

Mapping the language – how a dying language loses its place in the world

Dorothea Hoffmann

Argue Department of Linguistics, Faculty of the Humanities
University of Chicago

Abstract

This paper is concerned with documenting critically endangered and culturally significant aspects of spatial language in MalakMalak, a non-Pama-Nyungan Northern Daly language with eleven identified remaining speakers based in the Daly River Region in Australia. The documentation combines current speaker knowledge collected in fieldwork settings between 2012 and 2013 with historical recordings (Birk, 1971-1973) to identify such areas of knowledge that have been lost over time. As a result, this paper focuses on the intricate relationship between language, culture, landscape, and tradition in the absence of customary community life. It asks whether or not aspects of language may ever be fully documented when speakers no longer live in traditional areas practicing customary cultural life.

Keywords: language endangerment, Australian Indigenous languages, spatial language, language documentation, MalakMalak

1. Introduction

Naming, travelling, and 'singing' the land is of very high significance to the culture in indigenous Australia. In traditional mythological dreamtime narratives the ancestral beings travel the country to give it form and identity (Myers, 1986: 49-50). In the customary lifestyle of hunting and gathering high significance was placed on using highly specific spatial language and intricate knowledge of toponyms and landscape features. It is not surprising that therefore, as observed for other Australian languages such as Gurindji (Meakins, 2011), Jaminjung (Schultze-Berndt, 2006), Arrernte (Wilkins, 2006), Warrwa (McGregor, 2006), Guugu Yimithirr (Haviland, 1993), Kriol (Hoffmann, 2012) and many others, spatial absolute and deictic systems in MalakMalak are a highly significant part of the languages' grammar and underlying cognitive system (Hoffmann, under review/2013).

This paper discusses issues in documenting critically endangered and culturally significant aspects of spatial language. The linguistic community in question is that of MalakMalak, a non-Pama-Nyungan Northern Daly language with eleven identified remaining speakers based in the Daly River Region in Australia. The data comprising of about 15 hours of personal and mythical narratives, communicative discourse and stimuli-based events on MalakMalak's previously undocumented spatial language is the result of nine months of original fieldwork between 2012 and 2013 in Woolianna, Darwin, Peppimenarti, and Belyuen in the Daly River area. Additionally, some 3 hours of historic data comprising of mainly personal narratives from the 1970s (Birk, 1971-1973) were unconditionally made available for this project and annotated by the author. The resulting corpus allows for a unique insight into language development over the last 40 years in the Woolianna area.

The aim of this paper is to identify aspects of spatial language currently and formerly in use in MalakMalak and to formulate meaningful conclusions about the effects language decline and speaker resettlement have had. MalakMalak uses a variety of strategies for encoding spatial relationships and

settings that are intricately bound to the traditional land and its features. Today, these concepts and meanings are highly endangered or already extinct due to speakers' resettlement, loss of traditional lifestyle, and a massive decline in language use.

At present, only six of the eleven remaining MalakMalak speakers occupy the traditional lands around the Daly River surrounded by different language groups. A cardinal-type reference system based on the directions of prevailing winds blowing from the sea and inland is used frequently by the Daly-based speakers, but has not been recorded for those that moved away. The Daly River as a focal point of orientation ceases to be used outside the traditional country and cannot be replaced by other watercourses as has been observed for river-drainage based absolute systems in Jaminjung (Schultze-Berndt, 2006). Most importantly, the dominant choices of reference points in spatial descriptions are landmarks such as waterholes (billabongs), hunting grounds, or sites of significance within traditional MalakMalak country. As they cannot be used by speakers based outside the Daly-region, knowledge of their meaning and location is in stark decline. Already, even the Daly-based speakers cannot remember some place names and locations when the traditional owners of these lands have been absent for an extended period of time.

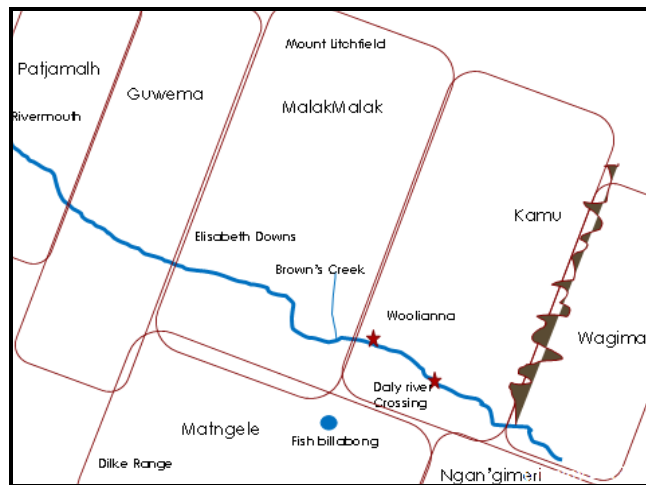
One of the aims of my documentation is to identify linguistic and non-linguistic areas of knowledge that have been lost over time. As a result, this paper focuses on the intricate relationship between language, culture, landscape, and tradition in the absence of customary community life.

2. Colonializing MalakMalak territory

The earliest outside influence of the MalakMalak territory is documented in circumstantial evidence for Macassan trade at the Daly River mouth (Stanley, 1985). Even though there has been European contact since the 17th century, no permanent white farming settlement was established until the 1860s. In 1884, four white miners were killed by Aboriginals at the local copper mine and retribution massacres wiped out nearly all members of the local Woolwonga tribe thought responsible in addition to members of MalakMalak and other tribes (Toohey, 1982).

Missionary efforts began in 1887 with the Jesuits establishing three (ultimately unsuccessful) missions. These were abandoned in 1899. In 1955, the Mission of the Sacred Heart at the Daly River Community (Naiyu since 1975) was founded. In addition to white farming settlers and the missionaries, many Aboriginals of neighbouring tribes started settling the area majorly disrupting the traditional lifestyle of the MalakMalak. Children started to be educated in boarding schools of the mission, where 'good' Aboriginal customs, such as marriage, dancing and art, were encouraged, and 'bad' ones, such as polygamy and punishment practices, discouraged (Toohey, 1982; Stanley, 1985).

Throughout these historical developments, the MalakMalak retained close cultural and linguistic connections to neighbouring tribes Matngele and Kamu (Toohey, 1982; Stanner, 1933; Harvey, 1990) with which they have shared dreaming stories and place names. Map 1 shows MalakMalak country in relation to its neighbouring language groups and tribes.



Map 1: Neighbouring MalakMalak tribes and languages (Harvey, p.c. 2013)

Today, MalakMalak, Matngele, and Daly River Kriol are spoken at Woolianna outside traditional MalakMalak country. The origin of Kriol in the area is unclear, but it has close structural resemblance to Roper Kriol and other varieties (Ellis, 1988). With the influence of Kriol and Aboriginal English increasing, MalakMalak is moribund. No children are acquiring the language today and the adult children of the current speakers have no or only passive knowledge of the language.

3. Grammatical and spatial systems in MalakMalak

MalakMalak is a Northern Daly language related to, but not mutually intelligible with neighbouring Matngele and (extinct) Kamu. A prominent feature is the complex predicate system consisting of a limited number of closed-class inflecting verbs combining with up to four uninflecting coversbs contributing the majority of semantic content as in (1).

(1) *kubuk* *karrarr* *dat-tyed* *yuyu*
 swim move.up look-stand 3SG.masc.stand.PST

yanak *ka* *yida=ke*
 one come 3SG.masc.go.PST=FOC

'he swam up and looked for the river once, then he came here' (DH13_A35_02.161)¹

There are a limited number of adjectives in MalakMalak showing concord with the nouns they modify distinguishing between male (*y*-concord) (2) and female (*n*), inanimate items (*w*) and trees (*m*). These

¹ The abbreviations in glosses used in this chapter are: 1=first-person, 2=second-person, 3=third-person, ABL=ablative, ALL=allative, AUX=auxiliary, COMIT=committative, CONT=continuous marker, DAT=dative, DIR=directional, DIST=distal demonstrative, DU=dual, excl=exclusive, ERG=ergative, FOC=focus, FUT=potential/future, IMP=imperative, IMPF=(past)imperfective, incl=inclusive, INTJ=interjection, LOC=locative, NEG=negative marker, n_top=toponym, PL=plural, POT=potential/future prefix, pro=pronoun, PROG=progressive aspect, PROX=proximal demonstrative, PRS=present, PST=past-tense, RDP=reduplication, REFL=reflexive/reciprocal suffix, SG=singular, TOP=topic, TR=transitive marker (in Kriol), *taunwei*=Kriol is marked in MalakMalak examples in cases of code-switching with underlining. Prosodic breaks are marked by %, ... or . . Intonational breaks are marked as \. Vowel lengthening is marked with :.

concordances exist alongside a limited noun classification system for plant- and animal-derived food and trees, as well as possibly dreamings and places.

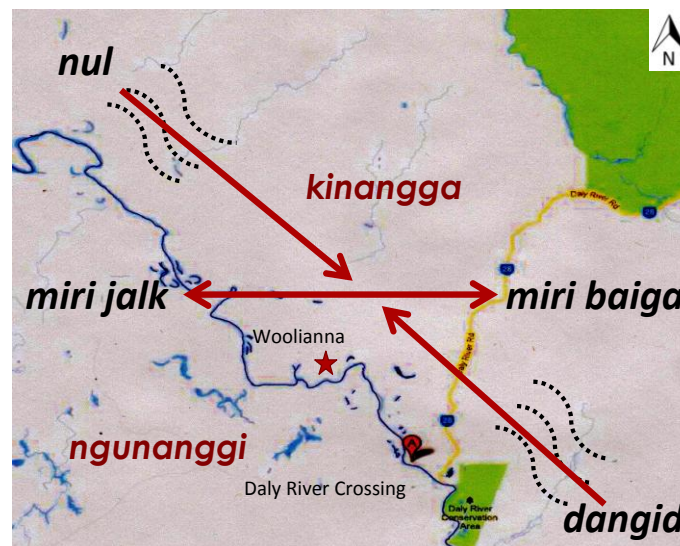
- (2) *yunpayin* *ngak-ma* *yida*
 good.masc eat-CONT 3SG.masc.go.PST
 'he eats well' (QUEST_017)

Case-marking is limited and optional, and word order is 'free', governed by information structure rather than syntactic constraints as seen in (3) which also displays a discontinuous nounphrase.

- (3) *dek* *nuende* *wunet* *nikkitimany*
 camp 2SG.go.PRS bad why
 'why did you go to the bad place?' (DH13_V51_01.004)

3.1. Spatial aspects of grammar

Studies into spatial systems allow for significant insight into how landscape features reflect facets and use of language and vice versa (Pederson et al., 1998; Levinson, 2003). MalakMalak utilizes a variety of strategies in spatial reference and language intricately bound to features and stories of the traditional lands; a system that was referred to by one speaker as 'The language is like a map' (Hoffmann, under review/2013).



Map 2: Absolute frames of reference in relation to Woolianna

Most notable for my purposes in this paper are MalakMalak's absolute frame of reference systems, the use of toponyms in discourse (6), and deictic demonstratives and affixes such as the proximal directional *-nggi* which may attach to any word class (7). Abstracted absolute frames of reference are based on prevailing wind directions at different times of the year blowing from the sea (*nul*) as in (4) and inland (*dangid*). Additionally, a cardinal solar-system utilizing directions of the setting (*miri jalk*) and rising sun (*miri baiga*, (5)) is utilized. Surprisingly, river-drainage as observed for other languages of the top-end with prominent watercourses, such as Jaminjung (Schultze-Berndt 2006) and Gurindji (Meakins 2011), is not in use for MalakMalak. The Daly River is tidal and therefore up- and downstream are not salient. However, the respective riverbanks of the Daly are referred to by semantically lexicalized deictic demonstratives denoting 'this side' *kinangga* and 'that side' *ngunanggi* as in (8). These parallel used systems are illustrated in Map 2. Frequently, named places will be

referred to as landmarks if absolute terms are not available as in (6). However, ad hoc landmarks of the type ‘the man is looking at the rock’ are never used.

- (4) *nul-yen* *wudyu=we*
northwesterly-DIR 3PL.stand.PST=FOC
‘they stood towards the northwesterly wind direction’ (DH12_A15_03.012)
- (5) *miri* *baiga* *yipi-nana* *junguny*
sun rise leave.go-LOC 3SG.masc.go.IMPF
‘he’s going (away from me) towards the east, where the sun rises’ (DH12_A22_06.076)
- (6) *waitbala=we* ***Wuliana-nen*** *yuyu*
white.person=FOC place.name-DIR 3SG.masc.stand.PRS
keen ***Mirriny-nen*** *yuyu*
PROX place.name-DIR 3SG.masc.stand.PRS
‘a white bloke is towards Wuliana, and one is standing towards Mirriny’ (DH12_A15_04.018)
- (7) *ngaty* *tyagad-en-nggi* *yide-nuwa*
PART run-DIR-PROX.dir 3SG.masc.go.PRS-3SG.masc.OBJ
‘he runs towards him (us)’ (DB_A06_01.008)
- (8) *dek* ***ngunanggi*** *kaduk*
camp south.western.bank DIST
‘the place is on the southwest side, over there’ (DH12_V36_03.194)

Deixis may be encoded in coverbs as movement towards (*ka* ‘come’) and away from a deictic centre (*pi* ‘go’). Furthermore, adverbs are used to denote proximal (*kinangga*) and distal (*ngunanggi*, 0) space over a boundary. This distinction has also been conventionalized to encode the respective riverbanks of the Daly River (‘northeastern/southwestern bank’) and may be used in FoR settings. Additionally, related adverbs are used with proximal (*ki/kinanggi* ‘here/this side’) and distal (*ngun/ngunanggi* ‘there/that side’) meanings. The etymology of these terms is presented in Table 1 below. The suffixes *-nggi/-ngga* denoting directed gaze or movement towards or away from the deictic centre respectively productively also attach to inflecting verbs, coverbs, and adverbs and have been lexicalized in some cases. This is discussed in more detail in section 0.

Table 1: MalakMalak deictic terms

Proximal	Distal
ki PROX 'here'	ngun DIST 'there'
ki -na -nggi PROX -LOC -PROX.DIR 'this side, facing towards me'	ngun -an -ngga DIST -LOC -DIST.DIR 'that side, facing away from me'
ki -na -ngga PROX -LOC -DIST.DIR 'western riverbank/the side closer to me / this side, facing away from me'	ngun -an -nggi DIST -LOC -PROX.DIR 'eastern riverbank/the side further away from me/that side, facing towards me'

- (9) *chair keen-en pudang tyedali wuyu ngunanggi-na*
 chair PROX-DIR chest.give stand.PART 3SG.neu.stand.PST DIST.side-LOC
 'the chair is facing there, it is on the other side (of the ball)' (DH12_A43_02.203-4)

Finally, two contrasting terms *keen* and *kaduk* denote not strictly proximity, but person-based reference and a contrast of 'here' and 'there' space as illustrated in examples (10) and (11) and in Figure 1 below. In discourse they are often accompanied by pointing gestures and/or directed gaze.

- (10) *nen kagak muyu keen-en*
 thing/person far 3SG.neu*.stand.PST PROX -DIR
 'the ball was far away (from the chair) (standing) towards here' (DH12_V44_02.298, speaker RP)
- (11) *kaduk-en muyu*
 DIST-DIR 3SG.neu*.stand.PST
 'the ball stood towards there ' (DH12_V44_02.299, speaker BL)

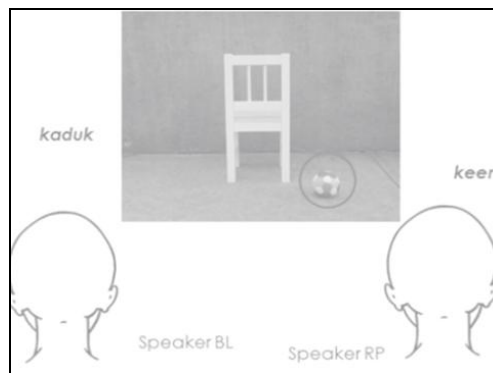


Figure 1: Stimuli setup for examples (10) and (11).

4. Lost, maintained and sleeping knowledge

MalakMalak used to be spoken all around the Daly River Crossing alongside Matngele, Kamu and other Daly languages (see Map 1 above). Relatively close proximity to Darwin and Adelaide River on the Stuart Highway and the disruption of traditional lifestyle with the arrival of white settlers and missionaries caused many MalakMalak to move away from the Daly. This led to a significant decline in speaker population. At present, only six (all members of one family) of the eleven identified remaining speakers occupy the traditional lands around Woolianna surrounded by members of a variety of different language groups. Original fieldwork was conducted with speakers on and off traditional territory and additional data comes from historical data recorded in the 1970s in Woolianna (Birk, 1971-1973).

Utilizing these different sources, this section aims to identify spatial grammatical knowledge that may have been lost over time due to aggressive language shift and speaker replacement. Some might be lost irreversibly while others are only 'sleeping' and may find their way back into the language.

4.1 *Landscape component terms*

Place names have received significant attention from linguists covering areas and languages all over the world (Basso, 1988) and around Australia (Hercus et al., 2002; Bower, 2009; McConvell, 2009; Harvey, 1999; Nash, 2011; Hodges, 2007). In the Australian context it has been emphasized that place names form a network of intersecting sites used by either members of one tribe only or various groups in border areas (Hercus and Simpson, 2002: 10). An example is the name for a major dreaming site for the Bluetongue Lizard which is called *Kumugutyinnga* in MalakMalak and *Pirriyende* in the neighbouring language Matngele. Both language groups have been in close linguistic and cultural contact for a long time and share many dreaming stories and sites.

Place names form an integral part of any group's history and culture: to learn an Australian language fluently it is vital to acquire a substantial knowledge of the place names and landscape features of the traditional area (Bower, 2009: 327). In contrast to introduced systems of place naming in Australia, 'indigenous place names form structured, interlinked networks in which places, together with their names and attributes, are related to each other in complex ways reflecting the relationship between people and the land they inhabit' (Hodges 2009, 383). A statement such as (12) from a dreamtime narrative about the travels of the Bluetongue Lizard can only be understood by an insider of MalakMalak culture and language. As Harvey (1999, 170) notes, placenames are often meaningful. However, their original meaning might get lost over time or phonological changes lead to original meanings no longer being recognized. In (12b), for example, the place name might be derived from the coverb *ngarun* 'help', but speakers may not be able to recognize this anymore. Additionally, place names in many indigenous language of Australia, lack locative coding as in (12a) where the ablative suffix *-man* appears on the coverb, but not the place name *Tedperrety*; or have it already incorporated within the toponym as in *Tyullk-yinnqa* in (12d). According to Harvey (1999, 177) this indicates that people inherently serve as reference points for places.

(12)

- (a) *pi-man=ye* ***Tedperrety***
move-ABL=FOC lap.dig
'from 'where he digged sitting in a lap' (*Tedperrety*) he went'
- (b) *la* ***Ngawurruny***
ALL help(?)
'to 'where (someone) helped (?)' (*Ngawurruny*)'
- (c) *karrarr-pi*
move.up-move
'he goes up?'
- (d) *en* *yerra* *karrk* *yida=ke* ***yinin*** ***Tyullkyingga***
and now/PART go.up 3SG.masc.go.PST=FOC nose go.down.LOC
'and then he went up to the point of the 'place where he went nose down' (*Tyullkyingga*)'
(DH13_V50_01.033-36)

As a result, the place names form an integral part of MalakMalak's language and culture legacy – the landscape is a system of signs (Harvey 1999, 172). Stanner (1965, 227)² summarizes this unique relationship beautifully:

But most of the choir and furniture of heaven and earth are regarded by the Aborigines as a vast sign system. Anyone who, understandingly, has moved in the Australian bush with Aboriginal associates becomes aware of the fact. He moves, not in a landscape, but in a *humanised* realm saturated with significations. Here 'something happened'; there 'something portends.' Aborigines, seeing the signs, defer to the significations; and watching others do so, seem to understand why.

There is also a substantial difference between the concept of 'knowledge' in European society which is available for acquisition by all, and in Aboriginal society, where 'the receipt of knowledge from those with prior access to it is a privilege and not a right' (Hodges 2009, 399). With regards to place names, this means that it is not common to freely talk about toponyms which 'are part of the Law assigned by Dreamings' (McConvell 2002, 52)³. Therefore, while in a Western understanding, the names of places and people are 'facts', in Aboriginal society, 'people affiliated with a language (and a land and its toponyms) do indeed 'own' it' (Hodges 2009, 399). Knowing toponyms then becomes an important marker of status and power (Nash 2014, 135). In the context of MalakMalak, even though the remaining inhabitants might have knowledge of place names and stories outside their ownership, they are often reluctant to share such knowledge with outside researchers like me, as it is not their knowledge to 'give'. At the same time, I encountered that the original owners of the language, land and knowledge living away from traditional country feel insecure about the depth of their knowledge and refer to the speakers that still live around Woolianna. This causes a significant dilemma for the

² Quoted in Harvey (1999, 172).

³ Quoted in Hodges (2009, 399).

creation of place name and dreaming networks for identifying original ownership and tribal boundaries.

While the semantics of some toponyms may not be easily recognized any longer, a number of place naming techniques are identified for MalakMalak utilizing and adapting features laid out by Harvey (2002: 37-38) below. Original (larger) estates of MalakMalak, Matngele or Kamu family groups are of the type 'land/water+characteristic feature' as in 1, 2 or 5 and the place name here also refers to the family grouping.

1. Country + plant species characteristic of an area, usually denoting a larger area:
 - a. *Dek Deliken* 'the place with cane grass' (place cane.grass-COMIT)
2. Generic noun 'water' + specific characteristic:
 - b. *Wag Purrarrma* 'whirly water' (water be.whirly.CONT)
3. Noun referring to an important dreaming site within a country:
 - c. *Kumugut-yinninga* 'at the Blue-Tongue Lizard' (lizard-LOC)
 - d. *Wani-ma* 'the Wallaby dreaming' (dreaming-wallaby)
4. Place of cultural significance:
 - e. *Mada-yinninga* 'the rain (making) place' (rain-LOC)
5. Country + place of prominent feature:
 - f. *Dek Kumani* 'place + name of a very large billabong', denoting a larger area surrounding the billabong (also Kamu: Dak Milnginy 'country+big hill (Harvey 1999, 185)
6. Place names without (easily) identifiable origin:
 - g. *Mirriny* 'place name for a billabong'

While the names of places are often remembered over generations, their original meaning might get lost over time when the language is no longer spoken, making it impossible to identify etymologies such as presented above. At the same time, there is evidence that place names are preserved by last and partial speakers (Harvey 1999, 192), making toponyms one of the most resilient elements of language within language endangerment. Furthermore, 'knowledge of traditional place names is one way of demonstrating a continuing connection to country in the face of physical separation.' At the same time, 'retaining and transmitting such knowledge is difficult in the absence of continual reinforcement through regular access to the country in the company of others from the same cultural group' (Hodges 2009, 400).

Knowledge and usage of place names, however, is only the most obvious connection between language and landscape. As the toponyms are no longer used by speakers based outside the Daly-region, knowledge of their meaning and location is in stark decline. Already, even the Daly-based speakers cannot remember place names and locations of certain sites when the traditional owners of these lands have been absent for long. This severely affects knowledge and performance of narrative discourse, where the choice of reference points in spatial descriptions are landmarks such as billabongs, hunting grounds or sites of significance within traditional MalakMalak country.

4.2. *Deixis and landscape reference*


Spatial descriptions using place names are naturally bound to the traditional lands using highly specific naming techniques. While there are many named places used in spatial reference such as in (6) above, 'ad-hoc' landmarks of the kind 'the man is looking at that rock' are not attested in the data. There is instead a clear preference for absolute directions using cardinal axes (*nul/dangid* 'southwesterly/northeasterly'; *miri baiga/miri tyalk* 'sunrise/sunset) and named landmarks (*ngunanggi/kinangga* 'riverbanks'; and place names) over relative ones such as ad-hoc landmarks. However, gesture-dependent deictic terms such as *kaduk* 'over there' and *keen* 'right here' often accompany fixed location references thus somewhat maintaining a speaker-dependent connection.

Taking a closer look at the usage patterns for landscape-dependent riverbank terms reveals a tight connection between the place of utterance and denoting deictic vs. absolute location. I argue that the transition from deictic (*ngunanggi/kinangga* 'that side/this side') to absolute meaning ('northeastern/southwestern riverbank') may be directly linked to movement patterns and resettlement of MalakMalak speakers outside their traditional homelands. The riverbank terms, for the Woolianna location, are not abstract and fixed in Levinson's (2003) sense. Instead, they denote concrete directions bound to the landscape and a non-abstracted course of the river. This is evidence for a close-knit relationship between the geomorphic features of the traditional lands and language use by its speakers. The lexicalized riverbank-denoting terms *ngunanggi* and *kinangga* are not used by speakers outside the traditional lands. Instead they are purely deictic and encode location of the figure with regards to a boundary in relation to a speaker (*ngun* 'the other side', *ki* 'this side') as well as direction of gaze or orientation of the figure (*-nggi* 'orientation towards the speaker; *-ngga* 'orientation away from the speaker') in opposition to *ngunangga* and *kinangga* as laid out in Table 1 above.

The wind-based terms *nul/dangid* are also not used by speakers outside the traditionally inhabited country. Instead, cardinal directions based on the course of the sun (*miri baiga/miri jalk*) are utilized. This absolute frame is also used widely in Kriol (*sanraiswei/sangodan*) and therefore this tendency might be explained by influences of language shift. When accompanied by deictics, the sun-based terms are more often anchored in the speech situation in denoting the time of day with regards to light situations and time references. The wind-based terms, on the other hand, are independent of current wind directions at the time of utterance. Therefore, the latter can be viewed as being more abstracted than the former. While both types of terms are landscape-independent and abstracted, the impact of the wind direction might be more influential for daily life in traditional country than in the city dwellings of other speakers.

Regarding the gesture- and discourse-dependent deictics, only *keen* is used (sparingly) by speakers located outside of Woolianna, while *kaduk* is solely used on traditional country indicating a close connection between deixis and landscape for this term as was shown in example (8) above. Additionally, historical sources (Birk, 1971-1973) suggest further uses of spatial terms which are recognised by today's speakers, but rarely produced spontaneously today. Birk's recordings reveal that there might have been at some stage in the language a more fine-grained deictic distinction as illustrated in figure (13). In example (14) below, the speaker describes a camp scene with multiple

clans and families gathering in one place presumably within eyesight as the use of the term *ngun* appears to not be bound to the ability to see a what is talked about from the deictic centre.

(13) 

distal				proximal
<i>ngun</i>		<i>kaduk</i>	<i>keen</i>	<i>ki</i>
'over yonder'		'over there'	'over here'	'here'
'out of sight'		'within sight'	'within sight'	'within sight'

(14)

<i>kaduk</i>	<i>wuyu</i>	<i>keen</i>	<i>wuyu</i>	<i>yawug</i>
DIST	3SG.neu.stand.PST	PROX	3SG.neu.stand.PST	another
<i>wunelli</i>	<i>ki</i>	<i>wuyu</i>		
big.NEU	PROX	3SG.neu.stand.PST		

'there's one there, one over here and another big one here' (DB_A02_06.142)

Furthermore, *kaduk* seems to have been additionally used as a marker of 'otherness' or taboo in the past. The speaker in (15) refers to a brother whose name is currently taboo to speak. Reasons for this are not apparent in the recording, but taboo language has been described for Australian languages for certain family relations (mothers-in-law) or names associated with recently deceased people (Haviland, 1979; Dixon, 1990). Contrastingly, *keen* appears to have been used as a familiarity marker as illustrated in (16). The speaker in this example is located in Woolianna about 250km southwest of Belyuen and therefore, the term *keen* cannot be interpreted to have a spatial deictic meaning of 'here'. Instead, a close relationship with the sister is presumably indicated, as for example a full sister by blood and not a cousin (in the western sense) which is often referred to as a 'sister' as well within the kinship system. Both kinds of usage are recognised by today's speakers, but so far have not been attested recently. However, current data suggests that, in a somewhat related manner, *keen* may be used today to denote a default situation in opposition to *kaduk*. The Daly River is subject to tidal influence from its mouth up until the Daly River Crossing. However, during the wet season, floodwater nourishing streams and rivers from inland that feed into the Daly prevents tidal change and the current always flows towards the sea. Therefore, in example (17) the speaker describes the river current's direction towards the sea as the stereotypical movement differentiated by reversed river flow from the sea by an expression marked by *kaduk*. Finally, *keen* may also act as a kind of discourse marker placing the narrative space in the 'here and now' (18).

(15)

<i>kaduk</i>	<i>yide,</i>	<i>dek</i>	<i>yuwaya</i>
DIST	3SG.masc.go.PRS	camp	2SG.go.PRS

'this other one (that person over there - brother that cannot be named) - he goes away (with his brother)' (DB_A02_05.112)

(16)

<i>mity</i>	<i>nga</i>	<i>keen</i>	<i>wurrka-ma</i>	<i>nuende</i>	<i>Denisibal</i>
sister	1SG.EXCL	PROX	work-CONT	3SG.fem.go. PRS	Belyuen

'my sister works in Belyuen' (DB_A02_05.137)

(17) *keen-en* *tity* *pi* *yunguny*
 PROX-DIR go.out move 3SG.masc.go.IMPF
kaduk-en *im* *blanga* *ontop*
 DIST-DIR 3SG LOC on+top
 ‘the water goes out (towards the sea in outgoing tide) and it goes to the Topend over there (when the tide is coming in)’ (DH12_A05_01_0148)

(18) *ki=we* *keen-en* *pudang* *tyedali*
 PROX=FOC? PROX-DIR chest.give stand.CONT
yuyu *Wag Purrarr*
 3SG.masc.stand.PRS place.name
 ‘and here, he is facing towards Wag Purrarr’ (DH12_A15_04.198)

In addition to these deictics, there are proximal and distal directional suffixes *-nggi* and *-ngga*, attaching to inflecting verbs, coverbs and demonstratives and adverbs following a case-marker. While in the recordings from the 1970s both suffixes appear regularly and productively on adverbs (19), inflecting verbs (20) and coverbs (21), they are today used much less frequently, unless partly lexicalised, in some inflecting verbs (22) and the demonstratives denoting a boundary and the riverbanks (23). However, after playing the Birk (1971-1973) recordings to the speakers for transcription, today’s informants immediately recognised the use of the terms. From then on they started using the suffixes again in non-lexicalised contexts as in the elicited example in (24). Generally, this suggests a historical development where some of the spatial system’s former complexity among the diminishing speakers and especially among those having left the traditional homelands had been lost over time. At the same time, knowledge of these suffixes is not yet ‘lost’, but may be revived when input is provided.

Historical data:

(19) *kanjuk-man-nggi* *kanggi* *nuendung*
 on.top-ABL-DIR.PROX COME.DIR.PROX 2SG.go.PURP
 ‘you come from up there to here towards me’ (DB_A03_05.100)

(20) *ngurra* *tyid* *pi* *enung -ngga*
 some/other take move 1SG.EXCL.go.FUT-DIST.DIR
 ‘I’m going to take some beef back away from me’ (DB_A02_01.035)

(21) *karrk-wat* *wa-nggi*
 move.up-send pick.up-PROX.DIR
 ‘bring it up here to me!’ (DB_A03_04.003)

Current data:

(22) *Jigbala -nen* *nuenue-yen* *wuta-ngga*
 name-DIR 3SG.fem.sit.PRS-DIR 3PL.go.PST-DIST.DIR
 ‘they went towards where Jigbala is sitting (away from me)’ (DH12_A15_03.114)

(23) *dek* *kadurruk-en* *wa-ngga* *wirrminy=ye*

camp DIST.ext-DIR pick.up -DIST.DIR 3PL.do.PUNCT=FOC
 'they took him to another country, away from me' (DH12_A25_03.010)

- (24) *pungaty-man-nggi nunda pungaty-man-ngga nunda*
 smoke-ABL-PROX.DIR 3SG.fem.go.PST smoke-ABL-DIST.DIR 3SG.fem.go.PST
 'She came over here towards me/there away from me smoking' (QUEST_118)

To sum up, there is a close connection between the deictic and absolute spatial systems in language use and lexical items in MalakMalak. Some uses of the demonstratives *keen/kaduk* attested in forty-year old data appear to be recognised by the speakers, but are no longer in use today. Therefore, these might represent specialised semantically extended uses (such as the use of the distal *kaduk* as a taboo-marker) that have been lost with the dwindling speaker population. Similarly, the use of distal and proximal directional suffixes *-ngga/-nggi* has almost been reduced to solely lexicalised forms today.

4.3. Summary of results

The current state of spatial language used in MalakMalak needs to be discussed from two angles. The speakers that remain in traditional country have retained many, albeit not all, uses historically found in the language. While it seems that some extended denotations of the inherently spatial demonstratives *kaduk* and *keen* have disappeared today alongside a four-way deictic distal-proximal distinction between demonstratives, the basic uses and meanings remain today despite observed language shift. Speakers that moved away from the Daly River still exhibit a passive knowledge of the aforementioned demonstratives, but they are used to a much lesser extent (*keen*) or not at all (*kaduk*) actively.

Absolute frame of reference terms based on prevailing winds are only used in and around Woolianna alongside deictic terms that have developed into absolute terms denoting the respective riverbanks of the Daly River. Outside the traditional lands influences from Kriol and potentially other indigenous languages led to a much more prominent use of the solar based-terms and only a passive knowledge of the wind-based terms without active usage.

Finally, the use of place names as orientation markers in discourse and spatial descriptions is non-existent in speakers outside the Woolianna area. Not even non-MalakMalak place names of surrounding communities or areas are used instead; in fact, English-introduced place names, such as *mijon* 'mission' in (25), are very rarely utilized on traditional country. This suggests a close-knit relation between language use and the landscape environment (including named places) it is spoken on.

- (25) *Mijon pi enggunguny tity ka ngun-na*
 place.name move 1SG.incl.go.IMP come.out come DIST-ALL
pak Wuliana
 sit place.name
 'I'm going to the mission and then I'm coming out (here) to sit down at Wolianna'
 (DB_A02_02.12)

I argued, in particular throughout section 0, that some extended meanings of spatial terms have already been lost either entirely or by speakers who moved away. Additionally, some reference aspects of MalakMalak spatial grammar are already in decline. The Daly River as a focal point of orientation is invariably lost in environments other than the traditional country and cannot be replaced by other watercourses, as has been observed for Jaminjung which uses an upstream/downstream system based on the Victoria River, and may be projected onto other streams such as the Katherine River when speakers are away from traditional country (Hoffmann, 2012; Schultze-Berndt, 2006). Similarly, the wind-based cardinal terms represent a culturally significant system in decline outside of Woolianna. This may in part be due to uses in restricted contexts of spatial orientation and giving directions within the traditional system. The existence of an alternative absolute system based on the course of the sun and outside pressure from surrounding languages and language shift may be additional contributing factors for this observed decline.

5. Conclusions

Language is part of a much bigger structure of interrelated culture, cognition, custom, landscape and environment. Such a language-system does not disappear overnight or when the last speaker dies, but gradually and slowly during the process of language endangerment and shift. I have shown for MalakMalak how the intricate connection between landscape features and language has been in gradual decline over the past almost 50 years due to speaker relocation and language shift. There are linguistic and non-linguistics aspects of the system, such as the spatial knowledge discussed in this paper, which are closely tied to a language and might disappear long before the language itself. This triggers a troubling question about whether the MalakMalak spoken in Darwin and elsewhere outside of Woolianna is an impoverished version of the 'original'. If so, how much of this primary system has been maintained by the remaining speakers in traditional land and what has been lost already?

Identifying such areas of language shift proves to be difficult. It is one thing to track grammatical and vocabulary changes historically over time using historic transcripts and recordings, but it is quite another to track such changes which do not easily reveal themselves in discourse or elicitation, but only through study of the language environment and usage up close. Toponyms, for example, often originate in meaningful descriptions of a place about stories, features or entities, and as such etymologies can be drawn. It has been argued (Harvey 1999) that place names are one of the most resilient parts of a language system in the process of language decline. While this may be true for remembering toponym-terms themselves and using them as reference point in space, the underlying knowledge and place within a larger cultural and mythical system might be lost even in the initial stages of language death. The way place names are used as markers of social and cultural identity can only be kept alive on the traditionally inhabited lands. For a highly localized and non-nomadic culture such as those of the Australian Aboriginals, knowledge of the connections between landscape and language is essential for a strong relationship with all aspects of traditional culture.

The Daly River with its small tribal groups and limited geographical expansion is a context in which the connections between language and landscape go way beyond named places. The Daly Languages form part of a cultural system that includes landscape and customs reflected in discourse and grammatical features. Therefore, problems arise related to language and culture documentation efforts in an environment that, to a large part, has lost its communal life and traditional reference

frame with regards to landscape and landmarks. Consequently, my paper's findings might help trigger discussions on future efforts in documenting non-linguistic aspects alongside grammatical and lexical structures.

6. Epilogue: Where do we go from here?

Some pressing questions surface from these observations on a close relationship between language and landscape in MalakMalak: What implications arise for language documentation of speakers away from traditional country or in diaspora? What kinds of non-linguistic features should documentary linguists pay attention to in their work? A non-exhaustive list may include:

- Landscape features, toponyms and spatial language
- Gesture
- Kinship systems
- Customs, traditions, rituals
- Taboos
- Plant and animal usage
- Hunting and gathering techniques
- Features of social interaction
- Arts and crafts
- Leisure activities and customs
- Festivals
- Lifecycle events
- Religions beliefs
- Customs of warfare and peace
- ...

And ultimately, in light of growing efforts in language-awakening: Can a language truly be revitalised as a system without knowledge of any such non-linguistic features as described here? How much underlying knowledge is lost during the process of language endangerment and how do we become aware of it? Such questions should incorporate above stated non-canonical extra-linguistic features of culture and language use with more extensive data collection and stringent linguistic analysis.

Acknowledgements

I would like to gratefully acknowledge financial support from the Franklin Research Grant of the American Philosophical Society (2012) and the Endangered Languages Documentation Program IPF0189 (2012-1014) by Arcadia allowing me to spend a total of over 9 months in Woolianna and surrounding areas between May 2012 and September 2013. The data collected during this fieldwork, some field recordings made between 2009 and 2012 generously shared by Mark Crocombe, and a collection of elicitation and communicative discourse material collected between 1971 and 1973 unconditionally made available by David Birk and obtained from AIATSIS in Canberra, form the basis of this study.

Furthermore, I would like to specifically thank Bidy Yingguny Lindsey, Frances Mijat, Rita Pirak, Rita McGregor, Rosie Mary Magdalene Kabat, Barbara Tenblin, Michael Kunbuk, Don White, and Edward Andrews for generously sharing their knowledge of MalakMalak with me. Additional thanks go to Rob

Lindsey and the late Joye Maddison for supporting my work with the MalakMalak people in every respect.

References

- Basso KH. (1988) 'Speaking with Names': Language and Landscape among the Western Apache *Cultural Anthropology* 3: 99-130.
- Birk D. (1971-1973) *MalakMalak Field Recordings*. AIATSIS Audio Collection
- Bohnemeyer J and Perez Baez G. (2008) *MesoSpace. Spatial language and cognition in Mesoamerica: 2008 Field Manual*. University at Buffalo, The State University of New York.
- Bowern C. (2009) Naming Bardi Places. In: Koch H and Hercus L (eds) *Aboriginal placenames: Naming and re-naming the Australian landscape*. Canberra: The Australian National University EPress, 327-345.
- Bowern C. (2010) The typological implications of Bardi complex predicates. *Linguistic Typology* 14: 39-70.
- Cahir P. (2006) *Verb composites in MalakMalak*. MA Dissertation, Melbourne: Melbourne University.
- Danziger E. (2003) Deixis, Gesture and Spatial Frame of Reference. *CLS* 39. 2nd ed. The University of Chicago: Chicago Linguistic Society 105-122.
- Danziger E. (2010) Deixis, Gesture and Cognition in spatial Frame of Reference Typology. *Studies in Language* 34: 167-185.
- Dixon RMW. (1990) The Origin of "Mother-in-Law Vocabulary" in Two Australian Languages. *Anthropological Linguistics* 32: 1-56.
- Ellis SJ. (1988) *Sociolinguistic Survey Report: Daly River Region Languages*. Summer Institute of Linguistics: Darwin
- Harvey M. (1990) *A sketch Grammar of Kamu*. Unpublished manuscript, University of Sydney.
- Harvey M. (1999) Place names and land-language associations in the Western Top End. *Australian Journal of Linguistics* 19: 161-195.
- Harvey M. (2002) Land Tenure and Naming Systems in Aboriginal Australia. *The Australian Journal of Anthropology* 13: 23-44.
- Harvey M. (2003) The evolution of verb systems in the Eastern Daly language family. In: Evans N (ed) *The non-Pama-Nyungan languages of northern Australia: comparative studies of the continent's most linguistically complex region*. Canberra: Pacific Linguistics, 159-184.
- Haviland JB. (1979) Guugu Yimidhurr brother-in-law language. *Language in Society* 8: 365-393.
- Haviland JB. (1993) Anchoring, Iconicity and Orientation in Guuguur Yimithirr Pointing Gestures. *Journal of Linguistic Anthropology* 3: 3-45.
- Hercus L, Hodges F and Simpson J. (2002) *The land is a map: Placenames of Indigenous origin in Australia*. The Australian National University: Pandanus Books.
- Hercus L and Simpson J. (2002) Introduction In: Hercus L, Hodges F and Simpson J (eds) *The land is a map: Placenames of Indigenous origin in Australia*. The Australian National University: Pandanus Books.
- Hodges F. (2007) Language planning and placenaming in Australia. *Current Issues in Language Planning* 8: 383-403.
- Hoffmann D. (2012) *Descriptions of Motion and Travel in Jaminjung and Kriol*. PhD Thesis, Manchester: University of Manchester.
- Hoffmann D. (under review/2013) Mapping Worlds: Frames of Reference in MalakMalak. *39th Annual Meeting of the Berkeley Linguistic Society*. The University of California, Berkeley: Berkeley Linguistic Society.

- Levinson SC. (2003) *Space in Language and Cognition. Explorations in Cognitive Diversity*, Cambridge: Cambridge University Press.
- Levinson SC, Brown P, Danziger E, et al. (1992) Man and Tree & Space Games. In: Levinson SC (ed) *Space stimuli kit 1.2: November 1992*. Nijmegen: Max Planck Institute for Psycholinguistics, 7-14.
- McConvell P. (2002) Changing places: European and Aboriginal styles. In L. Hercus, F. Hodges and J. Simpson (eds.). *The Land is a Map: Placenames of Indigenous Origin in Australia*. Canberra: Pandanus Books, 51-61.
- McConvell P. (2009) 'Where the spear sticks up': The variety of locatives in placenames in the Victoria River District. In: Hercus L and Koch H (eds) *Aboriginal placenames : naming and re-naming the Australian landscape* Canberra: The Australian National University EPress, 359-402.
- McGregor WB. (2002) *Verb Classification in Australian Languages*, Berlin: Mouton de Gruyter.
- McGregor WB. (2006) Prolegomenon to a Warrwa Grammar of Space. In: Levinson SC and Wilkins D (eds) *Grammars of Space. Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press, 115-156.
- Meakins F. (2011) Spaced Out: Intergenerational Changes in the Expression of Spatial Relations by Gurindji People. *Australian Journal of Linguistics* 31: 43-77.
- Myers FR. (1986) *Pintupi country, Pintupi self: sentiment, place and politics among Western Desert Aborigines*, Washington DC, London: Smithsonian Institution Press
- Nash J. (2011) *Insular Toponymies: Pristine place-naming on Norfolk Island, South Pacific and Dudley Peninsula, Kangaroo Island, South Australia*. PhD Thesis. Adelaide: The University of Adelaide.
- Nash J. (2013) *Insular Toponymies. Place-naming on Norfolk Island, South Pacific and Dudley Peninsula, Kangaroo Island*. Amsterdam: John Benjamins Publishing Company.
- Nash J. (2014) Norf'k placenames and creole toponymy. *Journal of Pidgin and Creole Languages* 29:1, 135-142.
- Pederson E, Danziger E, Wilkins D, Levison S, Kita S, Senft, G. (1998) Semantic Typology and Spatial Conceptualisation. *Language* 74: 557-589.
- Schultze-Berndt E. (2000) *Simple and Complex Predicates in Jaminjung. A study of event categorisation in an Australian language.*, Nijmegen: University of Nijmegen.
- Schultze-Berndt E. (2006) Sketch of a Jaminjung Grammar of Space. In: Levinson SC and Wilkins DP (eds) *Grammars of Space*. Cambridge: Cambridge University Press, 63-113.
- Stanley O. (1985) *The Mission and Peppimenarti: An economic study of two Daly River Aboriginal Communities*, Darwin: Australian National University North Australia Research Unit.
- Stanner WEH. (1933) The Daly River tribes. A report on fieldwork in North Australia. *Oceania* 3(4). 377-405.
- Stanner WEH. (1933) The Daly River tribes. A report on fieldwork in North Australia. *Oceania* 4(1). 10-29.
- Stanner WEH. (1965) Religion, totemism and symbolism. In RM Berndt & CH Berndt (eds.) *Aboriginal Man in Australia: essays in honour of Emeritus Professor A.P. Elkin*. Sydney: Angus & Robertson. 207-237.
- Terrill A and Burenhult N. (2008) Orientation as a strategy of spatial reference. *Studies in Language* 32: 93-136.
- Toohey J. (1982) *Daly River (MalakMalak) Land Claim*, Canberra: Australian Government Publishing Services.
- Tryon DT. (1976) The Daly Family. In: Dixon RMW (ed) *Grammatical categories in Australian languages*. New Jersey: Humanities Press.

Wilkins D. (2006) Towards an Arrernte Grammar of Space. In: Levinson SC and Wilkins D (eds)
Grammars of Space: Explorations in Cognitive Diversity. Cambridge: Cambridge University Press,
24-62.