofu*, which has already been exemplified above):

Postpositional:

(30) *Nai* [*eneka* ***adina**=ri*] *etu* *tora* *ni-yo.*
1S.POSS pelvis near=at boil big become-3S.PST
'I got a big boil close to my pelvis.' [From Bradshaw, In progress]

(31) *John* *bi* [*kodu* ***dudu***] *aruma* *u-yo.*
(name) TOP stick INST snake hit-3S.PST
'John hit the snake with the stick.' [ibid]

(32) *Re-si* *koro=ri* *vare-yo-ri* *aruma* *yaku* *ina* ***fafau***
do-SQSS boundary=at sleep-3S.PST-SIMDS snake DM 3 on.top.of
de-yo.
come.down-3S.PST
'And then when he was sleeping on the boundary (of the garden) a snake came down upon him.' [Justin Gugunu, *Baba bona mida di sina* 'Father and son story', 10 April 2004]

(33) *Omuna* *tau* *tora* *gabire=**ri*** *amei-sa.*
mountain all big under=at stay-2S.PRS
'You live under all the big mountains.'
[From Bradshaw, In progress]

Clause linking:

(34) ***adina*** *na* *rofu* *gedu* *mar-o*
because 1S to back.of.neck give-3S.PST
'because he ignored (lit. 'gave back of neck') me' [ibid]

(35) *Makai* ***dudu*** *beika* *yaku* *ni-yo* *bi* *rama* *ae-yo…*
like.this thus what DM say-3S.PST TOP true put-3S.PST
'Thus what he said was fulfilled (lit. 'was put true')…'
[*Sei di Uka Ago Ruaka* 'God's New Covenant', 2017:5]

(36) *Ye* *beika* *re-yo* ***fafau*** *iriyeduka* *re-si…*
so what do-3S.PST concerning sorrow do-SQSS
'And so he was sorry about what he had done and…' [ibid:67]

It appears that the *–ri* 'simultaneous different subject' switch reference marking may actually be another case of heterosymy, such that *=ri* 'at, in, on'[4] is also being used as a clause linking device [cf. (30) above].

(37) *Rafe-bi-gida-**ri*** *bai.si* *na* *eru.re-na* *ga* *re-fa.*
wash-DUR-1S.FUT-SIMDS come.SQSS 1S trick-NOM PRHB do-2P.IMP
'While (or lit. 'at/on') I will be washing, don't come and be tricking me.'
[From Bradshaw, In progress]

The other switch reference suffixes do not behave so, except interestingly the pair *ma* 'and (coordinating conjunction)[5] (38) and *–ma* 'subsequent different subject' (39), though this is a different type of heterosemy as both are connectors, but connectors or "coordinands" are different.

(38) *Nono.baba* ***ma*** *mida-mida* *amei-nu* *re-yadi.*
parent and child-RED stay-STAT do-3P.PST
'The parents (lit. 'mother-father') and children sat down.'
[Joe Warika, *Oga* 'Planting', 1999]

(39) *Ina* *yaku* *dona* *u-yo-**ma*** *na* *di-yaka.*
3 DM pig hit-3S.PST-SQDS 1S go-1S.PST
'He killed the pig and then I went.'

As there is precedence for heterosemous morphemes in other Papuan languages, and even as NP case marking used as clause linking devices, it is quite reasonable to find the same phenomenon occurring in Doromu-Koki. Several have been observed, and may even include the switch reference markings. Historically these may indeed be cases of reinterpretation.

[4] This is being interpreted as a clitic because it is bound to the end of an NP, whereas the switch reference *–ri* only occurs as a verbal affix.
[5] From Hiri Motu *ma* 'and' (Dutton & Voorhoeve 1974:199).

Abbreviations

1	first person	**IMP**	imperative	**PRS**	present
2	second person	**INST**	instrument	**PST**	past
3	third person	**JUS**	jussive	**PURP**	purpose
ALL	allative	**LK**	linker	**RED**	reduplication
BEN	benefactive	**LOC**	locative	**REFL**	reflexive
CAUS	causative	**NEG**	negative	**REL**	relativiser
DEF	definite	**NOM**	nominaliser	**S**	singular, subject
DM	development marker	**NP**	noun phrase	**SG**	singular
DS	different subject	**NSG**	non-singular	**SIM**	simultaneous
DUR	durative	**OBJ**	object	**SQ**	sequential
ERG	ergative	**P**	plural	**SS**	same subject
FUT	future	**POSS**	possessive	**STAT**	stative
GEN	genitive	**PPR**	Present progressive	**TOP**	topical marker
HAB	habitual	**PRF**	perfective	**VP**	verb phrase
HYP	hypothetical	**PRHB**	prohibitive		

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