

The Reconstruction of Nyulnyulan Complex Predication
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Abstract

I discuss comparative systems of light verbs and event classification in Nyulnyulan (Non-Pama-Nyungan) languages from a historical perspective. I describe the difficulties for reconstructing light verb structures for Proto-Nyulnyulan, despite their appearance in all eight Nyulnyulan daughter languages. The complex predicate systems for three well-attested languages are described in detail. Problems for reconstruction arise in three areas. First, while all Nyulnyulan languages exhibit classificatory light verbs, the classification systems differ between languages (even between otherwise closely related languages). Secondly, the syntax of the light verb constructions differs markedly, and there is not enough information to determine which languages have innovated. Thirdly, while the preverbal material is cognate amongst the languages, the number of items which are cognate as preverbs is quite small (preverbs being recruited productively from other word classes in some languages). Thus despite enticing similarities amongst the languages, reconstruction of the details is elusive.

Die *Light verb*- und *Event*-Klassifikationssysteme der Nyulnyulansprachen (Non-Pama-Nyungan) werden aus historisch-vergleichender Perspektive diskutiert. Die Rekonstruktion der *Light verb*-Strukturen des Proto-Nyulnyulan erweist sich als schwierig, obwohl diese Strukturen in allen acht Nyulnyulansprachen erhalten sind. Zunächst werden die *Complex predicate*-Systeme dreier gut belegter Nyulnyulansprachen im Detail beschrieben. Bei der Rekonstruktion ergeben sich dann in drei Bereichen Schwierigkeiten. Erstens kommen zwar in allen Nyulnyulansprachen klassifikatorische *Light verbs* vor, doch unterscheiden sich die einzelnen Klassifikationssysteme, selbst in ansonsten eng verwandten Sprachen. Zweitens weisen die *Light verb*-Systeme erhebliche syntaktische Unterschiede auf, wobei nicht festzustellen ist, in welcher Sprache die syntaktische Innovation stattgefunden hat. Drittens ist, obwohl präverbales Material insgesamt kognat ist, unter den Elementen, die also *Preverb* fungieren, die Anzahl der Kognate äußerst gering, was auf produktive Ableitungsprozesse aus anderen Wortklassen zurückzuführen ist. Insgesamt bleiben die Details der Rekonstruktion trotz vielversprechender Parallelen unklar.

Keywords: complex predicates, Australian languages, Nyulnyulan, historical syntax, reconstruction, light verbs

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1 Introduction

In this paper I provide a contribution to the reconstruction of complex predicates in Northern Australian languages; I discuss comparative systems of light verbs and event classification in Nyulnyulan languages from a historical perspective. Nyulnyulan is a cohesive Non-Pama-Nyungan family of about eight languages which were spoken on the North-West coast of Western Australia. The family has been the subject of a series of historical/comparative papers by McGregor (e.g. McGregor 1996a, 1998, 1999, 2001, amongst others) and ongoing work by Bowers (e.g. Bowers 2004). I make a further, methodological, point here: reconstruction of syntax is in essence an examination of the interplay between form and function over time. This is particularly true of unstable systems such as light verb constructions. Here I examine the evidence for reconstructing the category of complex predicates in Nyulnyulan languages. Can we reconstruct the system of complex predication itself, independently of the forms used? Are the forms reconstructible? What differences are there in the synchronic systems between the languages? In summary, the forms are not enough to guarantee a reconstruction of the construction overall.

I begin with an overview of complex predication in Nyulnyulan. I then describe the systems from three well-attested languages in the family: Bardi (Aklif 1993, 1999, Bowers 2004, submitted), Nyulnyul (McGregor 1996b, Nekes and Worms 1953), and Yawuru (Hosokawa 1991). They are spread among the two primary branches of the family: Bardi and Nyulnyul are Western Nyulnyulan¹ languages, while Yawuru belongs to Eastern² Nyulnyulan. I compare the systems and describe the

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¹The other languages in that subgroup are Jawi, Nimanburru, and Jabirr-Jabirr.

²The other Eastern languages are Ngumbarl, Warrwa and Nyikina.

problems inherent in reconstructing such a system to Proto-Nyulnyulan.³ While the syntactic reconstruction concentrates primarily on these languages, the lexical reconstruction and identification of cognates takes into account all available material on Nyulnyulan and surrounding languages.

2 Complex predication in Nyulnyulan languages

The complex predicate constructions under discussion here are light verb constructions; that is, verbal predicates which comprise an uninflecting preverbal element and an inflecting verb, which in these languages is marked for subject and object person and number, tense, modality, and transitivity.⁴ The examples in (1) provide illustration. In (1a), the preverb *garr* combines with the inflecting verb *-boo-* “hit, spear” to form a complex predicate meaning “rub”. The predicate is transitive. Example (1b) shows another complex predicate, this time intransitive. The preverb *roowil* “walk” combines with the inflecting verb *-inya-* “catch” to form a predicate meaning “walk”. Note that although glosses have been given for *roowil* and *garr*, neither item exists independently of the complex predicate construction.

(1) a. *garr nganamboogal* “I rubbed him.”

Preverb: *garr* “rub”

Inflecting verb: *-boo-* “hit”

Entire predicate: “to rub (something) to stop the pain”.

b. *roowil innyagal* “He was walking.”

Preverb: *roowil* “walk”

³Language name abbreviations used in this paper are: PN, Proto-Nyulnyulan; PWN, Proto-Western Nyulnyulan; PEN, Proto-Eastern Nyulnyulan; JAW, Jawi; BA, Bardi; NYL, Nyulnyul; NIM, Nimanburru; NGUM, Ngumbarl; JB, Jabirr-Jabirr; YAW, Yawuru; NYIK, Nyikina; WARR, Warrwa. The items in parentheses following language names refer to the sources for the languages; those sources include Nekes and Worms (1953), Aklif (1999), McGregor (1996b, 1998, 2002) and Hosokawa (n.d.). Other abbreviations are 1, first person; 2, second person; 3, third person; ABS, absolutive; ADJ, adjective; ADV, adverb; ALL, allative; AUG, augmented number; COMMIT, comitative; CONT, continuous (aspect); EN, epenthetic nasal; ERG, ergative; FUTURE, future; IMP, imperative; IMPF, imperfective; IO, indirect object; IRR, irrealis; LOC, locative; MID.PERF, middle perfect; MIN, minimal number; N, noun; NEG, negator; POSS, possessor; PST, past; PURPOSIVE, purposive; REM.PST, remote past; TOP, topic; V.AT, ambitransitive verb; V.IT intransitive verb; V.TR transitive verb.

⁴A full description of the verb morphology of these languages is beyond the scope of this paper. The reader is referred to McGregor (2004, 2006). Bardi (and the other Nyulnyulan languages to a certain extent as well) have incipient serialisation constructions (Bower 2008); however the discussion of complex predication here is confined to the light verb structures, which clearly have a different etymology.

Inflecting verb: *-nya-* “pick up, catch”

Entire predicate: “to walk”

Preverbs are an open word class. Loan verbs, for example, are borrowed as preverbs and assigned an inflecting verb based on the semantics of the action denoted by the preverb. The Kriol verb *boojoom* ‘push’ (from English “push’im”⁵), for example, is borrowed as a preverb into Bardi and takes the inflecting verb *-ma-* “put”, along with many other verbs that imply an action involving the physical transfer of an object.

In all the Nyulnyulan languages, there are about 10 verbs which form most of the light verb complex predicates, along with a further set of verbs which appear sporadically in the construction, and further ‘heavy’ verbs which only appear as simple predicates.

There are a number of dimensions along which we can describe the system of complex predicates in these languages. First is the number of light verbs which participate, which verbs they are, and whether they are reconstructible to earlier stages of the language. Second is the functions that these verbs fulfill in the language. In all Nyulnyulan languages, light verbs may be used as event classifiers; that is, they provide further information about some aspect of the event denoted by the preverb. For the term and detailed discussion and examples see McGregor (2002). Thirdly, we need to consider whether there are roles for light verbs other than the classificatory one. Finally, we need to discuss the preverbs which are found in the languages. §§3–5 present the data for the modern languages. Reconstructions and discussions of the changes are given in §6.

3 The Bardi system

In this section I provide information about the Bardi light verb system. I also illustrate the Bardi data in more detail than for the other languages.

3.1 Number and composition of light verb inventory

A list of Bardi light verbs is given in Table 1 and Table 2 below. First appear the light verbs which commonly appear with preverbs; these twelve verbs account for about 85% of the light verb

⁵In Kriol (the English-based creole widely spoken in north-west Australia), third person singular object clitic pronouns have been reanalyzed as markers of transitive verbs. Bardi borrows Kriol transitive verbs with the transitive marker intact.

constructions in Bardi. Following, in Table 2 appear the inflecting verbs which only occur in collocation with a few preverbs.⁶ For each verb, the total number of preverbs with which the verb is attested is given, along with the percentage of total complex predicational attestations this represents.

Root	Valency	Gloss	%age (no.)	Example	gloss
<i>-ar-</i>	v.tr	kill/spear (lice)	5 (34)	<i>darr -ar-</i>	come (v.it)
<i>-banji-</i>	v.it	share/exchange	1 (5)	<i>dirray -banji-</i>	turn around
<i>-bi-</i>	v.tr	hit w. hand	1 (9)	<i>garr -bi-</i>	rub to stop pain
<i>-boo-</i>	v.tr	spear, poke	2 (15)	<i>milimili -boo-</i>	write
<i>-ga-</i>	v.tr	bring s.th	4 (27)	<i>abarrabarr -ga-</i>	lead astray
<i>-gal(a)-</i>	v.it	walk, visit	3 (20)	<i>jarrman -gala-</i>	wade across
<i>-gardi-</i>	v.at	go inside	1 (6)	<i>lool -gardi-</i>	enter
<i>-(i)nya-</i>	v.tr	pick up	10 (68)	<i>yal -(i)nya-</i>	spread out
<i>-jiidi-</i>	v.it	go	4 (27)	<i>galgooriny -jiidi-</i>	swim breaststroke
<i>-joo- ~ -(d)i-</i>	v.tr	do/say	31 (208)	<i>yardab -joo-</i>	crawl
<i>-ma-</i>	v.tr	put s.th s.w.	20 (130)	<i>wajim -ma-</i>	wash something
<i>-ni-</i>	v.it	sit	2 (16)	<i>wiliwilon -ni-</i>	be fishing
<i>-ø⁷</i>	v.tr	give	9 (58)	<i>wanilirr -ø-</i>	curse

Table 1: Bardi common light verbs

All but one of the verbs used in preverb-inflecting constructions is also used independently. The one exception is *-ganyi-* “to come/climb up” (in Table 2), which is used with five preverbs⁸ and is not accepted by my consultants as a simple predicate. It does, however, appear in simple predicates in the earlier sources (such as Metcalfe c. 1975, who records *ingganyina bardagon* “he climbed on a tree”); similar usages are also found in Laves (n.d.), from the late 1920s. Thus *-ganyi-* appears to have fallen out of use relatively recently.

All these roots are reconstructible to Proto-Nyulnyulan except for *-jiidi-* and *-gala-*, which are reconstructible to Western Nyulnyulan, and the distinction between *-boo-* “spear” and *-bi-* “hit with hand”, which appears only in Bardi (although the root **-bu-* itself is reconstructible to Proto-Nyulnyulan in the meaning “hit, kill”). The other inflecting verb that warrants comment is *-ar-* “spear lice”. The root appears to have undergone a semantic shift in Bardi only; in the other

⁶Although only five verbs are listed with *-banji-* “exchange”, this verb productively forms reflexive/reciprocal complex predicates and is therefore included because of its productivity. Furthermore, *-ni-* “sit” occurs productively with adjectives; the count given here does not include those productive formations.

⁷The verb root is phonologically null (pN *-w-).

⁸The verbs are *lagal -ganyi-* “to climb” (by far the most common usage), *angan -ganyi-* “to come up closer”, *boorroboorr -ganyi-* “to swell up”, *binbirr -ganyi-* “drift to a place” and *birrbard -ganyi-* “ricochet, bounce back”

Root		Gloss	No.	Example	“Translation”
-(a)rli-	v.tr	eat	1	<i>ararr</i> -(a)rli-	‘ache (v.it)’
-arndi-	v.tr	catch	1	<i>joomoonoonoo</i> -arndi-	‘gamble (v.it)’
-balama	v.tr	entwine	1	<i>garga</i> -balama-	‘betrothe’
-banyi-	v.it	finish	1	<i>nilirr</i> -banyi-	‘slacken (of tide)’
-boolmoo-	v.it	smell	1	<i>gooroogooroo</i> -boolmoo-	‘give off a nice smell’
-booloo-	v.it	come	1	<i>darral</i> -booloo-	‘come out’
-galala-	v.tr	follow	2	<i>gorna</i> -galala-	‘become physically well-developed’
-gama-	v.at	laugh	1	<i>goolgarr</i> -gama-	‘laugh (v.it)’
-ganyi-	v.it	climb	5	<i>binbirr</i> -ganyi-	‘drift somewhere’
-garnboo-	v.tr	growl s.o.	1	<i>balygarr(a)</i> -garnboo-	‘swear at someone’
-gonboo-	v.tr	send	1	<i>ngaanka</i> -gonboo-	‘send a message’
-jala-	v.tr	see	2	<i>garrgooy</i> -jala-	‘stare hard at someone’
-jalgoo-	v.it	fall	1	<i>doolii</i> -jalgoo-	‘be prematurely born’
-janboo-	v.tr	tread	1	<i>gooljoo</i> -janboo-	‘pull out grass’
-jarrala-	v.it	run	1	<i>joornk</i> -jarrala-	‘take off with speed’
-jarrmi-	v.it	rise	1	<i>wirr</i> -jarrmi-	‘jump into the air’
-joogooloo-	v.at	break	2	<i>ngaada</i> -joogooloo-	‘break in half’
-jooloo-ng-	v.tr	collect	1	<i>boorrma</i> -jooloong-	‘gut something’
-joo-ng-	v.tr	do/say (+ appl)	3	<i>birarr</i> -joong-	‘leave behind’
-malanda-	v.it	go against tide	1	<i>arrinarr</i> -malanda-	‘go against the tide’
-minyji-	v.tr	receive from	1	<i>rirran</i> -minyji-	‘snatch’
-moondoo-	v.tr	wet s.th	1	<i>oola</i> -moondoo-	‘wash oneself’
-mooroo-	v.tr	waste s.th	3	<i>barrja</i> -mooroo-	‘spit something out’
-nganka-	v.it	speak	1	<i>balygarr</i> -nganka-	‘swear’
-ngooloo-	v.tr	throw	4	<i>niimi</i> -ngooloo-	‘keep watch (v.it)’
-ngooloo-ng-	v.tr	throw at	1	<i>anyja</i> -ngooloo-ng-	‘give away’

Table 2: Other Bardi light verbs

Nyulnyulan languages the root *-ar-* or *-ra-* simply means “spear”, although it can be used in more specialised meanings such as “sew”. In Bardi the root has much narrower semantics when used as a simple predicate, and *-boo-* “hit, spear, poke something” is the generic “spear” verb and has taken over many of the functions that *-ar-/ra-* covers in other Nyulnyulan languages.

Many preverbs can be used with more than one light verb. In (2), for example, *dirray* can occur with five different inflecting verbs.

(2) *dirray* “turn”

- a. + *-banji-* “turn around”; (*-banji-* = “exchange’)
- b. + *-ar-* “rotate something”; (*-ar-* = “spear lice’)
- c. + *-boo-* “turn into something”; (*-boo-* = “poke, spear’)
- d. + *-jiidi-* “swing about”; (*-jiidi-* = “go’)
- e. + *-∅-* “swing about, turn back”; (*-∅-* = ‘give’)

Much more typical, however, is the use of a preverb with two or three inflecting verbs. A majority of the preverbs in the corpus are attested with a single inflecting verb. There are also a few productive patterns of derivation, where a preverb may take different inflecting verbs with predictable changes in semantics. An example is given below in (3), showing the different inflecting verbs which the adjective *maanka* “black” may take when functioning as a preverb. Note that all true adjectives seem to be able to participate in a similar derivational system.

- (3) a. *maanka -ni-* “be black (stative)” (*-ni-* = “sit, be at a place’)
- b. *maanka -joo-* “get black, become black (inchoative)” (*-joo-* = “do/say’)
- c. *maanka -ma-* “make something black (causative)” (*-ma-* = “put’)

3.2 Functions of light verbs

Verbal classification is one of the main parts of the Bardi complex predicate system. Under this analysis, the inflecting verb acts as a classifier of the preverb, indicating the type of event the preverb refers to. Table 3 gives a summary of these findings, and they are discussed in detail in Bower (2004:Ch. 9). Some of the verbs have clear delineated semantics, while in other cases the functions of

the light verb are more difficult to determine. Clear cases include *-ni-* “sit”, which marks stative predicates, and *-banji-* “share”, which is used for reciprocal actions. A slightly less clear case is *-ar-* “spear lice”, which is primarily used for actions which involve a physical end point, but also has a cluster of bodily function preverbs. A sizable number of predicates marked with *-(i)nya-* “catch” are accomplishments, and cutting and scooping verbs tend also to use this light verb, but there are many exceptions, including *roowil* *-(i)nya-* “walk” described above.

Therefore, while there does seem to be some classificatory function in the Bardi complex predication system, it is not a neat system. Moreover, classification is only one of the functions of light verbs in Bardi, although it does account for the largest number of preverb–inflecting verb pairs. In fact, there are four clusters of constructions.

light verb	gloss	primary function	secondary function
Monovalent light verbs			
<i>-ni-</i>	sit	statives	—
<i>-jiidi-</i>	go	anticausatives	defined trajectory
<i>-gal(a)-</i>	visit	uncontrolled action	undefined trajectory
<i>-banji-</i>	share	refl/recip	—
<i>-ganyi-</i>	climb	trajectory up	—
<i>-gardi-</i>	enter	trajectory into a space	—
Bivalent light verbs			
<i>-ma-</i>	put	causatives (+ adj) result (+ other) telic, unergative (intransitive)	collection indirect impact change of location
<i>-bi-</i>	hit w. hand	impact, smashing	
<i>-boo-</i>	poke	impact, spear	change of state
<i>-ga-</i>	carry	carrying, change of location atelic activities	speech acts
<i>-ar-</i>	spear (lice)	action around a point activities with defined trajectory	bodily functions
<i>-∅-</i>	give	accomplishments, telic activities	cutting or chopping
<i>-(i)nya-</i>	catch	accomplishments	scooping, cutting
<i>-joo-</i>	do/say	results (+ adj), inchoative generic light verb (do X)	

Table 3: Summary of Bardi light verb uses

One type of non-classificatory complex predicate involves the preverb reinforcing, or giving a subset of meaning, of the inflecting verb. In such cases, the verb is never one of the light verbs also used in classification (although the preverb may be used with other inflecting verbs as well). The preverb is

frequently an adverb, or it may have the same or very similar meaning to the inflecting verb. Examples (4) – (6) give some common examples of the verbs used with this type of preverb construction:

(4) verbs of speech:

- a. *balygarr -nganka-* “swear’; cf. *balygarr* “swearing (n)”, *-nganka-* “speak”
- b. *balygarr -garnboo-* “swear at someone’; cf. *balygarr* “swearing (n)”, *-garnboo-* “growl someone (vituperate)”

(5) verbs of motion:

- a. *joornk -jarrala-* “run” (cf. *joornk* “run (n, adv)”, *-jarrala-* “run’)
- b. *wirr -jarrmi-* “rise, get up” (cf. *-jarrmi-* “get up’)

(6) “adverbial’:

- a. *ngaada -joogooloo-* “break in half” (cf. *ngaada* “short (adj)”, *-joogooloo-* “break’)
- b. *jondol -moolgoo-* “sleep doubled up” (cf. *jondol* “doubled up (adv)”, *-moolgoo-* “lie asleep’)

The second type of complex predicate which can be isolated is where the preverb appears to be functioning as a pseudo-incorporated object (or occasionally instrument) of the light verb. The predicate as a whole is intransitive.

- (7) a. *ngaanka -gonboo-* “send a message” (*ngaanka* = “word, language”, *-gonboo-* = “send’)
- b. *gooljoo -janboo-* “pull out grass” (*gooljoo* = “grass”, *-janboo-* = “tread on’)

Finally, there are the idioms which do not fit these patterns. The idiomatic complex predicates are a small minority of the total number. The incorporated object preverbs and ‘reinforcing’ preverbs (where the preverb and light verb have similar semantics) occur in roughly equal proportions and together account for just over 25% of the total preverb–light verb combinations in my corpus.

- (8) *joowara -jardi-* “sneak way together” (*-jardi-* “ask permission’)

3.3 Preverbs

Bardi preverbal syntax is quite straightforward in comparison to the other Nyulnyulan languages. The preverb almost always immediately precedes the inflecting verb. The only time a preverb may be moved around the clause is when it is an “adverbial” preverb and the meaning of the complex predicate is strictly compositional. (9) shows varying order for the preverb and the rest of the complex predicate:

- (9) a. *Arra joodarrarr oolalana.*
NEG with the tide 3-IRR-visit-REM.PST
“He didn’t go with the tide.”
- b. *Joodarrarr arra oolalana.*
with the tide NEG 3-IRR-visit-REM.PST
- c. *Arra oolalana joodarrarr.*
NEG 3-IRR-visit-REM.PST with the tide

Thus given this strong restriction on constituency, the orders illustrated in (9b) and (9c) are probably not really complex predicates.

There are limits on the combination of preverbs with light verbs in syntax. Preverb conjunction never occurs in spontaneous speech. The conjunction of preverbs with *agal* “and” is very rarely accepted. A few examples were considered grammatical; these are given in (10). Much more often, however, suggested sentences were rephrased with either two complex predicates joined by *agal* or by two verb phrases with no overt conjunction.

- (10) a. *Bilirl agal giringg nganarij bardi.*
yawn and cough 1-TR-spear-MID.PERF yesterday
“I yawned and coughed all day yesterday.” (CB/FN: NI.3/47)
- b. *Jooyiboon wiinya injij agal rambin.*
pot full 3-TR-do/say-MID.PERF and heavy.
“The pot got full and heavy.”

There are a few instances in Bardi of constructions where the preverb appears to be a multi-word phrase. Representative examples are given in (11). (11a) and (11b) involve two preverbs (*bard* “away, off” is the only preverb which may be productively stacked; in general in Australian languages if

there are limits on stacking motion direction preverbs are the only allowed doubled preverbs; see Bowerman 2006 for some discussion) while (11c) has a phrasal preverb.

- (11) a. *bard arr -joo-*
 off go do/say
 “go off”
- b. *bard roowil -nya-*
 off walk catch
 “walk off”
- c. *liyan layib -ma-*
 heart well put
 “make someone happy”

There is little independent usage of preverbs without their inflecting verb in Bardi. In the modern language, the only preverbs which may be used without a light verb are those which have cognates in other word classes, and again, we are confronted with the question of whether, in that case, the ‘preverb’ is actually a preverb. In (12), for example, the sentence could probably be equally well translated “he walked away with a song”. That is, *jirm(a)* could be a noun.

- (12) *Roowil innyij jirma-nyarr.*
 walk 3-TR-catch-MID.PERF singing-COMIT.
 “He walked away singing.” (Aklif 1990-1994:E0/11)

- (13) *Jooboolngan jirra.*
 swimming-ALL/PURP 3AUG.POSS
 “They are going swimming.” (CB/FN 12/26)

There are some hints from the Laves data that the use of preverbs without light verbs used to be a little freer in Bardi. There are a few examples of the preverb *roowil* “walk” without a light verb in the corpus; (14) below illustrates the use of *galgoorriny* “swim breast stroke” without an accompanying light verb:

- (14) *Jama, gala jawa barda gaalwa galgoorriny.*
 well thus 1+2MIN.IO off raft swimming
 “Well, let’s us two swim together, floating on the catamaran.” (Laves n.d.:129/15)

In Bardi, however, the inflection which preverbs may take is highly limited. The only even remotely productive derivation which some preverbs may undergo is reduplication.

4 Nyulnyul

4.1 Number and composition of light verb inventory

Nyulnyul and Bardi are closely related to one another, although they are not mutually intelligible.

Table 4 below provides the light verbs which are used in Nyulnyul. The percentages were calculated from the table of light verbs and corpus counts in McGregor (1996a).

verb	“gloss”	%age
<i>-bany</i>	“finish”	1
<i>-banyj</i>	“exchange”	4
<i>-jal</i>	“see”	1
<i>-jid</i>	“go”	4
<i>-ju</i>	“do/say”	33
<i>-k</i>	“carry”	6
<i>-kal</i>	“play, wander”	2
<i>-m</i>	“put”	13
<i>-n</i>	“be, sit”	3
<i>-nga</i>	“be”	2
<i>-nyu</i>	“get, catch”	13
<i>-w</i>	“give”	11

Table 4: Nyulnyul light verbs

All these roots, with the exception of *-nga* “become”, have cognates in Bardi. Nyulnyul loses final vowels in most positions. Thus *-m* “put” is directly cognate with Bardi *-ma-* “put”, etc. Vowel length also appears to be lost in Nyulnyul (cf. Nyulnyul *jid* vs Bardi *-jiidi-* “go’). Bardi loses intervocalic *w, whereas Nyulnyul does not; Nyulnyul *-w* “give” is the cognate of Bardi *-ø-* “give”. All these roots are reconstructible to Proto-Nyulnyulan with the exception of *jiidi, which is reconstructible to Western Nyulnyulan only.

Like Bardi, in Nyulnyul there are a few roots which sporadically occur in complex predicate constructions but do not appear to participate in the classification system. They include *-jalk* “fall” (cf. Bardi *-jalgoo-* “fall”) and *-muur* “spill” (cf. Bardi *-mooroo-* “waste’). Nyulnyul has approximately the same number of inflecting roots that Bardi does (c. 250) and most of them have cognates with Bardi.

4.2 Functions of light verbs

The most common light verbs used in Nyulnyul and their functions are presented Table 5. Nyulnyul has fewer productive light verbs than Bardi does (for example, the *-boo-* “hit” plays only a peripheral role in the Nyulnyul system). As in Bardi, *-j-* (Bardi’s *-joo-*) “do, say” is by far the most common light verb.

<i>-kal</i>	wander	meandering or uncontrolled motion
<i>-barnj</i>	exchange	reflexive/reciprocal activities
<i>-k</i>	carry	transitive motion intransitive motion involving exit from a medium change of state
<i>-r</i>	poke	motion in a straight line violent actions piercing sounds or experiences
<i>-jid</i>	go	manners of motion change of state bodily conditions
<i>-w</i>	give	violent activities involving physical contact via an intermediary grasping and grabbing actions
<i>-n</i>	be, sit	states, continuous activities
<i>-ny</i>	get, catch	acquisition and retention of an entity initiation of motion change of state violent actions
<i>-m</i>	put	change of position, motion perceptual, emotional and communicative activities
<i>-j</i>	do, say	vocalizations emission of light or heat motion social activities inchoatives

Table 5: Summary of Nyulnyul light verbs, after McGregor (2002)

McGregor (2002:115) also notes that the Nyulnyul inflecting verbs tend to pair off along a certain parameter. The eight most common light verbs, for example, form opposites. These are summarized in (15) below.

(15)

- n-* *j-* static versus dynamic events
- jid-* *kal-* directed versus undirected motion
- m-* *w-* action extending out versus action drawing in
- k-* *m-* source of energy moves with trajector, versus not

There are several differences between the Nyulnyulan classification system and that found in Bardi. In Nyulnyul, *-jid-* is primarily a motion light verb; it marks trajectory. In Bardi, however, most of the uses of the cognate *-jiidi-* do not involve motion; they are unaccusatives paired with the transitive verb *-(i)nya-*.

- (16) a. *lolor -jiidi-* v.it “peel off”;
 b. *lolor -(i)nya-* v.tr ‘peel off”

Secondly, Nyulnyul *-barnj-* is described as having a minor role in the classification system. In Bardi it is productively used to form reflexive/reciprocal complex predicates. I do not know how productive this use is in Nyulnyul. Thirdly, Bardi *-gal(a)-* as a light verb is not primarily a marker of trajectory or (metaphorical) undirected motion. Many preverbs which take *-gal-* “wander” do involve a component of *uncontrolled* action, however it is not clear to me that this parameter is at the core of this classifier class (there are many other preverbs whose actions are uncontrolled which do not take *-gal-*).

A few idiomatic examples with *-jiidi-/jid-* have undergone semantic shift. Nyulnyul *marrmarr -jid* means “twitch” (e.g. like a dog does while it’s sleeping), whereas in Bardi *marrmarr -jiidi-* means “be afraid”, or to get a fright such that it wakes a person right up.⁹ The original meaning is not reconstructible. Preverbs which take Nyulnyul *-w-* involve physical contact through an intermediary, but in Bardi these preverbs take *-ma-* instead. Some Bardi predicates with *-ø-* “give” could be described as denoting physical contact through an intermediary, but in fact they more specifically involve only cutting and chopping.

The Nyulnyul system, like that in Bardi, is not exhaustively classificatory, and there are examples where the preverb appears to “classify” (or provide further information about the light verb) rather

⁹The preverb *marrmarr* also appears with *-nya-* “catch” in Bardi, where the resulting predicate means “flash” (e.g. of lightning).

than the other way around (McGregor 1991). However, since most of McGregor's work has focused on the classificatory elements of the system, and since there is little available information for Nyulnyul where the preverbs and are collocated with their light verbs, nothing more can be said at this stage.

4.3 Preverbs

Like in Bardi, Nyulnyul preverbs are uninflecting apart from reduplication

In Nyulnyul it seems to be more common than in Bardi for preverbs to occur without an inflecting verb, as in (17) below:

- (17) *Kinyingk jarrbard-ung bindany malbul.*
this lift-ALL big thing.

“This is for lifting big things.”

(McGregor 2002:273)

I have no information on the extent to which Nyulnyul uses gerunds/infinitives in preverb nominalizations (McGregor's examples of gerunds all contain simple predicates).

Preverb conjunction is occasionally produced spontaneously in Nyulnyul, although it is rare:

- (18) *junk aa marriny ijidin.*
run and walk 3sg-go-CONT

“He runs and walks.”

(McGregor 1996a:48)

The syntax of Nyulnyul complex predication seems to be fairly similar to that described (in more detail) for Bardi, and where there are points of difference, the older Bardi sources are closer to Nyulnyul.

5 Yawuru

Both Bardi and Nyulnyul are Western Nyulnyulan languages. Let us now consider data from Yawuru, which is a member of the other Nyulnyulan subgroup.

5.1 Number and composition of light verb inventory

Most of the verbs used in Yawuru light verb constructions (given in Table 6) will be familiar from §3 and §4. The root *rndira* “go” is reconstructible to Proto-Eastern Nyulnyulan *-arndira- “go”; the

others are proto-Nyulnyulan.

verb	“gloss”	%age of total preverbs
<i>-dyu-</i>	“do/say”	33
<i>-ni-</i> ~ <i>-nga-</i>	“sit”	20
<i>-ma-</i>	“make/put”	13
<i>-ngara-</i>	“become”	11
<i>-rndira-</i>	“go”	6
<i>-nya-</i>	“catch”	4
<i>-ka-</i>	“carry”	3
<i>-ra-</i>	“spear”	3

Table 6: Yawuru light verbs

Besides the verbs given Table 6, thirteen other verbs can appear in complex predicate constructions. They are: *-ø-* “give” (pN *-w-); *-balu-* “hit”; *-bilka-* “hit”; *-bandyi-* “exchange” (pN *-banji-), *-baru-* “blow”, *-bula-* “come” (pN *-bulu- (which is seldom a light verb in these languages)), *-burnda-* “bite”, *-dyalku-* “fall” (pN *-jalku-, a minor light verb in Western Nyulnyulan), *-kardi-* “enter” (pN *-kardi-), *-ngula-* “throw” (pN *-ŋulu-), *-ni-* + *-ngany* “hold” (from pN “sit” with the applicative marker) and *-rba-* “follow” (Hosokawa 1991:§5.1.4). Each of these verbs may occur with one or two preverbs.

5.2 Functions of light verbs

Hosokawa (1991) does not present his analysis of light verbs in terms of classification, and the Yawuru dictionary does not list light verbs with most preverbs. Therefore the following generalisations reflect my interpretation of Hosokawa’s Yawuru data.

Yawuru appears to have a system rather like Bardi’s, in which classification does play a role, but not as the sole function of light verbs. For example, loan verbs are included with verbs other than the catch-all verb “do, say”. Hosokawa does not pursue the classification analysis, and his own division of complex predicates into four types according to the function of the light verb does imply that there is something to the function of complex predication in Yawuru other than classification. Like Bardi and Nyulnyul, Yawuru exhibits complex predicates where the preverb appears to modify the inflecting verb in some way.

Some Yawuru light verbs mark aspect. Complex predicates with *-dyu-* are telic or punctual, while those with *-ni-* are stative (the latter as in Bardi). Transitivity alternations are also marked by light

verbs (recall the *-jiidi-/(i)nya* pairs in Bardi discussed above). Hosokawa's examples are reproduced below:

(19)

	preverb	intransitive	gloss	transitive	gloss
a.	<i>bany</i>	<i>-dyu-</i>	explode, bang	<i>-ma-</i>	shoot
b.	<i>rdii</i>	<i>-dyu-</i>	break	<i>-ra-</i>	break
c.	<i>darlp</i>	<i>-dyalku-</i>	die suddenly	<i>-dyu-</i>	jump over

Yawuru also exhibits the same causative/inchoative alternation between the roots *-ma-* and *-dyu-* that Bardi does. Table 7 summarises the major functions of Yawuru light verbs.

<i>-dyu-</i>	do/say	'active'; default verb
<i>-ni-</i>	sit	statives
<i>-ma-</i>	put	causatives
<i>-ngara-</i>	become	state or change of state
<i>-rndira-</i>	go	[not further mentioned in Hosokawa (1991)]
<i>-nya-</i>	catch	causatives, change of state
<i>-ka-</i>	carry	carrying, transitive accompanied motion
<i>-ra-</i>	spear	action around a point; body functions
<i>-ngari-</i>	leave	causatives

Table 7: Major functions of Yawuru light verbs

Many of the verbs with *-ka-* "carry" contain a transitive motion meaning (as illustrated in (20)); however, not all are subsumable under this meaning (see (21)).

(20) a. *nganybi +ka* "hold at/by the side of one's body (or underarm)"

b. *ngandya +ka* "carry in the mouth" (as dogs)

(21) a. *wirrp +ka* "smash it, hit it hard"

b. *mardaly +ka* "make noise, be noisy" (cf. Bardi *mardaly -ga-* with the same meaning)

c. *darayim +ka* "try" (from Kriol "try'im")

The light verb *-ra-* "spear", like in Bardi, clusters around actions which occur around a point, and actions involving bodily functions.

- (22) a. *dyiin +ra* (Vt) “point to/at, show with a finger” (cf. Bardi *jiin -ø-* “point”, which replaces *jiin -ar-* from earlier sources from the 1920s)
- b. *dyad +ra* (Vt) “stab” (possibly cognate with Bardi *jard -ø-* “place hands somewhere for support”)
- c. *garrada +ra* (Vi) “ejaculate, have sexual ecstasy”

As in other Nyulnyulan languages, *-ni-* “sit” is used in stative predicates. Also familiar from other languages is the use of *-ma-* “put” in causatives. The details of causative marking differ between the languages, however; in Bardi, *-ma-* marked causatives are almost always deadjectival, whereas in Yawuru, we find alternations such as those exhibited in (23) and (24), where the preverb is not derived from a word in another word class.

- (23) a. *nyuwa +dyu* (Vi) “ABS shift” [+SAY] (animate subject)
- b. *nyuwa +ma* (Vt) “ERG take ABS away” [+PUT] (animate object)
- (24) a. *dyudug +dyu* (Vi) “ABS stop” [+SAY]
- b. *dyudug +ma* (Vt) “ERG stop ABS” [+PUT]

(24) is a good example of noncongruence between the Bardi and Yawuru systems; Bardi has this preverb, but it appears with *-ø-* in the meaning “stumble” and with *-ar-* in the meaning “kick”. Causation is also marked in Yawuru with *-nya-* “catch”; in Bardi causatives with this verb have intransitive counterparts with *-jiidi-* “go”, but no such set is found with the Yawuru causatives. Examples from Yawuru include *rurrku +nya* “make someone sweat” and *ridi +nya* “make something ready”.

Finally, Yawuru exhibits idiomatic preverbal collocations, as illustrated with the preverb *liyan* “heart” in (25), and “congruent” constructions (26), where the preverb and light verb have the same meaning. Bardi also has idiomatic complex predicates with *liyan*, but in different meanings: compare *liyan -ga-* “carry a grudge”, *liyan -nya-* “breathe”, and *liyan -ngooloo-* “sigh [+THROW]”.

- (25) a. *liyan +ni* (Vi) “ABS be sorry for DAT” [+BE]
- b. *liyan +rndira* (Vi) “ABS be pregnant” [+GO]

- c. liyan +dyalku (Vm) “ERG feel sorry for DAT” [+FALL]
 - d. liyan +ka (Vm) “ERG get angry about DAT” [+CARRY]
 - e. liyan +nya (Vt) “ERG oppose ABS” [+CATCH]
- (26)
- a. yinydya +rndira (Vi) “go, set out” [+GO]
 - b. dyunku +mirdibi (Vi) “run” [+RUN AWAY] (cf. Bardi *joornk -jiidi-*, *joornk -jarrala-* “run away”)
 - c. baku +bula (Vi) “come” [+COME]
 - d. kanydyirr +bura (Vt) “gaze” [+SEE]

The cluster of verbs listed in (26) can be compared with those Bardi predicates in (4) – (6) above.

5.3 Preverbs

Hosokawa (1991:ch 5) contains a detailed discussion of the syntax and semantics of Yawuru preverbs. Yawuru preverbs apparently attract stress from the light verb, thus the complex predicate is treated as a single phonological unit (unlike in Bardi, where the complex predicate is a single prosodic unit, although with two primary stresses).

Preverbs in Yawuru can receive case marking, unlike in Bardi, where the only ‘case’ preverbs receive is clausal subordination marking (for example with the allative *-ngan*, marking purposives; see Bowern 2008 for more details). Yawuru preverbs, however, can receive several different case markers, as well as other inflection, as summarized in Table 8.

Some examples are given below. (27) shows *-bardu* “still” (cognate with the independent adverb *bardo* “still, already” in Bardi) with a preverb accompanied by a light verb, while (28) shows case marking on a preverb used independently.

- (27) *Nunydy-a-bardu ya-nga-rn.*
 alive-STILL 1+2-be-IMPF
 “It doesn’t matter” [lit, “we’ll still live”] (Hosokawa 1991:\$8.2.1.2)

- (28) *Burd inydyun midyala-gap.*
 rise 3-EN-say-IMPF sitting-ABL
 “He stood up from sitting.” (Hosokawa 1991:\$5.4.1.1)

Function	Form	Gloss
with light verb:		
aspectual	<i>-bardu</i>	“still Xing”
limitative	<i>-manydyan</i>	“only”
resolutive	<i>-da</i>	“surely, no doubt”
dual	<i>-mildyarri</i>	“by two”, reciprocal
intensive	<i>-gadya</i>	“really”
without light verb:		
dative	<i>-dyi ~ -yi</i>	“so that . . .” (consequence)
locative	<i>-gun</i>	“so that . . .” (purpose)
ablative	<i>-gap</i>	“from Xing”
causal	<i>-nyurdany</i>	“because of”
instrumental	<i>-barri</i>	“while Xing”

Table 8: Yawuru preverb inflections, after Hosokawa (1991:\$5.4.1)

Hosokawa (1991:\$5.1.6) contains a short but very interesting discussion of Yawuru preverb ordering. As in Bardi, the regular word order is preverb – verb, and there are few deviations from this. His example of a preverb-inflecting verb combination is *dyunku -mirdibi* “run”, where all orders are grammatical. A pause usually appears when the preverb follows the light verb.¹⁰ Hosokawa also notes that intransitive preverbs exhibit variable ordering, but transitive preverbs are more fixed. (I do not know if this is actually the case or is a relic of the types of preverbs which Hosokawa tested.) Yawuru preverbs also overlap with other word classes (as in Bardi), as shown by the examples in (29). The same is true in Nyulnyul. However, in Nyikina, another Eastern Nyulnyulan language, there is no overlap with other word classes, and preverbs, with few exceptions, occur in that word class only.¹¹

- (29) a. *nyiwa +ngara* (Vi) “faint” [+BECOME] (*nyiwa* “feeble”)
b. *wirkany +ka* (Vi) “elope” [+CARRY] (*wirkany* “elopement”)
c. *bukarri +rndira* (Vm) “dream about DAT” [+GO] (*bukarri* “dream”)
d. *narli +ma* (Vt) “believe, trust” [+PUT] (*narli* “true, truly”)
e. *rayi +ni-ngany* (Vt) “keep in secret” [+HOLD] (*rayi* “spirit”)

¹⁰In Bardi the cognate *joornk(oo)* is an adverb and a noun, and its appearance in orders other than immediately preverbal would not be surprising (for a comparable example see *joodarrarr gala* “go with the tide” in (9) above). It would seem that the phenomenon is more widespread in Yawuru than it is in Bardi.

¹¹Nyikina was not included in this study because the dictionary materials currently available to me do not list which light verbs a preverb may appear with, which severely limited the conclusions which could be drawn by comparison with the other languages. Nyikina does have a classification system (Stokes 1982), and many Nyikina preverbs are cognate with items in other Nyulnyulan languages.

- f. rurrp + \emptyset (Vt) “revenge” [+GIVE] (rurrp “in return”)
 g. ridi +nya (Vt) “prepare” [+CATCH] (from “ready”)

6 Reconstruction of the system

There is little doubt that the preverb-inflecting verb construction should be reconstructed to Proto-Nyulnyulan. It is robust in all the languages, and there are many words which function only as preverbs in all languages. There are also probably enough idiomatic complex predicates that are reconstructible that we could count them as ‘shared irregularities’. However, complex predicate reconstruction is not straightforward. This section evaluates some of the problems.

6.1 Light verb inventory

The light verb inventories of each language are similar but do not overlap completely. The verb **-jiidi-* “go”, for example, can only be reconstructed to Proto-Western Nyulnyulan, not to Proto-Nyulnyulan. Another example is *-boo-*, which is a fairly common light verb in Bardi but is rare in Nyikina and absent in Yawuru. The following are reconstructions of light verbs. (pW) before a reconstruction indicates that the verb should be reconstructed to Proto-Western Nyulnyulan only; pE denotes Proto-Eastern Nyulnyulan.

***-arndi-** “catch’;

Ba.(A) *-arndi-*; Nyik.(S) *-andi-* (I) (pick up); Warr.(McG) *-(a)ndi-*.

***-(a)w(u)-** “give’; Jaw.(B) \emptyset - [*anangi*] (‘give me it’); Ba.(A) \emptyset -; Nyl.(Bis) *-w-* [*mawan*]; Jb. *-w-* ~ *-aw-*;

Yaw.(Hos) \emptyset -; Warr.(McG) *-wa-* ~ \emptyset -

***-banji-** “exchange, share’; Ba.(A) *-banji-* ~ *-onji-* (share); Nyl.(N&W) *-barnji-* [*mabandjen*];

Nim.(N&W) *-banji-* [*mabandjen*]; Jb.(N&W) *-banji-* [*mabandjen*];

Yaw.(Hos) *-bandyi* (II)-; Yaw.(Hos) *-bandyibandyi-* (I/II?) (exchange collectively);

Nyik.(S) *-barnji-* (II); Warr.(McG) *-banyji-* ~ *-wanyji-*

(pWN) *-banyi- “finish, kill” Ba.(A) *-banyi-* ~ *-onyi-* (also intrans; pass away); Nyl.(N&W) *-banyi-*

[*mabanjen*] Nim.(N&W) *-bany-* [*mabanjen*] Jb.(N&W) *-bany-* [*mabanjen*]

*-bu- “hit, kill’;

Ba.(N&W) -*b-* [*maben*] (hit); Ba.(A) -*bu-* ~ -*o-*; Nim.(N&W) -*bunyj-* [*ma-bondjen*]; Jb.(N&W) -*bu-* [*ma-bon*];
Nyk.(S) -*bu-*;

*-bula- “come’;

pWN* -*bulu-*; Ba.(A) -*bulu-*; Nyl.(N&W) -*bul-* [*mabolan*] (grow); Jb.(N&W) -*bul-* [*mabolan*] (grow);
pEN* -*bula-*; Yaw.(Hos) -*bula-*; Nyk.(S) -*bula-* (II); Nyk.(S) -*mulumulu-* (haunt, visit frequently.); Warr.(McG) -*bula-* ~ -*wula-*; Warr.(McG) -*bulawula-* (come (of many people)).

*-(i)nya- “get, pick up, catch’;

Ba.(A) -(i) -*nya-*; Nyl.(Bis) -*ny-* [*manyān*] (to get, grasp, hold); Nyl.(Bis) -*ny-* [*manjān manjān*] (to buy);
Yaw.(Hos) -*nya-*.

(pWN) * -*jiidi-* “go” Ba.(A) -*jiidi-* ~ -*yiidi-* Nyl.(McG) -*jid-* Jb.(N&W) -*jid-* [*ma-djeden*]

*-ka- “carry; take’;

Ba.(A) -*ga-* ~ -*gaja-*; Ba.(N&W) -*gaja-* [*m-andjan*]; Nyl.(McG) -*g-*; Nyl.(N&W) -*ga-* ng- [*ma-gan-ang*]; Nim.(N&W) -*g-* [*ma-gan*]; Jb.(N&W) -*ga-*; Yaw.(Hos) -*ga-*; Nyk.(S) -*ga-*; Warr.(McG) -*ga-*

(pWN) * -*kal(i)*- “move, visit, play[?]” Ba.(A) -*gal-*, Ba.(A) -*gali-* (to visit) Ba.(N&W) -*gal-* [*m-a:len*, *ma-alen*, *m-alan*] (walk, roam about); Nyl.(McG) -*kal-*; Nyl.(N&W) -*gal-* [*ma-galan*]
Nyl.(N&W) -*galwal-* -ng [*ma-galwalan- aŋ*] (feel restless); Nyl.(Bis) -*gal-* [*magalan*];
Nim.(N&W) -*gal-* [*ma-galan*]; Jb.(N&W) -*gal-* [*ma-galan*]

(pEN) * -*karnda-* “go’; Yaw.(N&W) -*andira-* [*m-andiran*]; Yaw.(Hos) -*garnrda-* ~ *rndira-* (II);

Warr.(McG) -*arnrda-*;

*-ju- ~ *-di- “do” “say’;

Ba.(A) -*ju-* ~ -*da-* ~ -*i-*; Nyl.(N&W) -*j(i)*- [*madjendjon*]; Nyl.(N&W) -*ju-* [*ma-djon*, *ma-djen*];
Jb.(N&W) -*ju-* [*ma-djon*, *ma-djen*];

Yaw.(Hos) *-dyu-* (II); Nyik.(N&W) *-ju-* ~ *-di-* [*man-den*]; Nyik.(S) *-i-* ~ *-di-* ~ \emptyset ; Warr.(McG) *-ji-*;
Warr.(S) *-yi-* ~ *-di-*.

***-ma-** “put”;

Ba.(A) *-ma-*; Nyl.(Bis) *-m-* [*maman*]; Jb.(?) *-m-*;

Yaw.(Hos) *-ma-* (~ *-ngama-*); Nyik.(S) *-ma-*; Warr.(McG) *-ma-*

***-ni-**, ***-nga-** (suppletive root) “sit, be located”;

Ba.(A) *-ni-*; Nyl.(N) *-ni-* ~ *-nga-*; Nyl.(Bis) *-ni-* [*manen*]; Jb.(?) *-n-*;

Yaw.(Hos) *-ni-* ~ *-nga-* ~ *-ji-*; Nyik.(S) *-ni-* ~ *-nga-*; Warr.(McG) *-ni-* ~ *-wani-* ~ *-nga-*.

(pEN) *-ngara- “become” Yaw.(Hos) *-ngara-*; Nyik.(S) *-ngara-* (~ *-ra-* ~ *-ya-*); Warr.(McG) *-ngara-* (~ *-ra-*);

***-ra-** “spear”;

Ba.(A) *-ar-* (‘spear lice’, “sew”); Nyl.(McG) *-r-* (*-ra-*); Nyl.(N&W) *-ar-* [*m-aran*], [*manaran*];

Nim.(N&W) *-ar-* [*m-anan*]; Jb.(N&W) *-ar-* [*m-aran*];

Yaw.(N&W) *-ar-* [*m-aran*]; Yaw.(Hos) *-ra-* (~ *-ri-*) (I); Nyik.(S) *-ra-*; Warr.(McG) *-ra-*;

6.2 Functions of light verbs

While all the Nyulnyulan languages surveyed here show classification systems, reconstructing such a system is not possible. The first problem is that even among very closely related languages, such as Bardi and Nyulnyul, the basis for classification is quite different. Thus the preverb material is often cognate, but the preverbs take a different light verb. In (30), for example, Bardi uses *-ma-* “put” with this preverb, whereas the other languages take *-ka-* “carry”. We might want to argue that we should reconstruct **-ka-*, since that is more parsimonious; however, since the complex predicate means “to carry [something] on one’s shoulders”, it is possible that the use of *-ka-* here is a regularisation.

(30) ***kurndu -ka-** “carry on shoulders” (Nyul *kurnd -k-*, Yaw. *kundu -ka-*, Nyik. *kundu -ka-*, but cf. Ba. *goondoo -ma-*).

In all Nyulnyulan languages, preverbs form an open word class with members from multiple sources. Loan verbs are borrowed as preverbs, and frequently the loans are given the same light verb

across languages. *Bany* “shoot”, for example, consistently appears with the light verb *-ma-*, and *gad* “cut” is used with *-(i)nya-* in the Western languages and *-andi-* in Nyikina (there are many pairs of preverbs which appear with *-(i)nya-* in the Western languages and *-andi-* in the Eastern languages).

It is possible that the reason behind this lack of reconstructibility is not the age of the complex predicate system, but the fluidity of the system. Such systems are highly susceptible to variation between speakers and that it would not take much of a shift in the archetype of a category to shift a group of preverbs from one light verb to another. Compare, for example, Bardi *-(i)nya-* with Nyikina *-andi-*, or the meanings of *-jiidi-/ -jid-* in Bardi and Nyulnyul. In Nyulnyul the category primarily denotes motion, whereas in Bardi complex predicates with *-jiidi-* as a motion verb are present, but they are a minority. A parallel example of category shift can be found in the reconstruction of Bantu noun classes (Maho 1999). For example, many in languages Class 9 takes plurals in Class 10 (using the Bleek-Meinhof numbering system), but there is a sizable contingent of languages whose Class 9 singulars form plurals in Class 6. Some allow both (Maho 1999:175). We find a similar array of variation in pairing of other noun classes.¹²

The lack of consistency in light verb use between languages may also be an artifact of recording. Many preverbs can appear with more than one light verb, and most of the Nyulnyulan languages are not very extensively documented. It is quite possible that a given preverb could appear in several languages with several verbs but has only be recorded with one (a different one in each language).

6.3 Preverbs

Two problems arise in the consideration of preverbal reconstruction. The first is the syntax of preverbal complex predicate constructions; the second is the reconstructibility of forms *qua* preverbs.

Bardi stands out among Nyulnyulan languages because of the inability for preverbs to appear without a light verb. In the other Nyulnyulan languages, there are constructions where the light verb

¹²We have a parallel for dialects of a single language favoring different light verbs, i.e. English. Compare the use of different light verbs in the following English phrases from UK/Australian and American English:

UK/Australia	US	
have a shower	take a shower	
have a haircut	get a haircut	take a haircut
turn right	make a right	take a right

is not present. The ability of preverbs to occur without an inflecting verb seems to have been a change in progress in the period around 1920, when the Laves texts were written down. Laves” corpus shows examples of preverbs which are used without an accompanying light verb, in constructions which current speakers find ungrammatical. This reanalysis was probably rather recent (and may be a function of declining language use).¹³ The prohibition on bare preverbs in certain contexts would cause considerable changes in the underlying system, one would imagine. The Eastern Nyulnyulan languages allow inflection with preverbs (examples were provided for Yawuru in Table 8 above). Bardi allows no inflection, and Nyulnyul has one or two unproductive suffixes. Two of the markers in Yawuru appear to have grammaticalised, since they are cognate with free forms in other languages. Compare Bardi *minyjin*, Nyulnyul, Jabirr-Jabirr *manyjin*, Nyikina *manjan* “only” with the Yawuru “limitative” *manydyan*. *Bardu* “still” is also widespread in Nyulnyulan as an adverb. The only item that can be reconstructed as an affix is *-gadya*. Lexical reconstruction of preverbs is difficult simply because most of the items either do not occur with the same light verb in all languages, or they are not members of the same word class, which casts doubt on their preverbal status in Proto-Nyulnyulan. Some words are reconstructed and are preverbs in all the modern languages:

- (31) a. ***dumbul+** “clap” Ba.(A) *dumbul* *-(i)nya* *-/-joo* *-/-ma*; Nyl.(McG) *dumburl* *(dumburl)* *-ju-*; Yaw.(Hos) *dumbul* *+*;
- b. ***janngal+** “cut across the tide’: Ba.(A) *janngal* *-ar*- Yaw.(Hos) *dyangal*; intercept;
- c. ***kujuk** + “swallow’: pWN***kujuk** *-w-*: Ba.(A) *gujuk* *-ø-*; Nyl.(McG) *kujuk* *-w-*; Yaw.(Hos) *kudyuk*; Nyik.(S) *gujuk*; Warr.(K) *gujuk*;
- d. ***mijala** *(-ni-)* “sit (be sitting)’: Jaw.(K) *miyala*; Ba.(A) *miyala* *-ni-*; be awake; Nyl.(McG) *mijal* *-n-*; Nyl.(McG) *mijal* *-nyu-*; Ngum. *mijala*; Jb.(K) *mijal*; Yaw.(Hos) *midyala* *+ni*; Jk.(HKL) *mijal*; Nyik. *mijala*; *-ni-*, *-nga-*; Warr. *mijala*;

In others, we find that one language attests the word only as a preverb, and others attest it as a noun, adjective, or adverb.

¹³For another example of a radical reanalysis of complex predicates within a few generations, see Reid (2004).

- (32) a. ***jarrbard+** ‘lift up’; pWN***jarrbard -ka-**; Ba.(N&W)*jarrbard -ma-*; Ba.(M)*jarrbad -ga-* (also adverb) Nyl.(McG)*jarrbard -k-*; Nyik.(S)*jarrbard -ka-*; Warr.(McG)*jarrbard nganany*;
- b. ***karrkuji (+)** ‘completely’: Ba.(A)*garrgooy*, Nyik.(S)*karrkooji+*; ‘kill with single accurate shot’
- c. ***kirrij(+)** ‘look under, uncover, reveal’: Ba.(A)*girrij* (n.) ‘screen for dancers’; Nyik.(S)*kirrij*

There are also many cases where the preverb would seem to be reconstructible to Proto-Nyulnyulan, but the daughter languages attest the preverb with very different meanings. A few examples of cognate sets are given in (33)

- (33) a. pWN***bar+** ‘hit’: Ba.(Bow)*bar -ø-* hit with boomerang; Ba.(Bow)*barbar -ø-* knock about, cut, sting, cause sharp shooting pain; Ba.(Bow)*bar -ju-* pull or jerk; Nyl.(McG)*barbar -banyj-*; Jb.(K)*barbar kangaw* glossed as ‘cut?’;
- b. ***kuly+** ‘birth, giving Ba.(A)*gooly -ø-*; squeeze Yaw.(Hos)*kuly +*; Nyik.(S)*kooly* excrete: impregnate, give birth,
- c. ***kurd +** ‘bend down (WN), die (EN)’: Ba.(A)*goord -joo-* bend down; Ba.(M)*gudgud -ju-* crouch; Ba.(A)*gurd -ju-*; Nyl.(McG)*kud -ju-* (also) hide; Nyl.(McG)*kudkud -ju-* Nyik.(S)*gurd +*; Warr.*gurd +*

7 Conclusions

In conclusion, we have seen that the light verbs used in complex predication in Nyulnyulan languages are similar, and are reconstructible. That the same verbs are used should not be surprising; after all, similar verb forms are used the world over, in languages like Farsi (Ghomeshi 1996) and Hindi (Hook 1974) as well as only very distantly related Australian languages (McGregor 2002). The fact that similar verbs are used does not, of itself, demonstrate that the system is reconstructible. However, if we assume that complex predicates *are* reconstructible, we would want to assume that these verbs were involved. Some similarities in function of light verbs are found above what might be expected from universal tendencies.

One might think that the question of reconstruction would be solved by an appeal to form. After all, if the forms are cognate and the construction is inherited, that is usually enough. However, as seen

above, the *pairs* of preverbs and inflecting verbs are not readily reconstructible. There are two main reasons for this: first, preverbs tend to have close connections to other word classes in these languages, and so if we find items which are preverbs in one language and nouns or adverbs in another, we have no a priori basis for deciding whether that item could function as a preverb in earlier common stages of the language. Secondly, because of the different classificatory properties of the systems within Nyulnyulan languages, the preverb-inflecting verb combinations are themselves subject to reanalysis. We could add to this the fact that preverbs are highly borrowable and many Nyulnyulan languages have evidence for loaned verbs as preverbs, not just from English but from other Aboriginal languages too; and finally, there is evidence for variation among individual speakers and the exploitation of variation for poetic effects.

It has long been recognised that paradigm uniformity and regularisation potentially hamper reconstruction in morphology. Here is a case where, despite a great deal of common material and reconstructible forms, the functions of those items in earlier stages of the language remain elusive.

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