

## Research Article

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# Epistemic authority and sociolinguistic stance in an Australian Aboriginal language

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**Abstract:** Murrinhpatha, an Aboriginal language of northern Australia, has an initial *k*-alternation in verbs that has hitherto been resistant to grammatical analysis. I argue that *k*- does not encode any feature of event structure, but rather signals the speaker's epistemic primacy over the addressee. This authority may relate to concrete perceptual factors in the field of discourse, or to socially normative authority, where it asserts the speaker's epistemic rights. These rights are most salient in the domains of kin, country and totems, as opposed to other topics in which speakers are habitually circumspect and co-construct knowledge. My analysis of the *k*-alternation thus brings together the typology of epistemic grammar (Evans, Bergqvist, & San Roque, 2018a, 2018b), and a sociolinguistic perspective on stance (Jaffe, 2009).

**Keywords:** epistemic grammar, stance, Australian languages, grammaticalisation

## 1 Introduction

The assumption of superior knowledge, and contestation of this assumption, are ubiquitous in conversation (Heritage, 2012; Stivers, Mondala, & Steensig, 2011). But one may also ask to what degree there are culturally specific norms for assuming and contesting knowledge. Much of the work on the assumption of 'asymmetric epistemic access' – i.e. superior knowledge – draws evidence from English-language conversation. Meanwhile, with respect to Australian Aboriginal societies, it has been argued that consensus, collaborative knowledge and epistemic equality are the preferred modes of interaction (e.g. Liberman, 1982, 1985). Claiming epistemic authority is a 'marked' act, and often depends upon kin- and clan-based determinations of who has the right to know (Keen, 1994; Myers, 1986).

In this article I discuss Murrinhpatha, an Aboriginal language for which both consensual interaction and rights to knowledge have been well documented (Blythe, 2009, 2013; Stanner, 1936, 1966; Walsh, 1997). Murrinhpatha verbs exhibit forms where the initial consonant is replaced by *k*-, and this alternation has hitherto been resistant to grammatical analysis. I argue that the general function of this alternation is the marking of *epistemic authority*, which can be seen as a pragmatically marked strategy in Murrinhpatha, compared to the unmarked norm of *epistemic equality* (1, 2). Epistemic authority may be claimed on the grounds of concrete perceptual access, but also on socially normative grounds – i.e. because the speaker claims the right to know. I propose that the Murrinhpatha *k*- alternation reflects the markedness of epistemic authority in Murrinhpatha culture.

- |      |                |      |   |
|------|----------------|------|---|
| (1a) | wurran         | (1b) | kurran                                      |
|      | go.3SG.NFUT    |      | go.3SG.AUTH                                 |
|      | 'She/he goes.' |      | 'She/he goes.' ( <i>speaker authority</i> ) |

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(2a)	dem-wirnturt pierce.RR.3SG.NFUT-get.up 'She/he gets up.'	(2b)	kem-wirnturt pierce.RR.3SG.AUTH-get.up 'She/he gets up.' ( <i>speaker authority</i> )
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The analysis presented here draws on recent work in the typology of 'engagement' – where grammar encodes not just propositional content, but also speakers' and addressees' epistemic relation to the content (Evans et al., 2018a, 2018b; Bergqvist & Knuchel, this volume). A canonical engagement system is that of Andoke (Witótoan: Landaburu, 2007), where all declarative and interrogative sentences have an 'auxiliary base' marking a symmetrical paradigm of the four possible configurations of epistemic access for speaker and addressee [+SPK+ADDR, +SPK-ADDR, -SPK+ADDR, -SPK-ADDR]. The concept of engagement has some overlap with the concepts of 'mirativity' (DeLancey, 1997) and 'egophoricity' (San Roque, Floyd, & Norcliffe, 2018), though engagement's focus on speaker/addressee epistemic states and attentional coordination is a closer fit for the Murrinhpatha data. Though engagement is a new typological concept, its applicability to an Australian language has already been shown for Jaminjung (Schultze-Berndt, 2017), which is an immediate neighbour of Murrinhpatha, though the languages are not closely related. A comparison of Murrinhpatha and Jaminjung engagement marking is provided below (§7).

The Murrinhpatha *k*- alternation is not canonical engagement of the type found in Andoke, but rather provides a single form for marking speaker authority, i.e. [+SPK-ADDR], while engagement is otherwise unmarked in the verb. Furthermore, Murrinhpatha *k*- is used only with third-person verbs in non-future (NFUT) tense, and is much more frequent on certain 'postural' verb stems than others. I will argue that this rather contingent type of engagement marking has probably developed by reanalysis of a person/TAM marker. I will also propose that the optionality of Murrinhpatha *k*- is expected, given what we know about Aboriginal cultural epistemology. One of the main contributions of this article is to situate the grammar of engagement in its sociocultural context, thus linking this new typological endeavour with anthropological and sociolinguistic perspectives. This article also draws on concepts from conversation analysis, since epistemic stance forms an important part of interactional management (Heritage, 2012; Stivers et al., 2011; though see Lindwall, Lymer, & Ivarsson, 2016 for a dissenting view). I analyse Murrinhpatha epistemic authority using fragments of natural discourse, in which the preceding or subsequent turns often provide crucial evidence. I draw these examples from the Murrinhpatha Morpho-corpus (Mansfield, Blythe, Nordlinger, & Street, 2018), a 100,000-word corpus of spontaneous and elicited Murrinhpatha speech, which is morphologically annotated.

In the next section I review observations of cultural epistemology and interaction in Australian Aboriginal societies generally, and in Murrinhpatha in particular (§2). I then introduce the formal characteristics of the Murrinhpatha epistemic authority marker (§3), before providing examples of its attentional coordination function in discourse (§4). I then contrast 'concrete' epistemic uses with socially normative epistemic authority (§5), and present corpus frequency evidence to support my claims of social stratification (§6). I compare Murrinhpatha and Jaminjung engagement marking (§7), then explore likely grammaticalisation pathways and reflect on connections between linguistic form and social context (§8).

## 2 Consensus and epistemic rights in Murrinhpatha interaction

The Murrinhpatha people of northern Australian were until recently semi-nomadic hunter-gatherers (Falkenberg, 1962; Stanner, 1965), but during the last century have transitioned to sedentary life in the town of Wadeye (Pye, 1972). Several language groups settled in Wadeye, but since the town was founded on Murrinhpatha land, other groups underwent language-shift to Murrinhpatha, in accordance with Aboriginal beliefs about the interconnectedness of language and place (Rumsey, 1993). Thus the Murrinhpatha speaker population has grown over the last century, and now numbers some 3000 people, with children learning it as their first language (Taylor, 2010).

It has been claimed that Australian Aboriginal societies in general prefer an interactional style that is circumspect, collaborative and consensual (e.g. Eades, 1982; Walsh, 1997). For example, it is reported that

Pitjantjatjara speakers are reticent about offering personal opinions, that talk is filled with phatic consensus markers *palya, uwa*, affirming knowledge-held-in-common, and that interlocutors often echo each others' statements (Lieberman, 1982, 1985). Statements of personal opinion, as opposed to shared knowledge, are preferably aired in early morning 'broadcast' speech, which is declaimed in the hearing of the still-sleepy group, without any specific interlocutor (Lieberman, 1985, p. 3ff.; Walsh, 1997). But while epistemic symmetry may be a general preference in Aboriginal societies, there are certain circumstances in which epistemic authority rests with particular parties, and is carefully controlled (e.g. Keen, 1994; Michaels, 1986; Mushin, 2012; Sansom, 1980). Sometimes this may simply be a matter of differential perceptual access. But it may also involve 'epistemic rights' which are particularly salient in the domains of kinship, country, totems and language. To simplify somewhat, European Enlightenment epistemology grounds knowledge in perceptual evidence and logical induction (Solomon, 1988). The knower faces the world directly, and alone. By contrast, the Aboriginal knower is situated in a kin-based social network, and epistemological access is determined by one's place in this network (cf. Shweder & Bourne, 1984; Spiro, 1993). Totems, country, ancestors and language are known because one is related to them, and this knowledge is treated as an inalienable right (Stanner, 1936, 1966).

Murrinhpatha interaction exhibits both the default consensual stance, and the emphatic demarcation of epistemic rights. In the default setting speakers often co-construct information in such a way that no speaker could be accused of assuming epistemic authority, with each speaker providing only partial contributions to a shared body of knowledge, replete with omissions and doubts. Speakers actively seek confirmation from addressees, and recruit co-narrators to provide details. In many cases this is not because the facts are actually in doubt, but because this is a socially normative form of interaction. Blythe (2009) provides conversation analysis of several Murrinhpatha interactions that demonstrate circumspection and collaboration. In one passage (Blythe, 2009, pp. 312–313), two elderly women recollect a mishap that they experienced together many years earlier (3). Other protagonists in the mishap are now deceased and their names must be avoided. Thus the passage is characterised by name avoidance (in lines 4 and 6), but there is also general scarcity of detail. The sequence initiator (EC) provides information in small chunks, while her co-narrator (PB) crafts questions to propel the narrative. The rationing of information is particularly clear in line 6, where a semantically broad noun *kura* 'liquid' is the only clue given as to the purpose of the ill-fated car trip. In this example, narrator and co-narrator have equal epistemic access to the nature of the trip (bringing beer to a bush camp) and identities of the protagonists (two deceased kin). Speakers respect this epistemic equality by refraining from providing too much information.

(3)

1. EC: Da=ka      karda=ya  
place=CST    PROX=INTJ  
'This place now.'
2. EC: Neki-ngime thim-tharrkat-ngime      trak kay=yu  
1INCL-PC.F    sit.1INCL.NFUT-STUCK-PC.F    car    PROX=CLS  
'This is where we got bogged in the car.'
3. PB: Ngananka=ya  
go.on=INTJ  
'Go on!'
4. EC: Nankungintha thini-ngintha-dha  
2PC.F                            sit.2SG.PST-DU.F-PST  
'You and another person were here.'
5. PB: Ngarra=wangu?  
where=TWD  
'Which way?'
6. EC: Kanyi-thu      kura      panthe-dha=tharra  
PROX=FROM    liquid    carry.3DU.SIBL-PST=move  
'The two siblings were bringing liquid this way.'

7. PB: Ngarra-nu-wangu mayern ngarra-nu-wangu?  
 where=DAT=TWD path where=DAT=TWD  
 ‘Which way? Which track?’
8. EC: Kanyi=ngu kanyi=ngu Dingalngu  
 PROX=TWD PROX=TWD PLACE.NAME  
 ‘This way, this way to Dingalngu.’
9. EC: Ngarra thardi-dha=kathu-ngime  
 where be.2SG.PST-PST=FROM-PC.F  
 ‘Towards where we were camping.’ (Blythe, 2009, pp. 312–313)

A further example, this time from a conversation between two young men, illustrates features of both narrative co-construction as well as epistemic non-assertiveness (4). LP initiates the narrative about typical recreational activities of young men in the town, but when BP fails to offer any contribution after four consecutive turns, LP recruits BP to fill in the next piece of information, with a direct question accompanied by a gesture (line 4). The interrogative *thangku* ‘what, why?’ in itself would be enough to formulate the question, but it is here accompanied by the enclitic =*kama* UNCERTAIN, which encodes a speaker’s uncertainty about propositional content. The =*kama* clitic is used again by both speakers in lines 5–6. However, as with the previous example (3), the facts of the matter under discussion are quite clear to each speaker, being in the domain of their own peer group. *Mi wiwi* ‘ganja’ is a mildly taboo topic, and thus provides socially normative, rather than epistemically concrete, reasons for encoding uncertainty and recruiting a co-narrator. This passage therefore demonstrates a performative aspect to the non-assertive stance (Kiesling, 2009, p. 177).

(4)

1. LP: Purtpurl kirra-dha ini=ka laif ngalla=matha  
 football stand.3ST.IRR-PST anaph=CST lively big=INTENS  
 ‘When the football is on, things really liven up.’
2. LP: Kardu kigay kani-wat-tha purtpurl  
 person young.man be.3SG.IRR-attend-PST football  
 kardu mere nangkal kani-dha tjalput=yu  
 person NEG anybody be.3SG.IRR-PST house=CLS  
 ‘The young men go to the football, nobody stays at home.’
3. LP: Kardu purni-dha da ngarra obal da=matha  
 person go.3PL.PST-PST place to oval place=INTENS  
 ‘They all go to the oval.’
4. LP: Pardi-yedhek puy puddini-wurl thangku=kama  
 be.3PL.PST-play continue TURN.3PL.PST-return what=UNCTN  
 ‘After playing they go back home, for what?’  
 (*Open-handed gesture towards BP*)
5. BP: Mi wiwi=kama  
 VEG smoking=UNCTN  
 ‘Maybe to smoke ganja.’
6. LP: Mi=kama puddini-wi  
 VEG=UNCTN TURN.3PL.PST-blow  
 ‘Maybe to smoke.’ (2012-06-30\_LP-BP)

For a contrasting example in which speakers vigorously defend their epistemic rights, we again turn to Blythe (2009, p. 331).<sup>1</sup> In this passage, the identity of someone’s deceased husband is at issue, and a

<sup>1</sup> The version presented here is somewhat abbreviated. See Blythe’s original for a fuller version, with explanation of some interactional complexities.

misunderstanding leads to a tussle over epistemic rights to the deceased (5). In lines 2–3, RI claims to know the identity of the deceased, formulating this as a statement of kin relationship. There is a complex name-avoidance technique in line 3, before RI and EC vigorously dispute each others' claims in lines 4–6. RI uses two linguistic forms to fortify her epistemic stance: firstly the *-nimin* CONTRASTIVE suffix in line 2 indicates that her proposal is in opposition to some other possible candidate(s); secondly, she uses *k-* AUTH on all verbs (underlined). Examples in the sections below further demonstrate how *k-* AUTH is associated with the stance of epistemic authority.

(5)

1. EC: Be-nirn-tha=ka                                  parram-na-ruy  
           AFFECT.RR.3SG.PST-dream-PST=CST appear.3PL.NFUT-visit  
           ngay    kardu    mamay  
           1s       person child  
           'When he was dreaming they came to visit him. I was a child.'  
           [...]
2. RI: Yuwu kardu yalngay    karrim                                  pangu-nimin=ya  
           yes    person father.1SG stand.3SG.AUTH DIST-CONTR=INTJ  
           'Yes it was actually my (classificatory) father.'
3. RI: Murrinh pana P\_\_\_\_                                  kanthin-kurran  
           name    RECOG person.name carry.3GS.AUTH-go.AUTH  
           'He had that name (related to) P\_\_\_\_.'  
           [...]
4. EC: Mere yawu ma-kardu-rdarri=wa=ngadha mere ngadha  
           NEG hey    NEG-person-back=UNXP=YET NEG YET  
           'Hey no, he wasn't born yet, not yet!'
5. RI: Kardu=ka   nhini=mana   kamam-kem                                  pangu=kathu=ya  
           person=CST ANAPH=DEDUC do.3SG.AUTH-sit.AUTH DIST=FROM=INTJ  
           'It must have been him.'
6. EC: Wurda  
           'No!'   (Blythe, 2009, p. 331)

### 3 Murrinhpatha verbs and the epistemic authority inflection

Murrinhpatha is a non-Pama-Nyungan, Australian Aboriginal language, best known in the literature for its highly complex verbal morphology (e.g. Mansfield, forthcoming; Nordlinger, 2015; Walsh, 1976). The epistemic authority marker is part of the complex inflectional system. Murrinhpatha verbs are built on 'finite verb stems'. These encompass highly irregular inflectional exponence, though they are nonetheless referred to as 'stems' in the Murrinhpatha literature because they are not clearly segmentable, and because they form the base for complex wordforms by combining with agglutinative inflectional suffixes and compounded stem elements.<sup>2</sup> Finite verb stems are a closed class of 39 members (listed in Table 2 below), each of which appears in a paradigm of 42 inflectional forms. Most verb lexemes comprise a finite stem stem base, compounded with 'coverb' and nominal elements. The following examples show a verb composed of a finite stem only (6), a finite stem plus suffixes (7), a finite stem compounded with a coverb (8), and a complex verb including compound, suffix and endoclititic elements (9).

- (6)   nungam  
           use.feet.3SG.NFUT  
           '(S)he is walking / running.'

<sup>2</sup> This element is elsewhere labeled a 'classifier stem' (e.g. Blythe, 2009; Nordlinger, 2015) or an 'auxiliary' (Walsh, 1976).

- (7) punnungam-ka-neme  
use.feet.3PL.NFUT-PC.SUBJ-PC.M  
'They (*pauc. masc.*) are walking.'
- (8) thunu-lili  
use.feet.2SG.IRR-walk  
'(You) walk!'
- (9) nungam-rti-dharl=warda=kathu-wurran  
use.feet.3SG.NFUT-bottom-open=SEQ=ABL-go.NFUT  
'Now he's slipping as he comes.' (LCh, 2015-07-01\_2-3)

It is the finite stem in which epistemic authority marking occurs. The finite stem has internal morphological structure, though as in the examples above, this is usually not shown as segmented in Murrinhpatha literature. This is partly because the inflections involve several suprasegmental alternations such as vowel fronting and consonant gemination, and partly because the morphological patterns are highly inconsistent from one finite stem to another (Mansfield, 2016b). For example, the contrast between 3SG and 3PL forms of 'use feet' in (6, 7) above is made by the addition of a *pu-* prefix and gemination  $n \rightarrow nn$ . The 2SG form in (8) takes a *thu-* prefix, and being in IRR rather than NFUT tense, loses the *-ngam* suffix. However these morphological patterns do not appear consistently with other stems. Table 1 illustrates all 42 forms of the 'use feet' stem, including epistemic authority alternations in third-person, NFUT forms. As can be seen in the table, verb stems also have *k-* in 3.IRR forms. While this may be historically related (see §8 below), its synchronic function is modal and temporal (Nordlinger & Caudal, 2012), and does not appear to have a role in engagement marking.

**Table 1.** Verb stem paradigm 'use feet' (Mansfield, forthcoming)

		NFUT (/AUTH)	IRR (/FUT)	PST	PSTIRR	
SG	1	ngunungam	ngunu	nguna	nguni	
	2	thunungam	thunu	thuna	thuni	
	3	nungam / <u>kunungam</u>	kunu / punu	na	nuy	
INCL	1	thunungam	punu	thuna	thuni	
PL	1	ngunnungam	ngunnu	ngunni	ngunni	
	2	nunnungam	nunnu	nunni	nunni	
	3	punnungam / <u>kunnungam</u>	kunnu / punnu	punni	punni	
			PC 1	ngunna	ngunna	ngunne
			2	nunna	nunna	nunne
			3	kunna / punna	punna	punne

### 3.1 Posture verb stems

Of the 39 Murrinhpatha finite verb stems, seven form a distinct class of 'postural verb stems', e.g. *dim* 'sit.3SG.NFUT', *pirrim* 'stand.3SG.NFUT' and *wurran* 'go.3SG.NFUT'. As we will see below, the AUTH inflectional form (e.g. *kem* 'sit.3SG.AUTH') is much more common with posturals than other verb stems. Postural stems can form simple verbs on their own, in contrast to other verb stems, most of which appear only in compounds. Posturals are also distinguished by their use as imperfective markers when compounded to a main verb, in which case their postural semantics may become a secondary predication (10), or may be lost altogether (11).

- (10) Kura mam-rlurluy-wurran ngarra palyirr  
 water do.3SG.NFUT-turn.PLRCT-go.NFUT LOC hill  
 ‘The river (goes) winding among the hills.’ (SeDu, 2014-10-01\_Pa1-D1)
- (11) Nungam-dim kanhi-warda-ngu  
 use.feet.3SG.NFUT-sit.NFUT PROX=SEQ=TWD  
 ‘Now he’s coming this way.’ (MiKu, 2011-08-21\_3-1)

Postural predication may also be secondary in simple verbs. The simple forms, especially ‘stand’ and ‘sit’, have additional functions in copula, locative and existential constructions (12–14). As we will see below, the high frequency of AUTH with posture verbs is associated with their existential and locative usage.

- (12) Le wiye dim  
 spirit bad sit.3SG.NFUT  
 ‘He is (sitting) unhappy.’
- (13) Nanthi het pirrim ngarra teibul  
 THING hat stand.3SG.NFUT LOC table  
 ‘The hat is (standing) on the table.’ (20161101-MP36)
- (14) Yuwu kuk pirrim  
 yes still stand.3SG.NFUT  
 ‘Yes he’s still (standing) there.’ (2012-07-19\_BB-SB-RM)

### 3.2 The *k*- alternation

Epistemic authority is encoded by an initial *k*- consonant on third-person, NFUT verb stems, which are the most frequent person/TAM forms in discourse.<sup>3</sup> The *k*- consonant usually replaces the initial consonant of the 3SG.NFUT form (15–17), though in a few verb stems a *ka*- ~ *ku*- syllable is added (18, 19). Under some morpho-phonological analyses this may be considered a prefix (Mansfield, forthcoming), but I here refer to it as ‘the *k*- alternation’.<sup>4</sup> The *k*- alternation is thus more irregular, and more contingent on grammatical context, than canonical engagement systems. In the glossing system used by Evans et al (2017a), *k*- encodes +SPKR-ADDR.ENGAG, but since *k*- does not contrast with other SPKR/ADDR values, I gloss it simply as ‘AUTH’.

- |   |   |
|---|---|
| (15a) wurran<br>go.3SG.NFUT   | (15b) kurran<br>go.3SG.AUTH   |
| (16a) yibim<br>lie.3SG.NFUT   | (16b) kabim<br>lie.3SG.AUTH   |
| (17a) dam-thuthu<br>use.mouth.3SG.NFUT-hoot.PLRCT<br>‘Play didgeridoo.’ | (17b) kam-thuthu<br>use.mouth.3SG.AUTH-blow.PLRCT<br>‘Play didgeridoo.’ |
| (18a) nungam<br>use.feet.3SG.NFUT                                       | (18b) kunungam<br>use.feet.3SG.AUTH                                     |
| (19a) mam<br>do.3SG.NFUT  | (19b) kamam<br>do.3SG.AUTH  |

<sup>3</sup> 3SG.NFUT accounts for about 25% of all finite verb stems in the Murrinhpatha Morpho-corpus (total *N* = 6197), which is about double the frequency of the next most popular person/TAM values, namely 1SG.NFUT and 3SG.PST (Mansfield, Blythe, Nordlinger, & Street, 2018).

<sup>4</sup> For example, *kem* sit.3SG.AUTH can be analysed as vowel coalescence from an underlying *ka-i-m* structure (Mansfield, forthcoming).

AUTH forms appear to be possible for all finite verb stems, but they are infrequent for most. They are also infrequent in plural forms. Table 2 illustrates the percentage of 3.NFUT stem tokens that use AUTH forms in the Murrinhpatha Morpho-Corpus. For posture verb stems, AUTH is relatively common (8–64% of instances), while for other verb stems it is rare or absent in the corpus ( $\leq 5\%$  of instances), though it may be elsewhere attested in elicitation. There are three verb stems which have *k-* in all 3SG forms: *kanam* ‘be’, *kanthin* ‘carry’ and *kanthangan* ‘crouch’. These three verb stems therefore do not encode epistemic stance, and are excluded from examples and token-counts below.<sup>5</sup>

**Table 2.** Corpus percentage of 3.NFUT verb stems with AUTH marking. Each stem is illustrated in 3SG.NFUT, 3SG.AUTH forms. Question marks appear where AUTH is unattested. Stems glossed in SMALL CAPS are semantically bleached, and their glosses are largely conventional (Mansfield, 2019).

Stem	% AUTH (N)	Stem	% AUTH
<i>mam</i> ~ <i>mangan</i> , <i>kamam</i> ~ <i>kumangan</i> ‘use hands’	0% (661)	<i>dirrangan</i> , <i>kirangan</i> ‘watch’	0% (36)
<i>mam</i> , <i>kamam</i> ‘do’	0% (784)	<i>wurdan</i> , <i>kurdan</i> ‘TURN’	5% (130)
<i>mem</i> , ? ‘hands.RR’	0% (169)	<i>wurdam</i> , <i>kurdam</i> ‘TURN.RR’	1% (201)
<i>mungam</i> , <i>kumungam</i> ‘COERCE’	0% (3)	<i>wulam</i> , ? ‘eat’	0% (8)
<i>mim</i> , <i>kumim</i> ‘look’	0% (9)	<i>yungan</i> , <i>kungan</i> ‘pull’	0% (22)
<i>bam</i> ~ <i>bangam</i> , <i>kubangam</i> ‘AFFECT’	0% (266)	<i>yungam</i> , <i>kungam</i> ‘pull.RR’	0% (25)
<i>bem</i> , ? ‘AFFECT.RR’	0% (31)	<i>kanthangan</i> , <i>kanthangan</i> ‘crouch’	NA (0)
<i>bim</i> , ? ‘hear’	0% (23)	<i>dirrim</i> , <i>kirrim</i> ‘watch.RR’	0% (31)
<i>ban</i> , <i>kuban</i> ‘DESCEND’	0% (69)	<i>dilim</i> , <i>kilim</i> ‘wipe.RR’	0% (0)
<i>bam</i> , ? ‘DESCEND.RR’	0% (39)	<i>ningam</i> , ? ‘heat.RR’	0% (5)
<i>dam</i> , <i>kam</i> ‘use.mouth, PIERCE’	3% (410)		
<i>pangam</i> , <i>kangam</i> ‘appear’	4% (50)	POSTURE VERB STEMS	
<i>dem</i> , <i>kem</i> ‘PIERCE.RR’	1% (134)	<i>dim</i> , <i>kem</i> ‘sit’	27% (549)
<i>kathin</i> , <i>kanthin</i> ‘have’	NA (80)	<i>yibim</i> , <i>kabim</i> ‘lie’	38% (82)
<i>pan</i> , ? ‘SLASH’	0% (158)	<i>pirrim</i> , <i>karrim</i> ‘stand’	64% (305)
<i>pam</i> , <i>kam</i> ‘SLASH.RR’	2% (52)	<i>kanam</i> , <i>kanam</i> ‘be’	NA (524)
<i>yingam</i> , <i>kingam</i> ‘put together’	0% (22)	<i>pinthim</i> , <i>kanthim</i> ‘perch’	33% (18)
<i>dilam</i> , <i>kilam</i> ‘wipe’	0% (1)	<i>wurran</i> , <i>kurran</i> ‘go’	22% (302)
<i>ninangam</i> , <i>kinangam</i> ‘heat’	0% (15)	<i>nungam</i> , <i>kunungam</i> ‘use feet’	8% (158)

## 4 Attentional coordination functions

The function of the Murrinhpatha *k-* alternation has proven somewhat elusive, as its use does not have obvious translational consequences in English. Nordlinger and Caudal (2012, pp. 101–102) note that its function is ‘not well understood’, and report that an informant provides both the AUTH and the epistemically unmarked NFUT form to describe the same situation (20).<sup>6</sup>

<sup>5</sup> In fact these verbs do have *p-* prefixes in 3PL forms, though plural forms in general very rarely carry epistemic marking, so they are de-facto excluded from this analysis.

<sup>6</sup> Nordlinger and Caudal also show that AUTH inflected stems need not agree in the imperfective verb serialisation structure, where stems generally agree for TAM. The main stem may be NFUT while the imperfectivising serial stem is AUTH, or vice versa (Nordlinger and Caudal 2012: 102). The corpus provides further examples of this non-agreement, e.g. *kunungam-pirt-wurran* ‘use.feet.3SG.AUTH-leave-go.NFUT’ (MM, 2011-09-13\_2-11).



(20a) kem-tharl  
 sit.3SG.AUTH-bathe  
 ‘He’s sitting in the bath-tub.’

(20b) dim-tharl  
 sit.3SG.NFUT-bathe  
 ‘He’s sitting in the bath-tub.’ (Nordlinger and Caudal 2012, pp. 101–102)

I argue here that AUTH is not required to encode any grammatical or semantic feature of event structure. Rather, it is a pragmatic stance, which explains why speakers in elicitation generally neither insist on it, nor dismiss it as incorrect. Below I exemplify the usage of AUTH for ‘attentional coordination’ – in particular, where the speaker is attending to something, and presumes that the addressee is not. One Murrinhpatha speaker explained AUTH to me as ‘You can see it,’ which I interpret as an indicator of this attentional function. As in other forms of grammatical engagement, attentional coordination may relate to entities, or to events (Evans et al., 2017b). Entity attention is coordinated by existential and locative constructions (§4.1), while event attention is coordinated by verbal predicates (§4.2).

#### 4.1 Existential and locative constructions

Previous studies including Nordlinger and Caudal (2012) and Street and Kulampurut (1978) have labelled the *k*- alternation ‘existential’ and described it as ‘asserting the existence of an entity, place, state or event’ (Nordlinger & Caudal, 2012, p. 101). In fact many of the examples are existential and/or locative, and it is typologically common for these meanings to overlap (Bentley, Ciconte, & Cruschina, 2013). As mentioned above, Murrinhpatha encodes locative and existential predicates using ‘posture verbs’, and in these functions the posture verbs are indeed very frequently marked with the *k*- alternation, which has led to its interpretation as an existential marker. However I will argue below that the existential/locative function is best understood as one usage case in which attentional coordination is particularly frequent. Intersubjectivity is implicit in existentials, which presume an entity to be inaccessible to the addressee (Freeze, 2001; Lambrecht, 1994, p. 179).

The use of AUTH in an existential construction is illustrated in (21). EC uses the unmarked NFUT to enquire about the presence of a desirable fruit species (line 1). LT somewhat distractedly answers in the affirmative (line 2), but EC indicates ongoing uncertainty (line 3). The failure to coordinate attentional states has now become salient, leading LT to use AUTH in asserting fruit’s existence and location (line 4).

- (21)
1. EC: Nga mi=ka kilern=wa nawa dim ... mi-thangku?  
 hey VEG=CST green.plum=UNXP right sit.3SG.nfut ... VEG-which  
 ‘Hey that’s green plum isn’t it? Which fruit is it?’
  2. LT: Mm pam-terte-dim  
 mm SLASH.3SG.NFUT-stick.out-sit.NFUT  
 ‘Mm, it’s coming into flower.’
  3. EC: Na?  
 ‘Is it?’
  4. LT: Kem kanhi  
sit.3sg.auth PROX  
 ‘There’s some here.’ (JB20040912Dingalngu)

Some existential examples have an ‘alert’ function, where the speaker draws the addressee’s attention to an entity that should concern them (22, 23). Conversely, AUTH may be used in assertions of non-existence where the addressee falsely assumes the contrary (24).

(22) Ya ku-thirrinhin pangu kurran-kem  
 hey ANIM-skink there go.3SG.AUTH-sit.AUTH  
 ‘Hey, there’s a skink crawling along there!’ (LAMP\_20140321\_LD\_01)

(23) Ngawu bidio karrim pangathu nebirl  
 hey video stand.3sg.AUTH over.there look  
 ‘Hey look, there’s a video camera there!’ (2012-07-19\_B-S-R)

(24)

1. PB: Kura=kathu!  
 liquid=RQST  
 ‘Give me some water!’
2. EC: Nanthi ngu-  
 thing  
 ‘The thing-’
3. PB: Na-nga-yit kura=wa mam-pirra  
 use.hands-1SG.OBL-hold liquid=UNXP do.1SG.NFUT-3PL.OBL  
 ‘Hold it for me, I got them water.’
4. EC: Ma-kura=ya karrim  
 NEG-liquid=INTJ stand.3SG.AUTH  
 ‘There is no water here.’ [holding out empty bottle]  
 (Blythe, 2018b, fragment 10)

While AUTH is common in existential/locative constructions, it is not grammatically required. Thus we also find existentials where the epistemically unmarked NFUT form is used (25, 26). Here we see NFUT used where the interlocutors have already signalled their shared attention to the referent (25), and when an existential is cautiously offered for confirmation (26). These are both co-constructed passages, with no speaker taking an authoritative stance.

(25)

1. SB: Nukunu pana=ka B\_\_\_  
 3SG.M RECOG=CST PERSON.NAME  
 ‘That guy, B\_\_\_.’
2. RM: Dam-thiwik na  
 PIERCE.3SG.NFUT-drown right?  
 ‘He drowned eh?’
3. SB: Dam-thiwik  
 PIERCE.3SG.NFUT-drown  
 ‘He drowned.’
4. SB: Pangu-da=wangu ini-yu Deliriba pangu=de=ya  
 DIST-LOC=TWD ANAPH=CLS place DIST=ITER=INTJ  
 ‘At that place, Daly River.’
5. BB: Kuk pirrim nawa  
 still stand.3SG.NFUT right?  
 ‘He’s still there (in ghost form) eh?’
6. SB: Yuwu kuk pirrim  
 yes still stand.3SG.NFUT  
 ‘Yes he’s still there.’ (2012-07-19\_BB-SB-RM)

(26)

1. PP: Belyuen pawathu=warda Dawun eriya=kathu  
 PLACE DIST=SEQ PLACE area=FROM  
 wurdan-ka-wurl-nime kanhi=matha  
 TURN.3SG.NFUT-PC-return-PC.M PROX=INTENS  
 ‘From Belyen, then from the Darwin area they came back down here.’
2. DP: Da rud pirrim ngawa wilili-nukun=yu  
 place path stand.3SG.NFUT right? walk-GEN=CLS  
 ‘There’s a walking path, right?’
3. DP: Da tjutkat nukunu wilili-nukun  
 place back.road 3SG walk-GEN  
 ‘The back-road he took is a walking path.’
4. PP: Wilili=warda pangu=yu dam-ngkardu-thim  
 walk=SEQ DIST=CLS AFFECT.2SG.NFUT-see-sit.NFUT  
 ‘He walked that way, you know.’ (2011-08-30\_GM-AM\_2-1)

A final example demonstrates how AUTH and the epistemically unmarked NFUT align with attentional coordination (27). This passage is the continuation of the ‘drowned man’ passage above. BB uses AUTH to propose a tree as a reference point, but RM does not yet recognise the reference (lines 1, 3). RM then offers his own tree, seeking coordination from his own reference point, for which he also uses AUTH (line 4). It is only after the interlocutors reach a shared epistemic representation of the tree that BB switches to the NFUT form (line 6).

(27)

1. BB: Ngarra thay wikal karrim pawathu dam-ngkardu  
 where tree small stand.3SG.AUTH DIST affect.2SG.NFUT-see  
 ‘(He is) where that little tree is, you know?’
2. RM: Thay ngarra  
 tree what  
 ‘What tree?’
3. BB: Thay wikal karrim pangathu  
 tree small stand.3SG.AUTH DIST  
 i da mi ngukin nukunu-nukun  
 and place VEG shit 3SG.M-GEN  
 ‘There’s a little tree there, and some cow dung.’
4. RM: Yuwu thay ngarra-nimin ... thay karrim kanhi=ngu  
 yes tree what-CONTR tree stand.3SG.AUTH PROX=TWD  
 ‘Yes, which tree... the tree (standing) on this side?’
5. BB: Yuwu thay wikal pangu-nimin dam-ngkardu  
 yes tree small DIST-CONTR AFFECT.2SG.NFUT-see  
 ‘Yes, that little tree’s the one, you see?’
6. BB: Ini=matha pirrim  
 ANAPH=INTENS stand.3SG.NFUT  
 ‘It’s right there.’ (2012-07-19\_BB-SB-RM)

## 4.2 Use with other types of predicates

Examples above show that AUTH can be used with existentials and locatives, but is not grammatically required for them. Conversely, we also find examples where AUTH is used in predicates that are not existential or locative. Some of these use postural stems in compound verbs, where the primary predication

is no longer postural. Other examples illustrate AUTH in non-postural verb stems. These examples show that the best generalisation about AUTH usage involves epistemic pragmatics, rather than existential/locative semantics.

Examples (28, 29) illustrate ‘alert’ situations, which are like (22, 23) above in that the speaker draws the addressee’s attention to something that should concern them. But whereas the above examples alerted addressees to entities, these two examples alert addressees to events (watching, recording). In (28) three speakers know that they are being recorded and are wondering what they should talk about. In line 2, KM observes that the camera is on, but this is already clear to all participants, so it is encoded with NFUT. But in line 3, BB makes the more startling observation that the researcher is looking at them (the researcher was standing some way off, trying to be unobtrusive), so they should start speaking. BB presumes that his addressees are not aware of this, and therefore encodes the ‘watching’ predicate with AUTH.

(28)

1. BB: Murrinh manipirr ini u wurda  
language type ANAPH or no  
‘Should we talk like that, or not?’  
[...]
2. KM: Wakay nanthi on=warda pirrim pana=yu  
finish thing on=SEQ stand.3SG.NFUT RECOG=CLS  
‘Come on, the camera is on now.’
3. BB: Ku pangathu kirrim-nhi-bath-nime start=warda  
ANIM DIST watch.3SG.AUTH-1INC.OBJ-watch-PC.M start=SEQ  
‘That whitefella is watching us, (let’s) start!’ (2012-07-19\_BB-SB-RM)

Example (29) is quite similar to the previous. In this instance, the addressees had been aware that they were being recorded, but in line 2 LT seems to forget this when she playfully insults DT. SB then reminds her that she is being recorded, using AUTH to imply her ignorance of this fact.

(29)

1. DT: Da mere-ngarra kunnu-ki ku-bamam=yu nawa  
place NEG-what use.feet.PL.IRR-sit.IRR ANIM-white=CLS right?  
‘Whitefellas can’t go that place, right?’
2. LT: Thangku mi wiye mi kanhi=yu  
what VEG bad VEG PROX=CLS  
DT kanam-nhe-kut=yu  
PERS.NAME be.3SG.NFUT-1INCL.OBL-collect=CLS  
‘What’s this shitty food DT got for us?’
3. SB: Thangku yawu ... aa tju=wa  
what hey ah violence=UNXP  
‘What’s that! ... Hey (you’re) fighting!’
4. SB: Pirda tju mere-nukun thun-put  
don’t violence NEG-ADVERS use.feet.2SG.IRR-fight  
nanthi kanyi=thu karrim-nhi-ngawurt  
thing PROX=FROM stand.3SG.AUTH-2SG.OBJ-catch.PLRCT  
‘Don’t fight! This thing is recording you!’ (2015-03-30\_DT-LT-SB)

A final example (30) shows a speaker using AUTH when correcting the addressee’s misconceptions about a state of affairs. In line 1, SD makes an incorrect supposition about an aeroplane being the cause of an engine noise. LP provides an alternative guess (line 2), before adducing visual evidence that his proposal is epistemically superior (lines 5–6).

(30)

1. SD: Yerreplan=mana da=warda  
aeroplane=DEDUC time=SEQ  
'(That sound) must be the aeroplane.'
2. LP: Ngarra=ngu ... biyeit M\_\_\_-nukun  
where=TWD V8 PERS.NAME-GEN  
'Which way? ... M\_\_\_'s V8 (car engine)?'  
[...]
3. SD: Ngarra=de=ngu  
where=ITER=TWD  
'Which way now?'
4. LP: Kanhi ngirram-yirlbirl  
PROX stand.1SG.NFUT-look.PLRCT  
'This way that I'm looking.'
5. LP: Trak pangu=ya  
car DIST=INTJ  
'There's the car!'
6. LP: Puba-ngkardu-ngime trak kanhi kurran-ngerren  
AFFECT.1INCL.IRR-see-PC.F car PROX go.3SG.AUTH-sound  
'We'll see this car rumbling along.' (2015-07-09\_SD-LP)

### 4.3 A cognate prefix in Ngan'gi

Murrinhpatha's sister language Ngan'gi has a cognate *g*- verb prefix, which has also proved somewhat elusive to grammatical analysis (Hoddinott & Kofod, 1988, p. 113; Reid, 1990, pp. 108–111). Reid tentatively proposes that Ngan'gi *g*- encodes 'states that are remote from the speaker, either spatially distant or conceptually distant', labeling the category 'subject remote' (SR) (p. 110). In terms of engagement theory (Evans et al., 2017a), we may interpret Reid's formulation of 'conceptually distant' as meaning 'epistemically inaccessible'. But whereas Reid focuses on the epistemic state of the speaker, engagement theory highlights the epistemic coordination of speaker and addressee. This leads us to note that in each of Reid's examples, the speaker is attending to something that can be construed as inaccessible to the addressee (31, 32). Thus the Ngan'gi *g*- prefix may have a similar function to the Murrinhpatha *k*- alternation. On the other hand, Reid's examples involve more 'out of sight' or 'in the distance' predicates, which raises the possibility that the Ngan'gi cognate is more specifically related to visibility.

#### *Ngan'gi*

- (31) Yu Darwin kine, wembem yaga,  
yes PLACE.NAME this house DEM  
buy-gumum-derri-gaganim  
white-do.3SG.PRS.SR-back-go.3SG.PRS.SR  
'Yes this is Darwin alright, the houses are standing out white in the distance.'
- (32) Yu wetimbi kinyi gibem  
yes didgeridoo here lie.3SG.PRS.SR  
'Yeah OK! (the didgeridu) is here (inside the house / out of sight).' (Reid 1990: 111)

Ngan'gi also furnishes examples where the predicate is not existential or locative. In (33) the speaker has asymmetric access to the identity of someone on the other end of the telephone, and the 'talking' predicate is thus marked with AUTH.

*Ngan'gi*

- (33) Ty\_\_\_        girim-terrakul    yi-tyerr-gat-pe  
 PERS.NAME    sit.3sg.prs.sr-talk    sit.2SG.IRR-mouth-answer-FUT  
 'It's Ty\_\_\_ talking (on the phone), will you speak?' (Reid 1990: 111)

## 5 Socially normative authority and 'heavy speech'

The functions of AUTH described above involve epistemic asymmetry rooted in actual differences of perceptual access, recognition of a referent, or at least presumed differences where the speaker believes the addressee to be unaware of something. But examples of this type do not account for all the corpus instances. There are other instances in which the speaker does not have superior epistemic access via physical perception such as visibility or audibility, but rather on socially normative grounds, because their social status makes it proper for them to have special knowledge of some referent (see §2 above). Enfield characterises this type of epistemic stance as 'source-based authority' versus 'status-based authority' (Enfield, 2011, p. 300). In the typology of engagement, it is notable that some systems like Kogi (Chibchan: Bergqvist, 2016) separate out epistemic *authority* and epistemic *accessibility*, whereas Murrinhpatha conflates the two.

In this section I discuss how Murrinhpatha AUTH is indexical of 'stance' in the sociolinguistic sense (e.g. Jaffe, 2009), which is somewhat different from the sense used in studies of epistemic management (e.g. Heritage, 2012). Each of these literatures draws attention to a different aspect of how speakers situate themselves in discourse. Whereas epistemic studies tend to abstract away from the different social identities of speakers, sociolinguistic stance focuses on culturally specific tropes that speakers draw upon in the course of linguistic interaction. For example, Kiesling (2004) shows how the term *dude* in American English indexes a stance of 'cool solidarity', which is a highly valued form of youth masculinity in their cultural milieu (Kiesling, 2004). In the case of Murrinhpatha AUTH, we will see how a culturally specific stance can shape the use of engagement grammar.

### 5.1 Totemic references

In Murrinhpatha and other Aboriginal languages there is a narrative genre in which a speaker describes their totemic spirit beings, and in this genre AUTH is used extensively. Murrinhpatha people are spiritually connected to tracts of country over which they have ownership, and to spirit forms of the animals and plants that reside there (Falkenberg, 1962; Stanner, 1936). As mentioned above (§2), kin connections establish knowledge of the landscape and its totemic as epistemic rights, though lived experience can also play a role (Keen, 1994; Myers, 1986). Thus Murrinhpatha totemic narratives exhibit a form of socially normative epistemic authority. Extensive reproduction of such narratives would be inappropriate in this article, but in any case this is not required, as the use of AUTH in totemic narratives does not depend on preceding discourse context. The AUTH verbs are used for most references (either first-mention or subsequent) to places and totemic beings (34, 35).

- (34) P\_\_\_\_\_        karrim        burrburr=warda  
 PLACE.NAME    stand.3SG.AUTH    cold=SEQ  
 'P\_\_\_\_\_ is the cold place.' (2008-09-25\_ThNa\_Thithay)
- (35) kardu    wak    pana=ka    ngangka-rda    kem  
 person    crow    RECOG=CST    DIST-LOC        sit.3SG.AUTH  
 K\_\_\_\_\_        da=wangu  
 PLACE.NAME    place=TWD  
 'That crow-man is there in the K\_\_\_\_\_ area.' (20041016\_Da-Nirрпи)

While key totemic references use AUTH marking, epistemically unmarked NFUT may be used for other commentary. In (36), the narrator uses AUTH to locate a totemic place (line 1), but then uses NFUT to comment on the dangers of visiting (lines 2, 3).

(36)

1. K\_\_\_\_\_ karrim nanthi thay kala  
 PLACE.NAME stand.3SG.AUTH thing tree bloodwood  
 ‘The bloodwood tree is there at K\_\_\_\_\_.’
2. Nangkal-ngatha kurru da pangu=ka  
 someone-COND go.3SG.IRR place DIST=CST  
 thigalan=wa=kathu ma-wuy-kurru  
 cyclone=UNXP=FROM do.3SG.IRR-exit-go.IRR  
 ‘If anyone goes there, a cyclone will appear.’  
 [...]
3. Bem-ke-dim beremathangu pan-pekarl-dim  
 AFCT.RR.3SG.NFUT -avoid-sit.NFUT always SLASH.3SG.NFUT-spin-sit.NFUT  
 ‘It should be avoided, (that wind) will go round and round.’  
 (2008-09-25\_ThNa\_Thithay)

The frequent use of AUTH in totemic narratives is partly explained by the prominence of existential and locative constructions in this genre, as in (34, 35) above. However the frequency in totemic existentials goes beyond that of other speech types, becoming almost categorical. The effect may be incremented when addressing an out-group researcher (as in the examples above), as this produces a particularly great asymmetry of sacred knowledge. But use of AUTH in referring to totems is not solely existential, and is not limited to out-group addressees. In example (37), classificatory sisters AN and CP are looking at the sun. AN uses AUTH in a locative construction (line 2), and CP again uses it observing that the sun is setting (line 3). CP refers to the sun as ‘our mother’ because it is a totem for the two women’s matrilineal clan. In this instance, speaker and addressee have equal perceptual and attentional access to the setting sun, but the AUTH form is used as part of the conventionalised usage for totemic references.

(37)

1. CP: yuwu tina=ka dhi=kathu=wa  
 yes sun=CST DIST=FROM=UNXP  
 ‘Yes, the sun is right there.’
2. AN: karrim kanhi=rda=ya  
 stand.3SG.AUTH PROX=LOC=INTJ  
 ‘It’s right there.’
3. CP: mama neki dhi=kathu kem-buktharr  
 mother 1INCL DIST=FROM sit.3SG.AUTH-be.red  
 ‘Our mother there (the sun) is setting.’ (2011-08-28\_JB\_03)

## 5.2 Sociolinguistic stance and ‘heavy’ speech

Socially normative epistemic authority in Murrinhpatha is associated with sacred knowledge, but also has a lot to do with the social role of the speaker. Speakers may take up an authoritative stance in any discourse situation, if they feel that they have the appropriate social status. Differential social rank may be founded in greater age than the addressee, or a senior kinship relation to the addressee. Examples of this authoritative stance can be seen in Murrinhpatha recordings of the Family Problems Picture Task (Barth & Evans, 2017; San Roque et al., 2012), where pairs of speakers collaboratively describe a series of sixteen pictures, then devise a sequence for the pictures to form a coherent narrative. Some Murrinhpatha recordings of this task

involve senior/junior kin pairings, and in these recordings we find the senior partner repeatedly using AUTH, while the junior partner uses it little or not at all. There is no concrete asymmetry in epistemic access here, as both speakers are looking at the same pictures. Neither is the use of AUTH restricted to existential or locative functions. For example, NT is the grandson of LT, and with his better eyesight, he initiates description of most of the pictures presented. He does so predominantly using the epistemically unmarked NFUT form, while LT responds with repetitions or further commentary, making far more frequent use of the AUTH form (38, 39).<sup>7</sup>

(38)

1. NT: Kura dim-tha-gurdu<sup>2</sup>duk  
 liquid sit.3SG.NFUT-DUAL-drink.PLRCT  
 ‘The two of them are sitting drinking.’
2. LT: Kardu kay=yu ... kibim-ka-gurdu<sup>2</sup>duk-nume awu  
 person PROX=CLS ... stand.3PL.AUTH-PC.SUBJ-drink.PLRCT-PC.M no  
 ‘These people ... they’re drinking, oh no!’

(39)

1. NT: Ngarra kardu nimi dim-gurdu<sup>2</sup>duk=ka kuy=nukun  
 REL person one sit.3SG.NFUT-drink.PLRCT=CST fight=adverse  
 nimi kardu patha ne  
 another person good right?  
 ‘When this one drinks he tries to start a fight, but this other one is a peaceful man, eh?’
2. LT: Yuwu yuwu kardu kem-nintha pana-nimin pepe  
 yes yes person sit.3SG.AUTH-DU.M RECOG-CONTR below  
 ‘Yes yes, the two men sitting below.’

AUTH thus contributes to the linguistic construction of a senior, authoritative sociolinguistic stance. This stance is indexed by a recognised speech style, *murrinh yitthit* ‘heavy speech’, which is contrasted with *murrinh pamturtparn* ‘light speech’. *Murrinh yitthit* also involves the use of more archaic vocabulary, which may not be fully understood by all addressees (Mansfield, 2014, p. 129ff.; Walsh, 1976, p. 5). One speaker explains the *yitthit* style as being ‘like the Queen’s English’, while another describes it as language *da nginalmin-kathu*, ‘from the roots’. *Murrinh yitthit* is associated with age, place and clan heritage. As mentioned above, the founding of a Catholic mission on Murrinhpatha land led to community-wide language shift among other groups in the area from the 1940s onwards. Thus contemporary Murrinhpatha has around 3000 speakers, but not all of them have Murrinhpatha patrilineal heritage, which confers the right to speak *murrinh yitthit*. Similar speech styles (sometimes labelled ‘big’ or ‘deep’ speech) are recognised in many Australian Aboriginal communities, including Gooniyandi (McGregor, 1990, p. 8), Ndjébbana (McKay, 2000, p. 159), Nyikina (Stokes, 1982, p. 1) and Ngan’gi (Reid & McTaggart, 2008, p. 321). One of the more carefully documented cases is in the Wik dialect cluster, where ‘big’ speech is an esoteric style marking seniority, and considered to be beyond the comprehension of young people (Sutton, 1978, pp. 184, 223).

## 6 Quantifying AUTH usage by corpus genre

I observed in the previous section that the propensity to use AUTH varies substantially according to speaker, topic and speech types. The Murrinhpatha Morpho-Corpus provides further insight on this variation, thanks to its coding of texts for age, genre and subgenre. The ‘genre’ tag is used to make a coarse division of texts into Conversation, Elicitation and Narrative types. Within the latter two genres there is further ‘subgenre’

<sup>7</sup> LT uses AUTH in 31% of possible instances ( $N=71$ ), while NT uses it in only 10% of possible instances ( $N=53$ ). The fact that NT uses AUTH at all may be attributed to attentional coordination functions, while LT’s elevated rate of usage only seems explicable in terms of social roles.



coding, as shown in Table 3. The table illustrates the percentage of eligible verbs in which the AUTH form is used, given that the marker is used only on 3.NFUT forms, and only shows a substantial frequency with the posture verb stems. There are a total of 1414 stem tokens of this type, which is a large enough sample to give a general idea of the trends, though statistical analysis would require taking into account speaker identity, age and the precise mix of verb stems used.<sup>8</sup>

**Table 3.** Percentage of AUTH usage by (sub)genre, with total number (N) of eligible verb tokens.

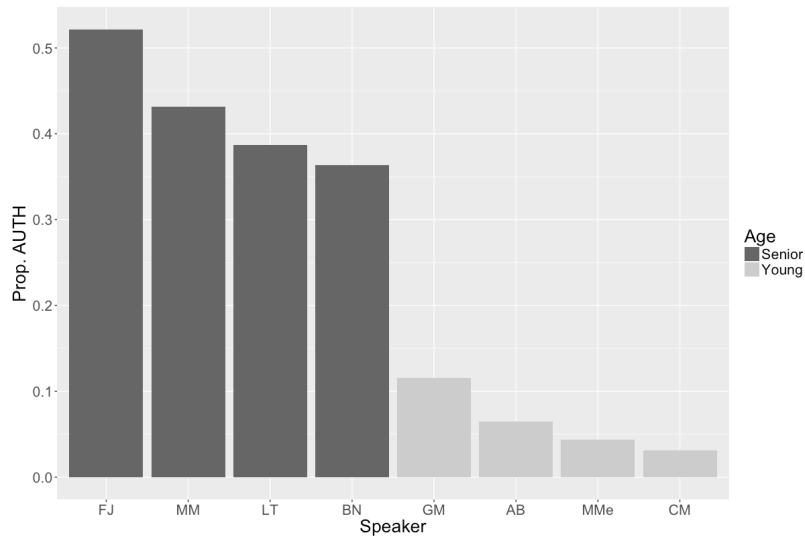
GENRE	%AUTH (N)	SUBGENRE	%AUTH (N)
Conversation	44% (430)	-	44% (430)
Elicitation	17% (482)	Grammatical	3% (73)
		Picture stimulus	8% (227)
		Video stimulus	34% (182)
Narrative	37% (502)	History	36% (190)
		Totemic	53% (190)
		Translation	12% (122)

Conversation and Narrative appear to have similar rates of AUTH usage, in their broad classification. However the finer-grained subgenre coding of Narrative types reveals substantial variation. Totemic narratives have the most frequent AUTH usage of all types, reflecting socially normative authority as discussed above. History narratives include a mixture of town history, personal history and some descriptions of cultural traditions, and these also have a fairly high rate of AUTH usage. Translation narratives are Murrinhpatha translations of English-language sources (the Bible and some education texts). These have a far lower rate of AUTH usage, reflecting the fact that the speakers have no authority over these texts, either from personal experience or epistemic rights. All Narrative texts are monologues with researchers as the immediate audience, so audience differences are unlikely to account for AUTH frequency differences among subgenres.

AUTH is used less frequently in the Elicitation genre, presumably because consultants producing elicited phrases do not vouch for the content of the elicited phrase, but only for its grammaticality. There is less reason for a speaker in elicitation to encode epistemic authority over a state of affairs, when the propositional content is provided by the linguistic researcher. However, within the Elicitation genre, it is evident that Video stimulus produces a significantly higher rate of AUTH usage. This is somewhat surprising, given that Video stimulus narratives, like other Elicitation texts, describe content provided by the linguistic researcher, rather than knowledge that is in the speaker's domain of authority. However there are some possible explanations for this discrepancy. The Video stimulus subgenre comprises a series of eight recordings in which speakers describe events unfolding in classic silent films by Charlie Chaplin, Mr Bean, and Laurel and Hardy (Mansfield, 2014, pp. 18–21). These provide fast-moving, complex visual material in comparison to the other elicitation subgenres. It is thus the Video material in which the speaker has more scope to assume that the addressee (either an imagined addressee, or the researcher) has not noticed certain elements of the action, and needs to have them pointed out.

It is possible to further analyse the Video subgenre by speaker seniority. The corpus contains eight runs of this elicitation task, four with speakers aged 60 or older (two male, two female), the other four with speakers aged 18–22 (all male). Dividing the text in this way shows that it is the senior speakers who provide the vast majority of the AUTH tokens, and that the split between senior and junior speakers is quite consistent. As Figure 1 illustrates, the senior speakers use AUTH in 35–50% of instances, while young speakers use it in 5–10% of instances.

<sup>8</sup> Speaker age is likely to affect frequency of AUTH, and this should be taken into consideration when interpreting Table 3. Conversation and Elicitation genres both have a wide mix of speaker ages. Narrative is more dominated by senior speakers, but this is so for all three of the Narrative subgenres.



**Figure 1.** Proportion of AUTH used by senior (dark) and young (light) speakers in an identical video-elicitation task (senior speakers N=97, young speakers N=85).

One of the ‘senior’ video elicitation sessions represented above further reinforces the connection between frequent use of AUTH and the *murrinh yitthit* speech style. MM (43% AUTH) is an elderly female speaker of Murrinhpatha clan heritage, who had been introduced to me as one who is able to (has the right to) speak *murrinh yitthit*. Before making the recording, she confirmed that she would be speaking *murrinh yitthit*, though we did not discuss any specific linguistic forms. Apart from having a high percentage of AUTH usage, MM uses the inflection in a wider variety of verb stems than other speakers. As we have seen, AUTH usage is concentrated in postural verb stems (§3). But in MM’s characterisation of *murrinh yitthit*, she uses AUTH on nine different verb stems, including non-posturals such as *kam-* ‘PIERCE’, *kirran-* ‘watch’ and *kurdan-* ‘TURN’ for which the AUTH form is rarely attested (40, 41, see Table 2 above). There is nothing in the discourse context of these examples that suggests attentional coordination; rather, they appear to be purely stylistic markers.

(40) kirran-nintha-bath-kanam                      kam-nintha-ngkarda-kanam  
 watch.3SG.AUTH-DU.M-look-be.NFUT    PIERCE.3SG.AUTH-DU.M-point-be.NFUT  
 ‘The two men are looking around, they are pointing at something.’

(41) dhi=wangu              kurdan-nintha-ngkarl-tharra  
 DIST=TWD              TURN.3SG.NFUT-DU.M-return-move  
 pangu-da=ngu    kangkarl=nu  
 DIST-LOC=TWD    above=DAT  
 ‘They are taking it back up there to the top’

While different rates of AUTH usage among older and younger speakers can be clearly demonstrated, it remains unclear to what extent this reflects age-grading, as opposed to change-in-progress. The fact that senior speakers like MM use AUTH on a wider range of verb stems than most younger speakers may suggest that its distribution is becoming progressively constrained, which might also reduce its overall frequency. On the other hand, AUTH is clearly being acquired by younger speakers, at least for postural stems. This suggests that although they use AUTH at a lower frequency, younger speakers have the grammatical competence that would enable them to use it more frequently with advancing age, especially if their social position enables them to take on the heavy speech style. Further sociolinguistic research will be required to test these suppositions.

## 7 Comparison with Jaminjung engagement clitics

Jaminjung is a neighbouring though unrelated language that has been shown to have engagement marking (Schultze-Berndt, 2017). Jaminjung verbs may optionally host an engagement clitic, either =*ngarndi* EGO encoding speaker authority, or =*mimdi* EGO+TU encoding epistemic equality. As in Murrinhpatha, verbs may also simply lack any engagement marking. Thus the two systems are similar in their optionality, though Jaminjung is more elaborated in that it encodes two types of marked engagement, asymmetric and symmetric. The Murrinhpatha *k*- alternation is bound up in a system of irregular verb inflection, while the Jaminjung markers are loosely bound, and do not depend upon particular grammatical features in the event structure.

There is considerable overlap in the speech situations that warrant Jaminjung EGO and Murrinhpatha AUTH. For example, the Jaminjung marker may be used when an assertion contradicts the expectations of the addressee. In (42), Jaminjung EGO is used because the addressee believes the car to be functional, but the speaker asserts that it is defective. We have already seen that such counter-expectation assertions may invoke Murrinhpatha AUTH (§3.1), and a further example, in this instance describing unexpected and undesirable behaviour, highlights the similarity with the Jaminjung usage (43).

### *Jaminjung*

- (42) ‘Gurrurrij marring=ngarndi ... nawurlu!’  
 car bad=EGO woman’s.daughter  
 “‘The car is no good, daughter!’” (Schultze-Berndt, 2017, p. 193)

### *Murrinhpatha*

- (43) Yuwa tju=yu  
 oh violence=CLS  
 ‘Oh (she’s) fighting!’  
 Yaa kardu pelpitj wiye kurran pangu=yu  
 hey person head bad go.3SG.AUTH DIST=CLS  
 ‘Hey, she’s not right in the head!’ (2011-08-08\_SL-PM\_3-11)

Turning to more socially normative forms of epistemic authority, a Jaminjung speaker uses EGO when talking about her traditional country, and noting the burial location of deceased kin (44). In a very similar Murrinhpatha example, the speaker uses AUTH (45). On the other hand, it does appear that Murrinhpatha AUTH’s association with socially normative authority goes beyond that of Jaminjung EGO. As shown above, Murrinhpatha totemic narratives are the speech genre in which AUTH is used more than any other type examined. By contrast, Jaminjung EGO is attested primarily in dialogic speech, and is largely absent in totemic monologues (Schultze-Berndt, 2017, p. 197).

### *Jaminjung*

- (44) Mugurla, ngajang ngunggina  
 FA.SIS FA.MO 2SG.POSS  
 ngiya mirrba ga-yu=ngarndi gribyard  
 PROX buried 3SG-be.PRS=EGO graveyard  
 ‘Auntie – your father’s mother is buried here.’  
 (Schultze-Berndt, 2017, p. 192)

### *Murrinhpatha*

- (45) Ku yu-pupup-dini-dha pangu ... dedi ngay  
 ANIM lie.3SG.PST-die.PLRCT-PST dist father 1sg  
 ‘My father was dying.’  
 [...]  
 Ku nukunu kanhi purtek ... ku kanyi kabim  
anim 3SG.M PROX burial ANIM PROX lie.3SG.AUTH  
 ‘We buried his body... the body lies here.’ (2015-07-13\_ATLH)

While the examples above show similar discourse contexts for Murrinhpatha AUTH and Jaminjung EGO, we have noted that they have very different morphosyntactic distributions. The Jaminjung engagement clitics are independent of subject and tense on the verb, and thus can occur with verbs over a wide range of participant, temporal and modal features. The Murrinhpatha *k*- alternation occurs only with third-person subject in non-future tense. Thus several of the use cases for Jaminjung EGO require other encoding strategies to mark speaker authority in Murrinhpatha. For example, Jaminjung EGO is used for a future declarative when the speaker is imparting knowledge to the researcher about a local foodsource (46). In a comparable Murrinhpatha example, where a quoted speaker makes a future prediction based on superior knowledge, we find the =*wa* clitic, which has elsewhere been interpreted as a marker of surprisal or emphasis (47) (Blythe, 2009, p. 107; Mansfield, 2019).

*Jaminjung*

- (46) Janju na gani-w-ijja=ngarndi bulgarding-guluwa-ni binka-ngunyi  
 DEM now 3SG>3SG-POT-poke=EGO father-KIN2-ERG river-ABL  
 ‘That one, your father will dig it up, from the river (bed).’  
 (Schultze-Berndt, 2017, p. 193)

*Murrinhpatha*

- (47) “Fadha,” mam-na, “Da=ka karda thi-nu=yu”  
 priest.ADR say.1SG.NFUT-3SG.M.OBL place=CST PROX sit.2SG.IRR-FUT=CLS  
 “‘Father’, I said to him, ‘You should stay here.’”  
 “Da lending=ka dhi=wa mi-kagu dhi=thu purru-nu=yu”  
 place landing=CST DIST=UNXP VEG-cargo DIST=FROM go.3SG.FUT-FUT=CLS  
 ‘The cargo will come to the landing there.’ (CS1-001-B\_sm\_03)

Similarly, Jaminjung EGO can be used for an assertion with second-person subject, where the speaker has direct visual evidence of the addressee’s actions, and is making a form of accusation (48). A similar Murrinhpatha example again uses an adverbial clitic, this time =*matha*, which has been interpreted as marking specificity or intensification (‘just, only, really’) (49) (Mansfield, 2019).

*Jaminjung*

- (48) Olrait gurr-agba=ngardi thawaya  
 alright 2PL-be.PST=EGO eating  
 ‘Alright, you have already eaten.’ (Schultze-Berndt, 2017, p. 184)

*Murrinhpatha*

- (49) Biskit nhinhi=matha nam-ngi-ngkardap  
 biscuit 2SG=INTENS use.hands.2SG.NFUT-1SG.OBJ-steal.from  
 ‘It was really you who stole my biscuits!’ (2011-08-30\_GM-AM\_2-5)

In summary, Murrinhpatha speakers appear to use adverbial clitics, and perhaps other devices, to claim epistemic primacy in grammatical contexts other than 3.NFUT. However, much research is still required to understand the range of such encodings – for example, the function of Murrinhpatha demonstratives as devices for managing intersubjective knowledge (but see Blythe, Mardigan, Perdjert, & Stoakes, 2016).

## 8 Discussion and conclusions

We are accustomed to inflectional alternations encoding obligatory grammatical features, while clitics or particles encode meanings that are more contingent on discourse context. The Murrinhpatha *k*- alternation is a striking exception to this, where an irregular inflectional alternation in the verb’s inner layer is not

associated with event encoding, but rather with a cluster of pragmatic and sociolinguistic functions. The functions of *k*-AUTH all relate to speaker's epistemic primacy over the addressee, thus making it relevant to the typology of engagement. But its usage is more contingent than a canonical engagement marker. Whereas Andoke speakers must obligatorily select from a set of engagement values to produce a grammatical utterance (Landaburu, 2007), Murrinhpatha speakers use the *k*-AUTH only in particular contexts, and otherwise leave engagement parameters unmarked in the verb.

It is likely that the Murrinhpatha *k*-alternation did not originally grammaticalise with an engagement function, but rather evolved by reanalysis of a marker fusing third-person subject with TAM features. A *\*ka*-prefix marking 3SG person, and perhaps also non-past tense, has been reconstructed for several non-Pama-Nyungan language families (Harvey, 2003, p. 499).<sup>9</sup> Its reflexes are present, with various TAM values, in most or all of Murrinhpatha's neighbouring languages, e.g. Jaminjung *ga*-3SG.R (Schultze-Berndt, 2000, p. 86), Marri Ngarr *k*-3SG.IRR and 3SG.R.IPFV (Tryon, 1974, p. 126), Marrithiyel *g*-3SG.R and 3SG.IRR (Green, 1989, p. 76), Merranunggu *k*-3SG.FUT (Tryon, 1970, p. 18). Murrinhpatha has *k*- in 3.NFUT.AUTH as well as 3.IRR, and this is largely shared with its Southern Daly sister language Ngan'gi, where *g*- has an engagement function in 3.PRS, and also appears in 2.IRR and 3.IRR with prohibitive and adversative functions (Reid, 1990, pp. 112–114). One possible scenario is that *\*k*- was the 3SG marker for a distinct TAM series, but in Proto Southern Daly this TAM series became obsolete and left only its most frequent member behind, i.e. the 3SG. With the erstwhile TAM category now obsolete, *\*k*- could have taken on an engagement function, arbitrarily restricted to 3SG verb stems. Whatever the actual scenario may have been, Murrinhpatha AUTH seems likely to have evolved by reanalysis from a person/TAM prefix of great time depth. This has set up the unusual situation of having a highly contingent, 'optional' marker encoded by an irregular verb inflection.

Within its AUTH function, Murrinhpatha *k*- has developed conventionalised subpatterns. In particular, it has become particularly frequent with existential and locative predicates. Because these predicates are formed with postural verb stems, AUTH is much more frequent on these than other verb stems, and some speakers may only use it with a subset of verb stems. It has also developed a conventionalised usage in the semantic domain of totemic reference, as well as a sociolinguistic indexicality for tradition and heritage, as part of the 'heavy' speech style. It is not unknown for inflectional categories to develop domain and sociolinguistic indexicalities in this way – for example, in Australian English the present perfect tense has a conventionalised usage in police media reports (Ritz, 2010). In neighbouring Jaminjung, =*ngardi* EGO has a similar function in claiming epistemic authority, though it is not known to have any special associations with existential or locatives, particular verb stems, or domains of discourse. But despite their differences of form and distribution, Murrinhpatha and Jaminjung markers share the property of optionality, being used in only a minority of utterances, while for the most part engagement has no dedicated grammatical marker. I propose that this type of engagement marking is precisely what we should expect, given what we know about Aboriginal cultural epistemology.

Two contrasting features of Aboriginal cultural epistemology were introduced above: the circumspect, consensual style of everyday conversation; and the careful monitoring of epistemic rights in the sensitive domains of kinship, country and spirituality. This implies that epistemic symmetry is the default, and need not be marked. But where epistemic authority is claimed, this is a marked stance that might attract dedicated linguistic encoding. The consequence of this is not an obligatory engagement paradigm as in Andoke, but a single, optional marker of epistemic authority, as in Murrinhpatha and Jaminjung. However, this proposal leads to a wider question about Australian languages: if the cultural epistemology described above is a widespread, continental feature, shouldn't we expect to also find a large number of optional epistemic authority markers across the continent? The literature does mention some epistemic markers, such as Guugu Yimidhirr particles encoding whether a statement is presumed to agree or disagree with the addressee's expectations (Haviland, 1987), Warlpiri 'propositional particles' expressing various epistemic stances on the part of the speaker (Laughren, 1982), or Kuuk Thaayorre demonstratives encoding a SPKR. PROX / ADDR.PROX contrast that can involve epistemic accessibility (Gaby, 2017, p. 185). But epistemic grammar is not a major theme in Australian grammatical descriptions. The solution to this paradox may

<sup>9</sup> I am indebted to an anonymous reviewer for pointing out this historical source.

well lie in descriptive practices. If optional engagement markers are usually clitics and particles, then this puts them in a domain that is often attracts less descriptive and analytical attention. For example, Murrinhpatha has about a dozen clitics that have only the vaguest descriptions (Street, 1996, p. 214ff.). Indeed, the only reason that *k*-AUTH has attracted analytical attention is its inflectional form, which impinges on the analysis of verbal paradigms. But with the recent flourishing of epistemic analysis, we may hope that related phenomena will be uncovered in other Australian Aboriginal languages.

## Abbreviations

Morphological glosses use the standard Leipzig conventions, with the following additions:

ADVERS	adversative
ANIM	animate
AUTH	epistemic authority
CLS	clause
CONTR	contrastive
CST	constituent
DEDUC	deduction
INTJ	interjection
ITER	iterative
NFUT	non-future
PC	paucal
PLRCT	pluractional
RECOG	recognitional demonstrative
RQST	request
SEQ	sequential
SIBL	sibling
SR	subject remote
TWD	towards
UNXP	unexpected
US	undesirable subject
VEG	consumable plant

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