# Strata of contact: Typologising spatial coordinate demonstrative systems in the Moluccas and west New Guinea

#### Laura Arnold

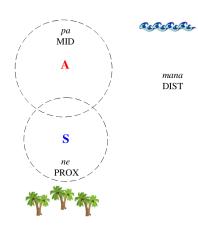
11th Austronesian and Papuan Languages and Linguistics Conference

Leiden University, 15 June 2019

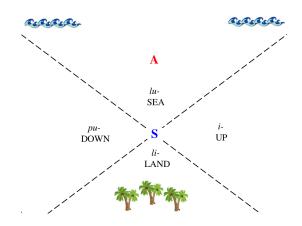


- ► Non-spatial coordinate demonstratives ('vanilla' demonstratives):
  - Encode information about relative proximity to the deictic centre
  - e.g. 'this'/'that'/'yonder'...
- ► Spatial coordinate demonstratives:
  - ► Demonstrative forms that encode **angular search domains** (Burenhult 2008)
  - ► e.g. UP/DOWN, LAND/SEA, IN/OUT...

#### ► Ambel:



#### ► Ambel:



#### (1) Ambel

```
ana-i-ne, ípon a-i-ne, bukan atú-tó lo
3sg.INAN-UP-PROX mountain DEM-UP-PROX NEG 3PC-stay place
Kábum málo a-mu-a po
Kabum truly DEM-IN-AND NEG
```

"[So as for the place that they stayed in...] it's up here, this mountain at the top here, they definitely didn't stay at Kabum inland there."

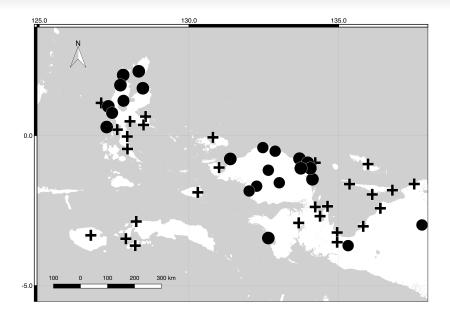
 Present study limited to pronominal and adnominal demonstratives

# Typologising spatial coordinate demonstrative systems

#### 1. Language sample

A typology of demonstrative systems
 Criteria
 The types

- 3. Strata of contact
- 4. Summary



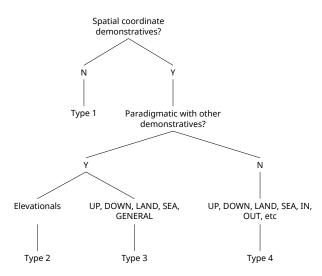
# Typologising spatial coordinate demonstrative systems

- 1. Language sample
- 2. A typology of demonstrative systems
  Criteria
  The types
- 3. Strata of contact
- 4. Summary

#### Criteria

- ► Are there spatial coordinate demonstratives?
- ► Are they paradigmatic or syntagmatic with other, non-spatial coordinate demonstratives?
- ► What are the categories distinguished?
  - ► Elevationals (UP, DOWN, ACROSS, SLOPING, etc)
  - ► UP, DOWN, LAND, SEA, GENERAL
  - ► UP, DOWN, LAND, SEA, IN, OUT, etc

### The types



► No spatial coordinate demonstratives

Wamesa (An, SHWNG)

nini this

yani that (middle distance)

wani that (far distance)

- ► Spatial coordinate demonstratives
- ► Paradigmatic with non-spatial coordinate demonstratives
- ► Elevationals

### Meyah (PAP, East Bird's Head)

=if near speaker
 =uma away from speaker
 =unj more distant from speaker
 =inda above
 =imba below

"They [the elevationals = inda and = imba] cannot occur with the distance clitics [= 'vanilla' demonstratives] mentioned earlier in this section" (Gravelle 2004: 147)

- ► Spatial coordinate demonstratives
- ► Paradigmatic with non-spatial coordinate demonstratives
- ► UP, DOWN, LAND, SEA, GENERAL

#### **Tobelo** (PAP, North Halmahera)

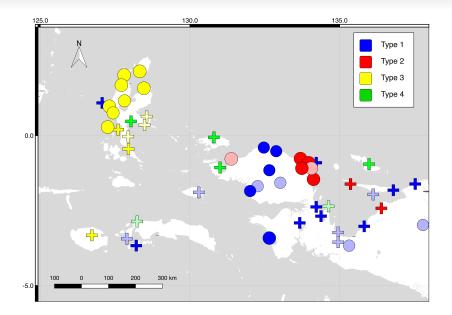
	Punctual	Areal
proximal	nenanga	naanga
distal	genanga	gaanga
seaward	danenanga	danaanga
landward	dinenanga	dinaanga
ianawara	amenanga	g
upward	dakenanga	dakaanga
	U	•

- Spatial coordinate demonstratives
- ► Paradigmatic with non-spatial coordinate demonstratives
- ► UP, DOWN, LAND, SEA, GENERAL

"While they ['vanilla' and spatial coordinate demonstratives] have identical syntactic distribution, they may be differentiated primarily because directional demonstratives function as part of a larger directional system which includes both directional locative adverbs and directional suffixes..." (Holton 2003: 17)

- ► Spatial coordinate demonstratives
- ► Syntagmatic with non-spatial coordinate demonstratives
- ▶ UP, DOWN, LAND, SEA, IN, OUT, etc

#### Ambel (An, SHWNG)

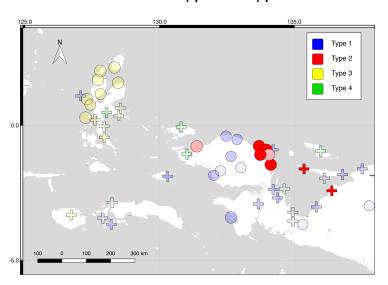


# Typologising spatial coordinate demonstrative systems

- 1. Language sample
- A typology of demonstrative systems
   Criteria
   The types
- 3. Strata of contact
- 4. Summary

### Strata of contact

- ► Stratum 1: Type 1 > Type 2
- ► Stratum 2: Type 1 > Type 3
- ► Stratum 3: Type 1 > Type 4

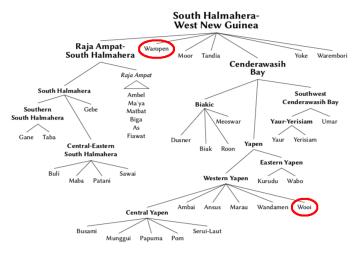


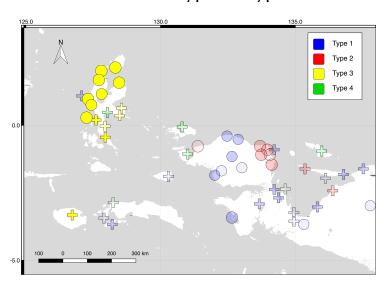
#### ► Papuan:

	East Bird's Head						Hat	am-Mansim
	Me	yah	Moskana		Sougb		Hatam	
- S	=if	PROX	$=ef\sim =ka$	PROX	gini	PROX	ni	PROX
Non- SCDs	=uma	MID	=ma	MID			та	MID
2 S	=unj	DIST	=maj	DIST	ingga	DIST	то	DIST
	=inda	UP	=da	UP	gada	UP	nyo	sloping up
SCDs							hu	vertically up
SC	=imba	DOWN			gaih	DOWN	mu	down
			=ba	ACROSS				

► Austronesian (SHWNG):

	\	Vooi	Waropen		
	(An, 9	SHWNG)	(An, SI	HWNG)	
S	ne	PROX	ni	PROX	
Non- SCDs	vaw	MID	wako	MID	
2 s	ра	DIST	gha	DIST	
Ds	ре	UP		_	
SC	vaw	DOWN	wako	DOWN	

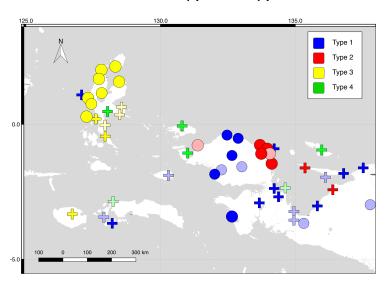


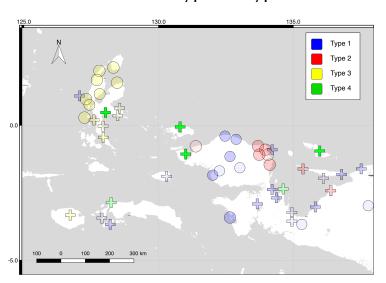


- ► Holton (2017): Spatial orientation systems of Papuan North Halmahera languages due to a pre-NH substrate?
- ► Bowden (2005): Metatypic restructuring of the spatial orientation system of North Moluccan Malay
- Evidence for potential grammaticalisation in Ternate Malay? (cf. Bowden 2005)
- (2) Ternate Malay

ngana di ujung **dara**, kita di ujung **lau** 2sc in tip land 1sc in tip sea

"You [sleep] at that end, I [sleep] at this end!" (Litamahuputty 2012: 240)





#### ► Austronesian:

	Biak	Ambel		Sawai	
(SH	IWNG, CB)	(SHWNG, RASH)		(SHV	WNG, RASH)
yás-	UP(RIVER)	i-	UP, OUT	уа	UP
vav-	DOWN	pu-	DOWN	nóp	DOWN
re-	LAND	li-	LAND	léw	LAND
ra-	SEA	lu-	SEA	law	SEA
rum-	IN	mu-	IN, BACK	min	IN
ri-	OUT	ta-	FRONT	tó	OUT
pon-	FRONT	ра-	SIDE	li	'there'
pur-	BACK, DOWN-				
	RIVER				
var-	SIDE				
vún-	MIDDLE				

► Contact with languages with Type 3 systems?

Tidore				
	(Pap, 1	NH)		
n- Ds	=re	'here/this'		
Non- SCDs	=ge	'there/that'		
	=tau	UP		
တ	=ta(h)u	DOWN		
SCDs	=tina	LAND		
Š	=tai	SEA		
	=ta	'over there'		

- 1. Why are SCDs in these languages syntagmatic, not paradigmatic?
- 2. Whence the additional categories?

► Paradigmatic > syntagmatic:

Tidore: "The locational enclitics, =ge ['that/there'] and =re ['this/here']... follow referring expressions to mark them as 'given"' (van Staden 2000: 196)

(3) mina=tau=re 3sg.F=upward=here

"she who is in an upward location here" [my translation]

► Paradigmatic > syntagmatic:

Tidore: "The locational enclitics, =ge ['that/there'] and =re ['this/here']... follow referring expressions to mark them as 'given" (van Staden 2000: 196)

(4) mina mi-ganyihi=tau toma tufa, toma kayangan=tau...
3sc.f 3sc.f.pos-place=upward Loc sky Loc heaven=upward
ena=tau=ge nyifu mansia waro sikari paka
3nh=upward=there must person know first.then ascend
ine
upwards

"She resides upwards in the sky, in heaven... About **this upwards** [place], people must know how to go up."

### ► The additional categories:

000000

	Wamesa	Ambai		
(S	HWNG, CB)	(SH	WNG, CB)	
Geo	graphic nouns	/	Adverbs	
rau	seawards	rau	seawards	
re	landwards	rei	landwards	
wi	uphill, inland	weu	down	
ye	upriver	yai	up	
po	front	fon	front	
pui	behind	fui	back	
ri	outside	war	across	

### ► The additional categories:

	Biak	Wamesa		Ambai		
(SH	IWNG, CB)	(SI	HWNG, CB)	(SF	HWNG, CB)	
	SCDs	Geo	graphic nouns		Adverbs	
yás-	UP(RIVER)	ye	upriver	yai	ир	
vav-	DOWN			weu	down	
re-	LAND	re	landwards	rei	landwards	
ra-	SEA	rau	seawards	rau	seawards	
rum-	IN					
ri-	OUT	ri	outside			
pon-	FRONT	ро	front	fon	front	
pur-	BACK	pui	behind	fui	back	
var-	SIDE			war	across	
vún-	MIDDLE					

- ► The additional categories:
  - ► Ambel (SHWNG, RASH)

S	CD	Directional noun	
i-	UP	il	upwards direction
pu-	DOWN	pul	downwards direction
li-	LAND	líl	landwards direction
lu-	SEA	lúl	seawards direction
mu-	IN	mul	inside
i-	OUT	li	outside
ра-	SIDE	pál	side, sideways direction
ta-	FRONT		
mu-	BACK		

- ► The additional categories:
  - 'Ordinary' contact-induced grammaticalization (Heine and Kuteva 2003)
    - 1. Speakers of language R notice that in language M there is a grammatical category Mx.
    - 2. They develop an equivalent category Rx, using material available in their own language (R).
    - 3. To this end, they draw on universal strategies of grammaticalization, using construction Ry in order to develop Rx.
    - 4. They grammaticalize construction Ry to Rx.

#### ► The additional categories:

Tide	ore	Ambel				
Pap,	NH	A	An, SHWNG			
SC	Ds	Ge	ographic nouns		S	CDs
=tau	UP	il	upwards		i-	UP
=ta(h)u	DOWN	pul	downwards		pu-	DOWN
=tina	LAND	líl	landwards		li-	LAND
=tai	SEA	lúl	seawards	>	lu-	SEA
		mul	inside		mu-	IN
		li	outside		i-	OUT
		pál	side, sideways		ра-	SIDE
					ta-	FRONT
					mu-	BACK

# Typologising spatial coordinate demonstrative systems

- 1. Language sample
- A typology of demonstrative systems
   Criteria
   The types
- 3. Strata of contact
- 4. Summary

### Summary

- This is an area of unusually high levels of typological diversity in spatial coordinate demonstrative systems
- ► Did Type 4 systems develop through contact-induced grammaticalization stimulated by political and trade links with Tidore?
- Whole grammatical subclass targeted as Ry: Are there cross-linguistic parallels?

### Sources: Austronesian I

Branch	Language	Location	Type	Source
WMP	Ambonese Malay	C Maluku	1	van Minde (1997)
	Ternate Malay	N Maluku	1	Litamahuputty (2012)
	Papuan Malay	New Guinea	1	Kluge (2014)
	Serui Malay	Yapen	1?	van Velzen (1995)
CMP	Buru	C Maluku	3	Grimes (1991)
	Alune	C Maluku	1?	Florey (2001)
	Larike	C Maluku	4?	Laidig (1993)
SHWNG	Taba	N Maluku	3	Bowden (2001)
	Sawai	N Maluku	4	Whisler (1996)
	Weda	N Maluku	3?	Yoshida (1980)
	Gane	N Maluku	3	Teljeur (1987)
	Maba	N Maluku	3?	Yoshida (1980)
	Patani	N Maluku	3?	Yoshida (1980)
	Ambel	Raja Ampat	4	Arnold (2018)
	Matbat	Raja Ampat	1?	Remijsen (2010, 2015)
	Ma'ya	Raja Ampat	4	van der Leeden (n.d.); Remijsen (2001)
	Irarutu	Bomberai	1	Jackson (2014)

### Sources: Austronesian II

Branch	Language	Location	Type	Source
SHWNG	Wamesa	Cenderawasih Bay	1	Gasser (2014)
	Dusner	Cenderawasih Bay	1	Dalrymple and Mofu (2012)
	Roon	Cenderawasih Bay	4?	Gil p.c.
	Yaur	Cenderawasih Bay	1?	Kamholz p.c.
	Yerisiam	Cenderawasih Bay	1?	Kalmholz p.c.
	Moor	Cenderawasih Bay	1	Kamholz p.c.
	Waropen	Cenderawasih Bay	2	Held (1942, 1957)
	Biak	Biak	4	van den Heuvel (2006)
	Wooi	Yapen	2	Sawaki (2017)
	Ambai	Yapen	1	Silzer (1983)
	Warembori	N New Guinea	1	Donohue (1999)

# Sources: Papuan I

Family	Language	Location	Туре	Source
North Halm.	Galela	N Maluku	3	Yoshida (1980); Shelden (1991)
	Loloda	N Maluku	3	Yoshida (1980)
	Tabaru	N Maluku	3	Yoshida (1980); Kotynski (1988)
	Tobelo	N Maluku	3	Holton (2003)
	Pagu	N Maluku	3	Wimbish (1991)
	Ternate	N Maluku	3	Hayami-Allen (2001)
	Tidore	N Maluku	3	van Staden (2000)
	West Makian	N Maluku	3	Voorhoeve (1982)
West Papuan	Moi	W Bird's Head	2?	Menick (1995, 1996, 2000)
·	Maybrat	C Bird's Head	1	Dol (1998, 1999)
	Abun	N Bird's Head	1	Berry and Berry (1999)
	Mpur	N Bird's Head	1	Odé (2002)
EBH	Meyah	E Bird's Head	2	Gravelle (2004)
	Moskana	E Bird's Head	2	Gravelle (2010)
	Sougb	E Bird's Head	2	Reesink (2002a)
Hatam-Mansim	Hatam	E Bird's Head	2	Reesink (1999)
	Mansim	E Bird's Head	2?	Reesink (2002b)

### Sources: Papuan II

	• • • • • • • • • • • • • • • • • • •			
Family	Language	Location	Type	Source
South Bird's Head	Arandai	S Bird's Head	1?	Voorhoeve (1985)
	Inanwatan	S Bird's Head	1	de Vries (2004)
	Kokoda	S Bird's Head	?	de Vries (2004)
	Puragi	S Bird's Head	1?	de Vries (2004)
W Bomberai	Kalamang	Bomberai	1	Visser (2016)
Wissel Lakes	Ekagi/Mee	C WNG	1?	Doble (1987)
	lau	C WNG	1?	Bateman (1986)

#### References L

Arnold, Laura, 2018. A description of Ambel, an Austronesian language of West New Guinea Austronesian language of the Raja Ampat archipelago, West New Guinea, Ph.D. thesis, The University of Edinburgh.

BATEMAN, IANET, 1986, Iau verb morphology, Iakarta: Universitas Katolik Indonesia Atma Iava,

BERRY, KEVIN AND CHRISTINE BERRY, 1999. A description of Abun, a West Papuan language of Irian Jaya. Canberra: Pacific Linguistics.

BOWDEN, JOHN, 2001. Taba: Description of a South Halmahera language, Canberra: Pacific Linguistics.

-, 2005. Language Contact and Metatypic Restructuring in the Directional System of North Maluku Malay. Concentric: Studies in Linguistics 31(2):133-158.

BURENHULT, NICLAS, 2008. Spatial coordinate systems in demonstrative meaning. Linguistic Typology 12:99-142.

DALRYMPLE, MARY AND SURIEL MOFU, 2012. Dusner. Number 487 in Languages of the World/Materials, München: Lincom Europa.

DOBLE, MARION, 1987. A description of some features of Ekari language structure. Oceanic Linguistics 26:55-113.

Dol, Philomena, 1998. 'Form and function of demonstratives in Maybrat'. In: Jelle Miedema, Cecilia Odé, and Rien A. C. Dam (eds.), Perspectives on the Bird's Head of Irian Jaya, Indonesia. Proceedings of the Conference, Leiden, 13-17 October 1997, 535-553, Amsterdam; Atlanta: Rodopi,

- -. 1999. A grammar of Maybrat: A language of the Bird's Head. Irian lava. Indonesia. Ph.D. thesis. Universiteit Leiden.
- DONOHUE, MARK, 1999. Annotated Warembori Grammar sketch. [Annotated version of: Mark Donohue, 1999. Warembori. Languages of the World/Materials 341, Muenchen: Lincom Europa, Freely available at http://web.archive.org/web/20030908172154/http://courses.nus.edu.sg/course/ ellmd/waremborinote.pdf, accessed 18/4/2014].
- FLOREY, MARGARET, 2001, Verb and valence in Alune, La Trobe Papers in Linguistics special edition: Explorations in valency in Austronesian languages 11:73-120.

GASSER, EMILY, 2014. Windesi Wamesa Morphophonology. Ph.D. thesis, Yale University.

Gravelle, Gilles, 2004. Mevah: An East Bird's Head language of Papua, Indonesia, Ph.D. thesis, Vrije Universiteit Amsterdam.

#### References II

GRAVELLE, GLORIA J., 2010. A grammar of Moskana: An East Bird's Head language of West Papua, Indonesia. Ph.D. thesis, Vrije Universiteit Amsterdam.

GRIMES, CHARLES E., 1991. The Buru language of eastern Indonesia. Ph.D. thesis, Australian National University.

HAYAMI-ALLEN, RIKA, 2001. A descriptive study of the language of Ternate, the northern Moluccas, Indonesia. Ph.D. thesis, University of Pittsburg.

HEINE, BERND AND TANIA KUTEVA, 2003. On contact-induced grammaticalization. Studies in Language 27(3):529-572.

HELD, GERRIT JAN, 1942. Grammatica van het Waropensch (Nederlandsch Noord Nieuw-Guinea). Bandung: Nix.

-, 1957. The Papuas of Waropen. The Hague: KITLV Translation Series 2.

VAN DEN HEUVEL, WILCO, 2006. Biak: Description of an Austronesian language of Papua, Utrecht: LOT.

HOLTON, GARY, 2003. Tobelo. Number 328 in Languages of the World/Materials, München: Lincom Europa.

-. 2017. 'A unified system of spatial orientation in the Austronesian and non-Austronesian languages of Halmahera'. In: Antoinette Schapper (ed.), Contact and substrate in the languages of Wallacea, NUSA: Linguistic Studies of Indonesian and Other Languages in Indonesia, volume 62, 157-189.

Jackson, Jason, 2014. A grammar of Irarutu, a language of West Papua, Indonesia, with historical analysis, Ph.D. thesis. University of Hawai'i at Mānoa.

KLUGE, ANGELA, 2014. A grammar of Papuan Malay. Utrecht: LOT.

KOTYNSKI, EDWARD A., 1988. Tabaru phonology and morphology. Work Papers of the Summer Institute of Linguistics, University of North Dakota Session 32:143-216.

LAIDIG, WYN D., 1993. Insights from Larike possessive constructions. Oceanic Linguistics 32:311-51.

VAN DER LEEDEN, A. C., n.d. Ma'va dictionary, morphology, and syntax, Unfinished Ms.

LITAMAHUPUTTY, BETTY, 2012, Ternate Malay: Grammar and texts, Utrecht: LOT.

MENICK, R. H., 1996. 'Verb Sequences in Moi'. In: Ger Reesink (ed.), Studies in Irian languages, NUSA: Linguistic Studies of Indonesian and Other Languages in Indonesia, volume 40, 41-60, lakarta: Universitas Katolik Indonesia Atma lava,

#### References III

- MENICK, RAYMOND, 1995. 'Moi: A language of the West Papuan Phylum. A preview'. In: Connie Baak, Mary Bakker, and Dick van der Meij (eds.), Tales from a concave world: Liber amicorum Bert Voorhoeve, 55-73. Leiden: Projects Division, Department of Languages and Cultures of South-East Asia and Oceania, Leiden University,
- -, 2000. 'Moi'. NUSA special edition: Studies in Irian Languages: Part II 47:7-24.
- VAN MINDE, DON, 1997. Malayu Ambong. Leiden: Leiden University, Department of Languages and Cultures of South-East Asia and Oceania
- ODÉ, CECILIA, 2002. 'A sketch of Mpur'. In: Ger Reesink (ed.), Languages of the eastern Bird's Head, 45-107. Canberra: Pacific Linguistics.
- REESINK, GER, 2002a. 'A grammar sketch of Sough'. In: Ger Reesink (ed.), Languages of the Eastern Bird's Head, 181-275. Canberra: Pacific Linguistics.
- REESINK, GER P., 1999. A grammar of Hatam, Bird's Head Peninsula, Irian lava, Canberra: Pacific Linguistics,
- -, 2002b. Mansim, a lost language of the Bird's Head. In: Ger P. Reesink (ed.), Languages of the eastern Bird's Head, 277-340. Canberra: Pacific Linguistics.

REMIJSEN, BERT, 2001. Word-prosodic systems of Raja Ampat languages. Utrecht: LOT.

- -, 2010. 'Nouns and verbs in Magey Matbat'. In: Michael Ewing and Marian Klamer (eds.), East Nusantara: Typological and areal analyses, 281-311. Canberra: Pacific Linguistics.
- -, 2015. Matbat MageyDialect 2003 Lexicography, 1998-2003 [text]. University of Edinburgh. School of Philosophy, Psychology and Language Sciences. Linguistics and English Language. Available online at: http://dx.doi.org/10.7488/ds/262.
- SAWAKI, YUSUF, 2017. A grammar of Wooi: An Austronesian language of Yapen Island, Western New Guinea. Ph.D. thesis, Australian National University.
- SHELDEN, DEIRDRE B, 1991. 'Setting a course in Galela: an orientation system of North Halmahera'. In: Tom Dutton (ed.), Papers in Papuan Linguistics, 147-60, A 73, Canberra: Australian National University.

#### References IV

- SILZER, PETER JAMES, 1983. Ambai: an Austronesian language of Irian Jaya, Indonesia. Ph.D. thesis, Australian National University.
- VAN STADEN, MIRIAM, 2000. Tidore: A linguistic description of a language of the North Moluccas. Ph.D. thesis, Leiden University.
- TELIEUR, DIRK, 1987, 'Spatial orientation among the Giman of South Halmahera', In: E. K. M. Masinambow (ed.), Halmahera dan Raja Empat sebagai Kesatuan majemuk. Studi-studi terhadap suatu Daerah Transisi, 347-66, lakarta: Lembaga Ekonomi dan Kemasyarakatan Nasional - Lembaga Ilmu Pengetahuan Indonesia.
- VAN VELZEN, PAUL, 1995. 'Some notes on the variety of Malay used in the vicinity of Serui'. In: Connie Baak, Mary Bakker, and Dick van der Meij (eds.), Tales from a concave world: Liber amicorum Bert Voorhoeve, 311-43. Leiden: Projects Division, Department of Languages and Cultures of South-East Asia and Oceania, Leiden University.
- VISSER, ELINE, 2016. A grammar sketch of Kalamang with a focus on phonetics and phonology. Master's thesis, University of Oslo.
- VOORHOEVE, C. L., 1982, 'The West Makian language, North Moluccas, Indonesia: A fieldwork report', In: C. L. Voorhoeve (ed.), The Makian languages and their neighbours, 1-74. Number 12 in Materials in languages of Indonesia D-46, Canberra: Pacific Linguistics.
- -. 1985. Some notes on the Arandai. Irian 13(3-40).
- DE VRIES, LOURENS, 2004. A short grammar of Inanwatan, an endangered language of the Bird's Head of Papua, Indonesia. Research School of Pacific and Asian Studies.
- WHISLER, JACQUI, 1996. A grammar of Sawai. Master's thesis, Pattimura University.
- WIMBISH, SANDRA GAY, 1991, An Introduction to Pagu through the analysis of narrative discourse. Master's thesis, University of Texas at Arlington.
- YOSHIDA, SHUII, 1980, 'Folk orientation in Halmahera with special reference to Insular Southeast Asia', In: N. Ishige (ed.), The Galela of Halmahera: A preliminary survey, 19-88. Number 7 in Senri ethnological studies, Museum of Ethnology.

