

# 9 *Dalabon verb conjugations*

NICHOLAS EVANS AND FRANCESCA MERLAN

## 1 Introduction

Conjugational patterns in tense/aspect/mood suffixes are a major source of comparative evidence in Australian languages (see Alpher, Evans & Harvey this volume). Although Capell (1962:115–120) gives some preliminary information about the Dalabon system, this is incomplete in its coverage of conjugations, and is phonetically inaccurate in places. For example, he fails to hear final palatal nasals after high front vowels, transcribing /yoŋjɪ/ as ‘jonjin’ (1962:116). No information on Dalabon conjugations has since been published, although a number of unpublished manuscripts (Alpher 1976; Merlan n.d.) give data or partial treatments. The discussions of the harmonic/disharmonic distinction on pronominal prefixes to the verb in Alpher (1982), and on the structure of the transitive paradigm in Evans, Brown and Corbett (2001), both contain a number of example sentences. The purpose of this paper is therefore to make a full statement of the conjugational system publicly available. Our discussion of the fuller system of verbal morphology, and of the semantics of the TAM suffixes, is brief, since a full grammar is currently in preparation.

## 2 Genetic and areal position

Dalabon (also known as Dangbon, Ngalkbon and Buwan<sup>1</sup>) is a member of the Gunwinyguan language family and is most closely related to the dialect chain containing Kunwinjku, Mayali and Kune, now known by the cover term Bininj Gun-wok (see Alpher,

<sup>1</sup> Dalabon has the etymology *dalû-* ‘mouth’ plus *bon* ‘go’, i.e. people in whose mouth (language) one says *bon* for ‘go’. Dangbon and Ngalkbon are parallel formations based on the root for ‘mouth’ in Bininj Gun-wok and Jawoyn, i.e. *kun-dang* and *ngan-ngalk* respectively (*kun-* and *ngan-* are noun class prefixes). The term Dangbon tends to be used by speakers of Bininj Gun-wok, and Ngalkbon by speakers of Jawoyn, but the terms are also used by Dalabon speakers themselves on the basis of which other language group they most regularly have dealings with. Buwan tends to be used on the Rembarnga side; it may reflect ‘unpacking’ of *o* in *bon* to *uwa*, a process attested elsewhere in Rembarnga (see Harvey this volume, Chapter 8).

Evans & Harvey this volume). Complicating the genetic picture is evidence of typological and lexical convergence with its eastern neighbour, Rembarrnga, which is also a Gunwinyguan language but belongs to a separate subgroup, being most closely related to Ngalakan. The three most striking typological features shared by Dalabon and Rembarrnga are

- (a) The innovation of a sixth vowel phoneme, basically a high central vowel. This is written *û* in the practical orthography used here.<sup>2</sup> Though the conditions under which this developed in Dalabon are presently far from understood, there are examples of it developing from the vowels *i*, *e* and (rarely) *o*, with *e* being the commonest source. In fact, all verbs with final-syllable *e* in Bininj Gun-wok have changed this to *û* in Dalabon (e.g. *yamûng*<sup>3</sup> 'spear-PP'; cf. BW *yameng*; or the present form of thematic *-mû*, matching BGW *-me*); the only exceptions are where the BGW vowel has actually been lost (this is restricted to exposed final position after palatal nasals, e.g. BGW *kinje* 'cook-NPST', D *kinj* 'cook-PRES') and in the verb *name* and its derivatives (BGW *name* 'make, put-NPST', D *nam* 'put-PRES'). Examples from outside the verbal domain are Mayali *kun-yid* 'fight, trouble', D *yûrrû* 'cheeky', Mayali *an-karre* 'song', D *karrû-no*; Mayali *-ken* 'GENitive', D *-kûn*, Mayali *dadbe* 'dangerous snake', D *dadbû*, Kune *morné-no*, D *mûrni-no*. Some Dalabon speakers have gone on to merge this phoneme with *u*, so that the present form for 'swim' is *wurlebmu* for some speakers and *wurlebme* for others (cf. BGW *wurlebme*).
- (b) Loss of the Proto Gunwinyguan gender system, still preserved by Dalabon's closest relative, Bininj Gun-wok, and Rembarrnga's closest relative, Ngalakan, except in a few paired male/female terms which retain the *na-/ngal-* masculine/feminine contrast found in Bininj Gun-wok. The prefixes found in other dialects are simply dropped — cf. Kune *man-ngohngo* 'pandanus basedowii', D *ngohngo*.
- (c) The development of a system of 'possessed noun' marking on such part nouns as body parts, parts of the landscape, and times of the day, e.g. *dje-no* [nose-3POSS] 'his/her/its nose', *dje-ngan* 'my nose'.

The latter two developments have begun to spread to the Kune dialect of Bininj Gun-wok, under the influence of traditional bilingualism between Kune and Dalabon — see Evans (1997, 2003).

### 3 Verbal structure

Dalabon is a polysynthetic language with a complex set of prefixes and suffixes, summarised in Figure 1.

<sup>2</sup> Some speakers merge *û* with *u* in certain environments, so that BGW *e*, having passed through *û*, ends up as *u* for these speakers. These speakers pronounce *yamûng* 'speared' as *yamung*, and thematic present *-mû* as *-mu*. This realisation is not represented in the transcriptions used in this paper.

<sup>3</sup> The Dalabon practical orthography is used here; except for the sixth vowel *û* it is identical to the Kunwinjku orthography. Non-obvious symbols are *h* = glottal stop, *nj* = laminopalatal nasal, *rd*, *rn*, *rl* = retroflex stop, nasal and lateral, *rr* = apicoalveolar trill / tap, doubled letters for consonant length. There is no voicing contrast; voiced symbols are used for all stops except the velar, represented by *k*.

-12	-11	-10	-9	-8	(-7)*	-6	-5	-4	-3	-2	-1	0	+1	+2	+3
Obj pron	Subj pron	REL	SEQ	CAUS	misc	BEN	misc	GIN	BPIN	NUM	COM	ROOT	REFL/RECIP	TAM	CASE

Figure 1: Structure of the Dalabon verb

- 10 REL: relative (y(e)) versus realis main clause (h).
- 9 SEQ: sequential ‘and then’
- 8 CAUS: ‘because’
- 7, -5 MISC: various adverbial type prefixes, e.g. *warrkah-* ‘in wrong place or direction’.
- 6 BEN: benefactive applicative
- 4 GIN: ‘generic’ incorporated nouns, e.g. *borndok* ‘woomera’
- 3 BPIN: ‘body part’ incorporated nouns e.g. *wungurr* ‘shadow’
- 2 NUM: ‘number’ prefixes, e.g. *mokûn* ‘bunch, group’
- 1 COM: comitative applicative
- +2 TAM: tense/aspect mood

Subject and object are shown by a combination of prefixes and proclitics which further specify some tense/mood/subordination categories. Except for subject/object portmanteaux, which are full prefixes (1), objects are shown by proclitics which normally appear just before the verbal word (2) but may be separated by a few elements such as *wanjh* (3). However, when no ‘interrupting’ elements as present most objects also have an reduced alternative form (e.g. *bulkah-* rather than *bulu=kah-* for ‘3/3pl’) in which they are rhythmically and prosodically prefixes rather than proclitics (4). Only the prefixal form of objects exhibit the vowel alternations characterising the various TAM forms of prefixes.

- (1) a. *Dja-h-na-n.*  
3/2-R-see-PRES  
‘(S)he sees you.’
- b. *Widji-na-n.*  
3/3APPR-see-PRES  
‘(S)he might see you.’
- (2) *Bulu ka-h-na-n.*  
them 3-R-see-PR  
‘(S)he sees them.’
- (3) *Rolu bunu wanjh ka-h-yelûng-banj.*  
dog 3du already 3-R-next-bitePP  
‘The dog has already bitten them.’
- (4) *Bul-ka-h-na-n.*  
3plO-3-R-see-PRES  
=(2), ‘(S)he sees them’

Following the pronominal complex comes a series of optional adverbial and applicative prefixes, as well as incorporated nominal root. Then comes the verb root, followed by an optional reflexive/reciprocal suffix, an obligatory TAM suffix (the main subject of this chapter), and optional suffixes for ‘complementising case’ (Dench & Evans 1988) such as the genitive to indicate purpose and the locative to indicate location. Examples (5) and (6) give instances of typical levels of morphological complexity in the Dalabon verb.

- (5) *Ka-Ing-yurdmi-nj bulu=ka-h-yelûng-berrû-bawo-ng,*  
 3-SEQ-run-PP them=3-R-SEQ-many-leave-PP  
 ‘He ran away then and left them all,  
*bala-buh-ngong-boyenj-ni-nj mahkih*  
 3plSUBORD-because-mob-big-be-PP because  
 because there were a big mob of them.’
- (6) ‘... *ngey-na-rr-inj-kah kah-yin-inj.*  
 1dis.SUBORD-see-RR-PP-LOC 3-say-PP  
 “‘To where we two met up (lit. where we saw each other)”, he said.’

As in other Gunwinyguan languages, verbs may be made up either of a simple root (e.g. *na-* ‘see’, *ni-* ‘sit, be’) or of a combination of a prepond plus a thematic usually identical with one of the roots, e.g. *buyhwo-* ‘show’, which can be segmented into prepond *buyh-* plus thematic *wo-* (cf. *wo-* ‘give’). The only thematics that lack a corresponding root are the (typically intransitive) verb formative *-mû* (corresponding to Bininj Gun-wok *-me*, and pGN *\*-ma-r*), the inchoative *-mûn* (corresponding to Bininj Gun-wok and pGN *-men*), and the reflexive/reciprocal derivational suffix.

It is the root, or thematic, which determines the form of TAM inflections. Thus once one knows how to inflect *bu-* ‘hit’ for TAM, this generalises to all verbs with *bu* as thematic, such as *ngibu* ‘name, call by name’, *ngabbu* ‘give’, and so forth. The only exception to this involves verbs with the thematic *-ka*, which have a complicated series of alternative paradigms, partly reflecting the fact that this thematic merges the two distinct thematics *\*-ka* and *\*-ke*, kept distinct in Bininj Gun-wok, for example. The discussion below therefore generally only gives roots or thematics unless a compound verb behaves in a way that cannot be predicted from its thematic (e.g. the irregular reductions of *bawo-* to *ba-* in the present and past imperfective forms of *bawo* ‘leave’).

### 3.1 Inflectional categories

Dalabon verb suffixes distinguish five basic TAM categories: present (PR, 7), future (F, 8), past perfective (PP, 3, 6), past imperfective (PI, 9) and irrealis, used in past negatives (IRR, 10) as well as in certain types of hypothetical and optative clauses (11). The present is also used for imperatives (12). Further TAM categories are generated through combination with different forms of the pronominal prefixes. For example, combination of the present TAM suffix with the APPREhensive prefix set is used to denote outcomes feared or to be avoided (1b).

- (7) *Djarra bad-dun-kah ngarra-h-yu.*  
 here rock-hole-LOC 12ua-R-liePR<sup>4</sup>  
 'We three are camped here in the rock cave.'
- (8) *Kardû yabbunh ngala-h-yongiyan.*  
 maybe two 12a-R-lieFUT  
 'Maybe we'll stay two nights.'
- (9) *Bim bula-h-nguninj wurrkardi-kûn.*  
 white.clay 3a/3-R-eatPI diarrhoea-GEN  
 'People used to eat white clay to stop diarrhoea.'
- (10) *Mak norr nga-wo-y, mak norr nga-ngabbu-y.*  
 not 2du IIRR-give-IRR not 2du IIRR-give-IRR  
 'I didn't give it to you two (harmonic).'
- (11) *Dah-me-y.*  
 2/3-get-IRR  
 'You should have got it.'
- (12) *Nah-ngan, nah-ngan, ka-h-na-n!*  
 mother-my mother-my 2/1-R-look-PR  
 'Mummy, mummy, look at me!'

Note that pronominal prefixes in realis categories end in the glottal stop (here written *h* and glossed R), whereas those in non-realis categories such as the apprehensive (1a) and irrealis (11) lack the glottal stop. There are also two sets of special 'subordinate clause' prefix forms, which likewise lack the glottal stop; (5) and (6) are examples. Imperatives and hortatives select the realis prefix form with the glottal stop (e.g. (12)).

Further aspectual distinctions are made by reduplication of the root to show continuous or durative activity (13), and by aspectual-type adverbial prefixes such as *bamû-* 'not yet' (14). These will not be discussed further in this paper.

- (13) *Ka-h-djal-ng-nawoydo-duninj budjkûh-budj-kûn, yila-h-yang-wona-wona-ny*  
 3-R-just-SEQ-dingo-REALLY REDUP-bush-GEN 1pl/3-R-talk-REDUP-hear-PI  
*yale-yu-yu, warrûkkûn yale-yu-yu.*  
 1plSUBORD-REDUP-sleepPI before 1plSUBORD-REDUP-sleepPI  
 'They were real bush dingoes, we would keep hearing their howls as we were sleeping, before as we were sleeping ...'
- (14) *Nga-h-bolh-wa-ninj, kahke mah nga-bamû-bolh-we-y*  
 1/3-R-track-follow-PI nothing NEG 1/3-not.yet-track-follow-IRR

<sup>4</sup> This sentence and the following one came from a speaker with a deviant number system following a minimal/augmented rather than a singular/plural system: while for most speakers the prefix *ngarra-* means 'you and me, three or more' (i.e. plural), for this speaker it meant precisely 'you, me and one other' (i.e. 12 unit augmented, glossed here as 12ua), with *ngala-* meaning 'you, me and two or more others' (i.e. 12 augmented, glossed here as 12a).

*nga-h-bolh-yawa-ninj.*

1-R-track-look.for-PI

'I kept following the track without success, I hadn't picked up the track yet,  
I kept looking for the track.'

Four of the five TAM inflections are cognate with those in Dalabon's closest relative, Bininj Gun-Wok (see Alpher, Evans & Harvey this volume).

The future, however, lacks cognates within the Gunwinyguan family. Interestingly, however, a formally identical suffix *-yan* is found in Wardaman (Merlan 1994:178–179, 198), just to the southwest of the Gunwinyguan family. Compare *buyan* 'hit-FUT' (Dal), 'hit-POT' (Ward); *nguyan* 'eat-FUT' (Dal), 'eat-POT' (Ward), *woyan* 'give-FUT' (Dal), 'give-POT' (Ward), *niyan* 'see-FUT' (Dal), *nayan* 'see-POT' (Ward). This raises the question of whether this is (a) the result of borrowing in one direction or another — but there are few other signs of contact between these languages, (b) a convergent independent development, arising by grammaticalising a form of the root *ya* 'go' as a future/potential marker — though the formal resemblances are so striking that this also seems unlikely, and there is also no candidate present form *yan* 'go' in either language or their near relatives, or (c) a shared inheritance from a higher-level proto-language, which among the Gunwinyguan languages has survived only in Dalabon. We believe that (c) is the most likely possibility, but to confirm it we need to look for cognate forms elsewhere outside Gunwinyguan (see R. Green (this volume) on a formally similar category in a number of other Arnhem Land languages, though she does not believe it to be cognate).

A further, composite inflection is built on the past imperfective by suffixing *-yi* (identical to the ergative/instrumental, except for the lack of final glottal stop); it appears to be a Dalabon innovation. This category functions as a 'customary past', and is used for describing events that used to take place as a matter of custom. Two examples are:

(15) *Bûla-h-ma-nginjyi nûnda korrûhkunh-ninj rangan-yih kowk.*  
3pl/3-R-get-CUST.PST DEM long.ago-PI paperbark-INSTR shelter  
'They used to get paperbark way back in the olden days to make shelters.'

(16) *Bûla-h-karrû-yidjnja-ninjyi nayunghyungki dadbû-kûn.*  
3pl/3-R-song-have-CUST.PST old.people brown.snake-GEN  
'They used to have a song, the old people, for the king brown snake.'

One more morphological possibility, shared with Bininj Gun-wok, is to incorporate one gerundivised verb into another, most commonly into *bon* 'go' but sometimes also into *di* 'stand'. Thus *njudjmû* 'sneeze' can be gerundivised by replacing the final *û* with *i*, and placing it directly before the main verb root, for example:

(17) *Nga-h-njudjm-i-bo-ninj.*  
1-R-sneeze-GER-go-PI  
'I was going around sneezing.'

At this point of research there appear to be two formal means of deriving participles — either by replacing final *û* with *i*, as in (17), or by adding *ey* to the present form (with *e* replacing any thematic-final vowel), as in (18a, b). It is not clear at this stage what conditioning factors are involved in this choice, which may be dialectal rather than phonological (since (18), like (17), also involves a *-mû* verb).

- (18) a. *Djamard ka-h-dala-barrm-ey-bo-n, yirrh wah-kah.*  
 lizard.sp 3-R-mouth-open-GER-go-PR down water-LOC  
 'The djamard lizard goes along with its mouth open, down to the water.'
- b. *Ka-h-warlkka-rr-inj, ka-h-warlkk-ey-di-ø, kanunh biyi*  
 3-R-hide-RR-PP 3-R-hide-GER-stand-PR that man  
*ka-h-warlkka-rr-inj mak bûla-ngalk-iyân.*  
 3-R-hide-RR-PP NEG 3pl/3-find-FUT  
 'He's hidden himself, he's in hiding, that man has hidden himself and they won't find him.'

Table 1: TAM inflectional paradigm of one representative verb in each pattern

	RR	PRES	FUT	PI	PP	IRR
1 <i>mang</i>	<i>marrûn</i>	<i>mang</i>	<i>miyan</i>	<i>manginj</i>	<i>me</i>	<i>mey</i>
1a <i>dong</i>	<i>dorrûn</i>	<i>dong</i>	<i>dongiyan</i>	<i>donginj</i>	<i>do</i>	<i>dongi</i>
2 <i>dung</i>	<i>durrûn</i>	<i>dung</i>	<i>dungiyan</i>	<i>dunginj</i>	<i>dunj</i>	<i>dungi</i>
2a <i>ni</i>		<i>ni</i>	<i>ningiyan</i>	<i>ninginj</i>	<i>ninj</i>	<i>ningi</i>
2b <i>yu</i>	<i>yurrûn</i>	<i>yu</i>	<i>yongiyan</i>	<i>yonginj</i>	<i>yo</i>	<i>yongi</i>
2c <i>da</i>		<i>di</i>	<i>dangiyan</i>	<i>danginj</i>	<i>dinj</i>	<i>dangi</i>
2d <i>yenjdjung</i>		<i>yenjdjung</i>	<i>yenjdjungiyân</i>	<i>yenjdjunginj</i>	[ <i>yininj</i> ]	<i>yenjdjungî</i>
2e <i>wadûng</i>		<i>wadûng</i>	<i>wadûngiyân</i>	<i>wadûnginj</i>	<i>wadûnginj</i>	<i>wadûngî</i>
3 <i>na</i>	<i>narrûn</i>	<i>nan</i>	<i>niyan</i>	<i>naninj</i>	<i>nang</i>	<i>ney</i>
3a <i>bu</i>	<i>burrûn</i>	<i>bun</i>	<i>buyan</i>	<i>buninj</i>	<i>bong</i>	<i>buy</i>
3b <i>bon</i>		<i>bon</i>	<i>boniyan</i>	<i>boninj</i>	<i>bong</i>	<i>boni</i>
3c <i>kinj</i>	<i>kinjûrrûn</i>	<i>kinj</i>	<i>kinjiyan</i>	<i>kinjinj</i>	<i>kinjing</i>	<i>kinji</i>
4 <i>ngun</i>	<i>ngurrûn</i>	<i>ngun</i>	<i>nguyan,</i> <i>nguniyan</i>	<i>nguninj</i>	<i>ngunj</i>	<i>nguy</i>
4a <i>wan</i>	<i>warrûn</i>	<i>wan</i>	<i>wiyan</i>	<i>waninj</i>	<i>wawinj</i>	<i>wey</i>
4b <i>don</i>		<i>don</i>	<i>doniyan</i>	<i>doninj</i>	<i>donj</i>	<i>doni</i>
5 <i>rakka</i>		<i>rakkan</i>	<i>rakkiyan</i>	<i>rakkaninj</i>	<i>rakkang</i>	<i>rakkey</i>
5a <sub>1</sub> <i>djowkka</i>		<i>djowkkan</i>	<i>djowkkiyan</i>	<i>djowkkanj</i>	<i>djowkkang</i>	<i>djowkkey</i>
5a <sub>2</sub> <i>ka</i>	<i>karrûn</i>	<i>ka</i>	<i>kiyan</i>	<i>kanj</i>	<i>kang</i>	<i>key</i>
5a <sub>3</sub> <i>marrka</i>		<i>marrka</i>	<i>marrkiyan</i>	<i>marrkaninj</i>	<i>marrkanj~</i> <i>marrkang</i>	<i>marrkey</i>
5b <i>wo</i>	<i>worrûn</i>	<i>won</i>	<i>woyan</i>	<i>woninj</i>	<i>wong</i>	<i>woy</i>
5b <sub>1</sub> <i>bawo</i>	<i>baworrûn</i>	<i>ban</i>	<i>bawoyan</i>	<i>baninj</i>	<i>bawong</i>	<i>bawoy</i>
6 <i>-mû</i>	<i>-mûrrûn</i>	<i>-mû</i>	<i>-miyan</i>	<i>-minj</i>	<i>-minj</i>	<i>-mi</i>
7 <i>yamû</i>	<i>yamûrrûn</i>	<i>yamûng</i>	<i>yamiyan</i>	<i>yaminj</i>	<i>yamûng</i>	<i>yami</i>
7a <i>nam</i>	<i>namiworrûn</i>	<i>nam</i>	<i>namiyan</i>	<i>naminj</i>	<i>namûng</i>	<i>nami</i>
7b <i>nahbû</i>		<i>nahbû(h)</i> <i>~ nahbun</i>	<i>nahbiyan</i>	<i>nahbinj</i>	<i>nahbong</i>	<i>nahbi</i>
8 <i>-mûn</i>		<i>-mûn</i>	<i>-mûniyan</i>	<i>-mûninj</i>	<i>-minj</i>	<i>-mini</i>
8a <i>-rrûn</i>		<i>rrûn</i>	<i>rrûniyan</i>	<i>rrûninj</i>	<i>rrinj</i>	<i>rrûni</i>
9 <i>yin</i>		<i>yin</i>	<i>yinmiyan</i>	[ <i>yihyininj</i> ]	<i>yininj</i>	<i>yini</i>

### 3.2 The TAM suffix paradigm

Table 1 shows the paradigm of TAM inflections for a representative verb of each pattern, while Table 2 displays the pattern of suffixes stripped from the root. In addition the reflexive/reciprocal form is given where it exists, since this is the most reliable indicator of the verb root: virtually all verb roots can be identified by removing the reflexive/reciprocal suffix *-rrû-*, the only exceptions being *nam* 'put (on)' and *yin(mi)* 'do, say', which extend the root with *wo-* (etymologically 'give') before adding the RR suffix. Reflexive/reciprocal forms then form their own inflectional class, 8a; normally the RR inflections do not influence the preceding material, but where they attach to the sequence *-mû* they induce changes to the preceding vowel as shown in (8b).

**Table 2:** Paradigm of TAM inflectional suffixes, stripped from the root

	RR	PRES	FUT	PI	PP	IRR
predominant allomorphs	<i>-rrû-</i>	<i>-ng, -n, -∅</i>	PR + ( <i>i</i> ) <i>yan</i>	PR + <i>inj</i>	<i>-y, -nj, -ng</i>	<i>+i/y</i>
1 <i>ma-ng</i>	<i>-rrûn</i>	<i>-ng</i>	<i>-Iyan</i>	<i>-nginj</i>	<i>-E</i>	<i>-Ey</i>
1a <i>do-ng</i>	<i>-rrûn</i>	<i>-ng</i>	<i>-ngiyan</i>	<i>-nginj</i>	<i>-∅</i>	<i>-ngi</i>
2 <i>du-ng</i>	<i>-rrûn</i>	<i>-ng</i>	<i>-ngiyan</i>	<i>-nginj</i>	<i>-nj</i>	<i>-ngi</i>
2a <i>ni-∅</i>		<i>-∅</i>	<i>-ngiyan</i>	<i>-nginj</i>	<i>-nj</i>	<i>-ngi</i>
2b <i>yu-∅</i>	<i>-rrûn</i>	<i>-∅</i>	<i>-Ongiyan</i>	<i>-Onginj</i>	<i>-O</i>	<i>-Ongi</i>
2c <i>da-[ng]</i>		<i>-l</i>	<i>-ngiyan</i>	<i>-nginj</i>	<i>-Inj</i>	<i>-ngi</i>
3 <i>na-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-Iyan</i>	<i>-ninj</i>	<i>-ng</i>	<i>-Ey</i>
3a <i>bu-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-yan</i>	<i>-ninj</i>	<i>-Ong</i>	<i>-y</i>
3b <i>bo-n</i>		<i>-n</i>	<i>-niyan</i>	<i>-ninj</i>	<i>-ng</i>	<i>-ni</i>
3c <i>kinj(i)</i>	<i>-rrûn</i>	<i>(-i)</i>	<i>-yan</i>	<i>-nj</i>	<i>-ng</i>	<i>-∅</i>
4 <i>ngu-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-yan, -niyan</i>	<i>-ninj</i>	<i>-nj</i>	<i>-y</i>
4a <i>wa-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-iyan</i>	<i>-ninj</i>	<i>-winj</i>	<i>-Ey</i>
4b <i>do-n</i>		<i>-n</i>	<i>-niyan</i>	<i>-ninj</i>	<i>-nj</i>	<i>-ni</i>
5 <i>rakka-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-Iyan</i>	<i>-ninj</i>	<i>-ng</i>	<i>-Ey</i>
5a <sub>1</sub> <i>djowkka-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-Iyan</i>	<i>-nj</i>	<i>-ng</i>	<i>-Ey</i>
5a <sub>2</sub> <i>ka</i>	<i>-rrûn</i>	<i>-∅</i>	<i>-Iyan</i>	<i>-nj</i>	<i>-ng</i>	<i>-Ey</i>
5a <sub>3</sub> <i>marrka</i>		<i>-∅</i>	<i>-Iyan</i>	<i>-ninj</i>	<i>-nj</i>	<i>-Ey</i>
5b <i>wo-n</i>	<i>-rrûn</i>	<i>-n</i>	<i>-yan</i>	<i>-ninj</i>	<i>-ng</i>	<i>-y</i>
5b <sub>1</sub> <i>ba&lt;wo&gt;-n</i>	<i>-rrûn</i>	<i>-&lt;wo&gt;n</i>	<i>-yan</i>	<i>-&lt;wo&gt;ninj</i>	<i>-ng</i>	<i>-y</i>
6 <i>-mû-∅</i>		<i>-∅</i>	<i>-Iyan</i>	<i>-Inj</i>	<i>-Inj</i>	<i>-I</i>
7 <i>yamû-∅</i>	<i>-rrûn</i>	<i>-ng</i>	<i>-Iyan</i>	<i>-Inj</i>	<i>-ng</i>	<i>-I</i>
7a <i>nam(û)</i>	<i>-worrûn</i>	<i>-(û)</i>	<i>-iyan</i>	<i>-inj</i>	<i>-ûng</i>	<i>-i</i>
7b <i>nahbû/u</i>		<i>-∅ ~ -h ~ -Un</i>	<i>-iyan</i>	<i>-inj</i>	<i>-ong</i>	<i>-i</i>
8 <i>mû-n</i>		<i>-Ûn</i>	<i>-Ûniyan</i>	<i>-ninj</i>	<i>-Inj</i>	<i>-ni</i>
8a <i>-rrû-n</i>		<i>-n</i>	<i>-niyan</i>	<i>-ninj</i>	<i>-Inj</i>	<i>-ni</i>
8b <i>-mûrrû-n</i>		<i>-mûrrûn</i>	<i>-mûrrûniyan</i>	<i>-mûrrûninj</i>	<i>-mirrinj</i>	<i>-mirrini</i>
9 <i>yi-n</i>		<i>-n</i>	<i>-nmiyan</i>		<i>-ninj</i>	<i>-ni</i>

[X] conjugational element not found in present form, but appearing in the two other TAM categories (FUT and PI) normally derived from the present.

(X) root vowel dropped in present

<X> root element dropped in present and PI

I, E, O, U suffixal vowel (i, e, o, û), which replaces root-final vowel



Note that:

- PRES has *-ng* (1, 7),  $\emptyset$  (2, 6), *-n* (3, 4, 5)
- PP has *-y* (1), *-nj* (2, 4), *-ng* (3, 5, 7b)
- PI, IRR and FUT are mostly based on the present stem.

As in most other Gunwinyguan languages (see Alpher, Evans & Harvey this volume) there is a substantial number of conjugations, and a messy relationship of final nasal alternations to TAM categories. Thus *-ng*, which is a present marker in conjugations 1 and 2, is a marker of the past perfective conjugations 3 and 5; in conjugation 7 it appears in both present and past perfective. With conjugations in which vowel alternations occur, in conjugations 1 and 3 the present contains the predominant form, which is then raised in the past perfective, while in conjugation 2b it is the past perfective which contains the dominant vowel (*o*), which is then raised in the present, although in this latter case it is the present rather than the predominant form which serves as the RR base, and is therefore given here in the citation form.

The present form serves as the base for the future and past imperfective forms, which in most cases can be predicted by adding *-(i)yan* (FUT) or *-inj* (PI) to the present form. The main exceptions to this are the three stance verbs, which each have a velar nasal which appears in the FUT and PI but is not in the present; some of the other subconjugational differences also depend on whether a nasal found in the present serves as a base for the future — cf. ‘see’ (3) *nan: niyan* but ‘go’ (3a) *bon: boniyan*. The past perfective form frequently takes a different nasal, and this cannot always be predicted from the present form: contrast *mang: mey* but *dung: dunj*, or *nan: nang*, *bun: bong* but *ngun: ngunj*.

As these alternations demonstrate, it is also impossible to predict the present from the past perfective form: past perfective forms in *-nj* can have present forms in *-n*, *-ng* or  $\emptyset$ , and past perfective forms in *-ng* can also have present forms in *-n*, *-ng* or  $\emptyset$ .

Verbs with the thematic *-ka* present special difficulties; as mentioned in the introduction this is the only thematic where one cannot predict all the conjugated forms for any verb containing it. Some verbs with this thematic have  $\emptyset$  in the present (*ka* ‘carry’, *marrka* ‘shake’), others have *-n* (*rakkan* ‘fall’, *djowkkan* ‘cross’); some have *-nj* (*djowkkanj*, *kanj*) in the past imperfective while others have *-ninj* (*rakkaninj*, *marrkaninj*); some have *-ng* in the past perfective (*rakkang*, *djowkkang*, *kang*) while others have *-nj* (*marrkanj*). These three binary choices, unfortunately, generally do not correlate with one another — if they did, we could arrange them into two (sub)conjugations. On the other hand, there are some correlations: we do not find all eight of the logically possible combinations exemplified. Thus, knowing that a verb takes *-n* in the present doesn’t help you predict the past imperfective form, though it does correctly predict that the past perfective will be *-ng*, and knowing that a verb takes *-nj* in the past imperfective doesn’t help predict the present form, though again it does correctly predict that the past perfective will be *-ng*. To make matters worse, there is additional inter- and even intra-speaker variation with some verbs (not shown on the above table): the present of *yaka* ‘fall (of rain)’ has been recorded as both *yaka* and *yakan*, for example, and some speakers have *marrkang* rather than *marrkanj* as the past perfective of *marrka*. It is possible that some of this variation originates from a merger of the historically distinct thematics *-ka* and *-ke*, which have different conjugational patterns in Bininj Gun-wok. Dalabon *ka* ‘carry’ and *warlkka* ‘hide’, for example, correspond to Bininj Gun-wok *ka* and *warlkka*, while the Dalabon use of *-ka* for the transitive member of intransitive/transitive verb pairs like *dadjmû* ‘be cut, cut off’ vs *dadjka* ‘cut (tr.)’ corresponds to the use of *-ke* for this opposition in Bininj Gun-wok: *dadjme* ‘be cut, cut off’ vs *dadjke*

'cut (tr.)'. In terms of system, the *-ke* thematic would have supplied a zero-inflected present (BGW *dadjke* 'cut:NPST') and the *-ka* thematic an *n*-inflected present (BGW *warlkkān* 'hide-NPST'). However, this explanation only gets us so far, since the *n*-inflected present verbs in Dalabon do not correlate very well with those in BGW, and moreover the BGW system, for these two thematics, entirely lacks past perfectives in *-nj* and past imperfectives in *-ninj*. So at best the merger of these two distinct thematics would have created the two present forms, which have then been redistributed over individual verbs.

Returning now to the overall system, the limited amount of vowel alternation is mostly explicable by assimilation to adjoining glide articulations, such as the form *niyan* instead of the more regular *\*nayan* as the future of 'see', or *mey* rather than expected *\*may* as the irrealis of 'get'. In the case of *da[ng]* 'stand' and *yo/u* 'lie', however, vocalic alternations may represent the collapse of vowel-graded variants of these stance verbs which are widely though chaotically attested in Gunwinyguan — see Alpher, Evans and Harvey (this volume).

Overall, the whole inflectional system conforms to very strong phonotactic constraints: inflected words must end in (a) one of the nasals *n*, *ng* or *nj* (b) any of the six vowels (c) the glide *y*. Again, similar constraints are found in most Gunwinyguan languages, but also in other Arnhem Land languages such as Iwaidja or Maung.

There are three pairs of verb roots which, for some TAM values at least, are distinguished only by the form of the TAM inflection and/or vowel contrasts employed for TAM ablaut: *yu* 'lie' vs *yu-ng* 'put', *ru-n* 'cry' vs *ru-ng* 'burn (intr.)', and *bo-n* 'go' vs *bu-n* 'hit' (which fall together in their PP forms, *bo-ng* in both cases).

### 3.3 Conjugation membership

A complete listing of conjugation membership would run to many hundreds of verbs and is beyond the scope of this article. Below we confine ourselves to listing (a) all attested themes for each conjugation, and (b) a sampling of common compound verbs. We comment on certain important correspondences to Bininj Gun-wok conjugations, though again for reasons of space we do not do this exhaustively.

CONJUGATION 1. Corresponds to BGW verbs in *ma-ng*.

<i>ma-ng</i>	'get' (BGW <i>ma-ng</i> )
<i>balk-ma-ng</i>	'catch'
<i>ye-ma-ng</i>	'pull out of' (conventionalised comitative form)
<i>wowh-ma-ng</i>	'lift up'
<i>djird-ma-ng</i>	'steal' (BGW <i>djirdma-ng</i> )

CONJUGATION 1A. Though this verb has cognates in BGW, it is organised quite differently — see Alpher, Evans and Harvey (this volume).

<i>do-ng</i>	'strike' (BGW <i>dong</i> )
--------------	-----------------------------

CONJUGATION 2. Corresponds to BGW verbs in *du-ng* and *ru-ng*, with the recruitment of *ba-ng* which is disyllabic in BGW (*baye*) as in most Gunwinyguan languages.

<i>du-ng</i>	'swear, growl at' (BGW <i>du-ng</i> )
<i>K-du-ng</i>	'call s.o. as kin K', e.g. <i>nahngan-du-ng</i> 'call someone mother'
<i>ru-ng</i>	'burn (intr.)' (BGW <i>ru-ng</i> )
<i>yu-ng</i>	'put, put down'
<i>ba-ng</i>	'bite'

CONJUGATION 2A. Though this verb has cognates in BGW, it is organised quite differently – see Alpher, Evans and Harvey (this volume).

*ni[ng]* 'sit' (BGW *ni*)

CONJUGATION 2B. Again this is organised quite differently to its BGW correspondent *yo*.

*yu* 'lie'  
*njengûyu* 'sleep'

CONJUGATION 2C. Roughly corresponds to BGW verbs in *-di*, which also exhibit the two stems *di* and *da[ng]*.

*di* 'stand'  
*daddi* 'be inside'  
*warddi* 'be up high'

CONJUGATION 2D. This contains only *yenjdjung* 'speak', which is a slightly defective member of Conjugation 2, which lacks a PP form; instead the PP form *yininj* of *yin* 'do, say' is used. It is likely that both *dung* 'swear at' and the thematic *djung* of *yenjdjung* descend from a single root \**dhung*<sup>5</sup> with the laminality preserved in *yenjdjung* because of the preceding palatal nasal.

CONJUGATION 2E. This contains only *wadûng* 'crawl, go on all fours', which differs from the main 2 conjugation only in having apparently neutralised the distinction between PI and PP forms in favour of the former.

CONJUGATION 3. Corresponds to BGW verbs in *-na-n* 'see'.

*na-n* 'see' (BGW *na-n*)  
*wodna-n* 'throw, push'  
*wona-n* 'hear, listen'

CONJUGATION 3A. Corresponds to BGW verbs in *-bu-n* 'hit'.

*bu-n* 'hit, kill' (BGW *bu-n*)  
*ngibu-n* 'name, call by name' (BGW *ngeybu-n*)  
*ngabbu-n* 'give'  
*danjbu-n* 'spear' (BGW *danjbu-n*)  
*marnbu-n* 'ignite, make' (BGW *marnbu-n*)  
*dombu-n* 'extinguish' (BGW *dombu-n*)  
*dulubu-n* 'shoot' (BGW *dulubu-n*)

CONJUGATION 3B. No BGW equivalent.

*bo-n* 'go'

CONJUGATION 3C. The BGW cognate *kinje* belongs to a *-ke/-we/-nje* conjugation with no Dalabon equivalent.

<sup>5</sup> See Harvey (this volume) on pGN laminodentals, and Alpher, Evans and Harvey (this volume) on this verb.

<i>kinj(i)</i>	'cook' (BGW <i>kinje</i> )
<i>binj(i)</i>	'"scratch", dig up'

CONJUGATION 4. This corresponds to BGW formatives in *-ngu-n* 'eat', and *-wa-n*; which belong to quite different conjugations. In BGW the simple verb *-wa-n* has supplied the suppletive past perfective of 'go' (*wam*), but otherwise this only occurs as a thematic: in D it is also slightly irregular (see conjugation 4a) with its partially reduplicated root in the PP.

<i>ngu-n</i>	'eat' (only this verb is attested with the alternative future form as <i>nguniyan</i> rather than <i>nguyan</i> )
<i>ru-n</i>	'cry'
<i>yidjnja-n</i>	'hold, grasp, have'
<i>djawa-n</i>	'ask'
<i>yawa-n</i>	'search, look for'
<i>borlh-wa-n</i>	'follow along'
<i>warkwa-n</i>	'not know; forget (PP)'

## CONJUGATION 4A.

<i>wa-n</i>	'follow'
-------------	----------

CONJUGATION 4B. The corresponding BGW verb is disyllabic (*dowe*) and belongs to a *-we/-ke* conjugation not represented in Dalabon.

<i>do-n</i>	'die'
-------------	-------

CONJUGATION 5, 5A. For some *-ka* verbs there is still insufficient evidence (e.g. no attestation yet for PR, PP or PI) to determine the subconjugation of the verb.

5	<i>rakka-n</i>	'follow'
	<i>dolka-n</i>	'fly' (BGW <i>dolka-n</i> )
	<i>djangka-n</i>	'hunt' (BGW <i>djangka-n</i> )
	<i>ngalka-n</i>	'find' (BGW <i>ngalke</i> )
5a1	<i>djowkka-n</i>	'cross' (BGW <i>djowkke</i> )
	<i>dirnika-n</i>	'sit down'
5a2	<i>ka</i>	'carry'
	<i>dadjka</i>	'cut' (BGW <i>dadjke</i> )
	<i>birdika</i>	'go in, enter'
	<i>mukka</i>	'cover'
	<i>murridjka</i>	'break'
5a3	<i>marrka</i>	'shake'

Alternating (speaker variation):

<i>dukka(-n)</i>	'tie' (BGW <i>dukka-n</i> ) 5 ~ 5a3
<i>yaka(n)</i>	'(rain) fall' 5a3, but with <i>-n</i> sometimes attested in the present (which is then a new subconjugation)

Insufficient information:

<i>bakka</i>	'break' (BGW <i>bakke</i> )
<i>lidjka</i>	'pinch' (BGW <i>lidjke</i> )
<i>yibka</i>	'sink, set (sun)' (BGW <i>yibke</i> )

CONJUGATION 5B. Corresponds to BGW verbs in (-)wo-n 'give'.

<i>wo-n</i>	'give'
<i>buyhwo-n</i>	'show'

CONJUGATION 5B.I. In BGW *bawon* is a regular member of the -wo-n conjugation.

<i>ba&lt;wo&gt;-n</i>	'leave'
-----------------------	---------

CONJUGATION 6. This corresponds to BGW verbs in -me.

<i>worrowkmû</i>	'jump, leap' (BGW <i>worrowkme</i> )
<i>durrkmû</i>	'pull' (BGW <i>durrkme</i> )
<i>marhmû</i>	'want to go' (BGW <i>marhme</i> )
<i>dalhmû</i>	'kick' (BGW <i>dalhme</i> )
<i>jujumû</i>	'swim, "bogey"'
<i>larrayhmû</i>	'cook on coals'
<i>bulhmû</i>	'arrive'
<i>dudjmû</i>	'return'
<i>warrbmû</i>	'tell a lie'
<i>nomû</i>	'smell, sniff'

CONJUGATION 7. In BGW this is simply a member of the -me conjugation.

<i>yamûng</i>	'spear' (BGW <i>yame</i> )
---------------	----------------------------

CONJUGATION 7A. In BGW this is again a simple member of the -me conjugation.

<i>nam(û)</i>	'put' ( <i>name</i> 'make')
<i>wardnam(û)</i>	'put up high'

CONJUGATION 7B. The only member of this conjugation is the verb for 'dance', whose present form has been recorded as *nahbun*, *nahbûh* and *nahbû* (from different speakers). In the PP it follows the pattern of a Conjugation 2B verb (with the characteristic replacement of *bun* by *bong*), but in the other TAM values it patterns like the other verbs in Conjugation 7A.

CONJUGATION 8 -mûn 'inchoative'. Unlike the other themes given above, this is always bound. It is a productive means of forming (mostly) intransitive verbs. It corresponds to -men verbs in BGW.

<i>dulhmûn</i>	'be cold'
<i>worrhmûn</i>	'be full' (BGW <i>worrhmen</i> )
<i>djongmûn</i>	'be afraid'
<i>yûrrûmûn</i>	'get wild'
<i>rarrûmûn</i>	'grow'

CONJUGATION 8A. The BGW form -rren has a similar conjugation.

All verbs in their reflexive/reciprocal form, e.g. *wonawonarrûn* 'listen to each other; listen to oneself; think'. The only difference from 8 is in the vocalism of the irrealis form: -rrûni versus -meni.

CONJUGATION 9. This contains just the verb *yin* 'do, say'. This verb is defective. No PI form has been attested, though a customary form *yih-yininjyi* has been, which in this case is based on a reduplicated form of the PP *yininj*. At least in its 'say' meaning, relevant forms of the verb *yenjdjung* 'speak' may be used for the missing TAM values; conversely, PP *yininj* is used to fill in the gap left by the lack of a PP form of *yenjdjung*.

This verb continues an old but rather scantily attested root *yi-n* 'say; do' (see Alpher, Evans & Harvey this volume). Two Dalabon-internal alternations suggest this once had a further root form *yinmi* in some TAM values: the F *yinmiyan*, and the word *yinmiwon* 'instruct, teach', which appears to be made up of *yinmi* plus a causativising use of *won* 'give'. Such a form, with *yinm*, would relate this root to the BGW form *yime* 'do, say' via simplification of the nasal cluster.

#### 4 Final remarks

A remarkable feature of the historical morphology of the Gunwinyguan languages is the stability of the overall pattern of having around a dozen conjugations organised around monosyllabic roots/thematics, from which a much larger set of verb lexemes is derived by compounding with 'prepounds'.

At any given point there may, however, be a few disyllabic verbs that do not fit this pattern (e.g. *kinje* 'cook' in BGW, for which an element *-nje* is not synchronically extractable). Dalabon appears to have reduced some of these disyllabic verbs (as well as others which do have a theoretically segmentable thematic, such as *wo* in *bawo* 'leave') to monosyllables, and in the process has created some new subconjugations.

In some cases this process of reducing a disyllabic root to a monosyllable has been complete, as in the case of *do-* 'die' from *dowe* attested in BGW (and ultimately from *dhuwe-* or *dhuwa-*; see Alpher, Evans & Harvey this volume). In other cases reduction to a monosyllable is only found in the present form, either through loss of a final vowel (*kinje* > *kinj* 'cook-PR', but with stem *kinji-* in all other TAM values) or of the initial CV of the second syllable (*bawon* > *ban* 'leave-PR', but with stem *bawo-* elsewhere). The new patterns created by these monosyllabisations create new conjugational types even as other conjugations are being lost.

#### References

- Alpher, Barry, 1976, Ngalkbun field notes.  
 1982, Dalabon dual-subject prefixes, kinship categories and generation skewing. In J. Heath, F. Merlan and A. Rumsey, eds *Languages of kinship in Aboriginal Australia*, 19–30. Sydney: Oceania Linguistic Monographs 24.
- Capell, Arthur, 1962, Dalabon grammar. *Some linguistic types in Australia*. Sydney: Oceania Linguistic Monographs 7.
- Dench, Alan and Nicholas Evans, 1998, Multiple case-marking in Australian languages. *Australian Journal of Linguistics* 8(1):1–47.
- Evans, Nicholas, 1997, Head classes and agreement classes in the Mayali dialect chain. In Mark Harvey and Nicholas Reid, eds *Nominal classification in Aboriginal Australia*, 105–147. Amsterdam: John Benjamins.

- 2003, *Bininj Gun-wok: a pan-dialectal grammar of Mayali, Kunwinjku and Kune*. Canberra: Pacific Linguistics.
- Evans, Nicholas, Dunstan Brown and Greville Corbett, 2001, Dalabon pronominal prefixes and the typology of syncretism: a Network Morphology analysis. *Yearbook of Morphology 2000*, 187–231.
- Merlan, Francesca, 1994, *A grammar of Wardaman, a language of the Northern Territory of Australia*. Berlin: Mouton de Gruyter.
- n.d., Ngalkbon verbal paradigms.

