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Simple and Complex Verbs in Jaminjung

A study of event categorisation in an Australian language

een wetenschappelijke proeve op het gebied van Letteren

Proefschrift

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Eva Friederike Schultze-Berndt

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Promotores: Prof. dr. Christian Lehmann (University of Erfurt, Germany)
Prof. dr. Stephen C. Levinson
Co-promotor: Dr. David P. Wilkins (Max-Planck-Institute for Psycholinguistics, Nijmegen)

Manuscriptcommissie:
Dr. Leon Stassen
Prof. dr. William B. McGregor (University of Åarhus, Denmark)
Prof. dr. Melissa Bowerman (Vrije Universiteit Amsterdam and Max-Planck-Institute for Psycholinguistics, Nijmegen)

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Núnyá adidóé, así métune o
Knowledge is like a baobab: one person cannot embrace it
(Ewe proverb)

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Abbreviations in interlinear glosses

Note that in addition to the glosses for grammemes listed here, verb roots will also be glossed in small capitals, in order to remind the reader that the glosses have only mnemonic value and do not adequately represent the meaning of the verbs. On the other hand, contrary to the convention of glossing grammemes in small capitals, the glosses for the pronominal prefixes indicating number and the inclusive/exclusive distinction, will be in lower case; this is for the sake of readability.

1, 2, 3	1st / 2nd / 3rd person	pronominal category
ABL	Ablative	case suffix
ABS	Absolutive	case (unmarked)
ALL	Allative	case suffix
ASSOC	Associative	noun-deriving suffix
CL*[1]	Noun class marker	nominal prefix
COLL	Collective	number marking clitic
COMIT	Comitative	case suffix
COND	Conditional	subordinating clitic
CONT	Continuous	derivational suffix on coverbs
CONTR	Contrastive focus	clitic
COTEMP	Cotemporaneous ("still", "then")	clitic
DAT	Dative	case suffix
DEM	neutral demonstrative, usually 'given'	demonstrative
DIR	Directional	suffix on demonstratives
DIST	Distal	demonstrative
DOUBT	"-ever, I don't know wh-"	clitic
DU	Dual	pronominal category
EMPH	Emphatic focus	clitic
ERG(/INSTR)	Ergative(/Instrumental)	case suffix
EXCL	exclusive	pronominal category
F*	Feminine	gender
FIRST	"first", "already"	clitic
FUT	Potential / Future	verbal prefix
GIVEN	'Given'	clitic
IMP	Imperative	modal prefix

[1] An asterisk marks abbreviations only employed for languages other than Jaminjung/Ngaliwurru.

IMPF	(Past) Imperfective	tense/aspect suffix
INCL	inclusive	pronominal category
IRR	Irrealis	verbal prefix
KIN2	"your kin"	suffix on kinship terms
KIN3	"his/her kin"	suffix on kinship terms
LOC	Locative	case suffix
L.ABL	Ablative (locationals)	case suffix on locationals
L.ALL	Allative (locationals)	case suffix on locationals
MED	Medial	demonstrative
MOTIV	Motivative ("about", "over")	case suffix
NEG	Negative	particle
NOM*	Nominative	case form
NOW	"now", "then"	clitic
NPAST*	Non-past	tense suffix
OBJ*	object	bound pronominal
OBL	Oblique	free pronoun
ONLY	"only"	clitic
ORIG	Origin	case suffix
POSS	Possessor	case suffix
PF*	Perfective	Aspect category
PL	Plural	pronominal category
PRIV	Privative ("without")	nominal suffix
PROPR	Proprietive ("having")	nominal suffix
PROX	Proximal	demonstrative
PRS	Present	tense suffix
PST	Past (perfective)	tense/aspect suffix
QUAL	Quality	nominal-deriving suffix
REFL	Reflexive / Reciprocal	derivational suffix on verbs
RDP	Reduplication	
SBJ*	subject	bound pronominal
SEMBL	Semblative ("like")	clitic
SFOC1	Sentence focus	clitic
SFOC2	Emphatic sentence focus	clitic
SG	Singular	pronominal category
SUBORD	Subordinator	clitic
TAG	Tag question	particle
TR*	Transitive marker	suffix on Kriol verbs

Abbreviations of kinship terms

Br	brother	Si	sister	Wi	wife
Fa	father	Mo	mother	Hu	husband
So	son	Da	daughter	Ch	child

Abbreviations of language names (in Ch. 7)

GDJ	Gun-djeihmi	NGALI	Ngaliwurru
GOON	Gooniyandi	NGAR	Ngarinyman
HIN	Hindi	NUN	Nunggubuyu
JAM	Jaminjung	URDU	Urdu
KAL	Kalam	WAM	Wambaya
MANG	Mangarrayi	WARL	Warlpiri

Conventions used in transcription and glossing

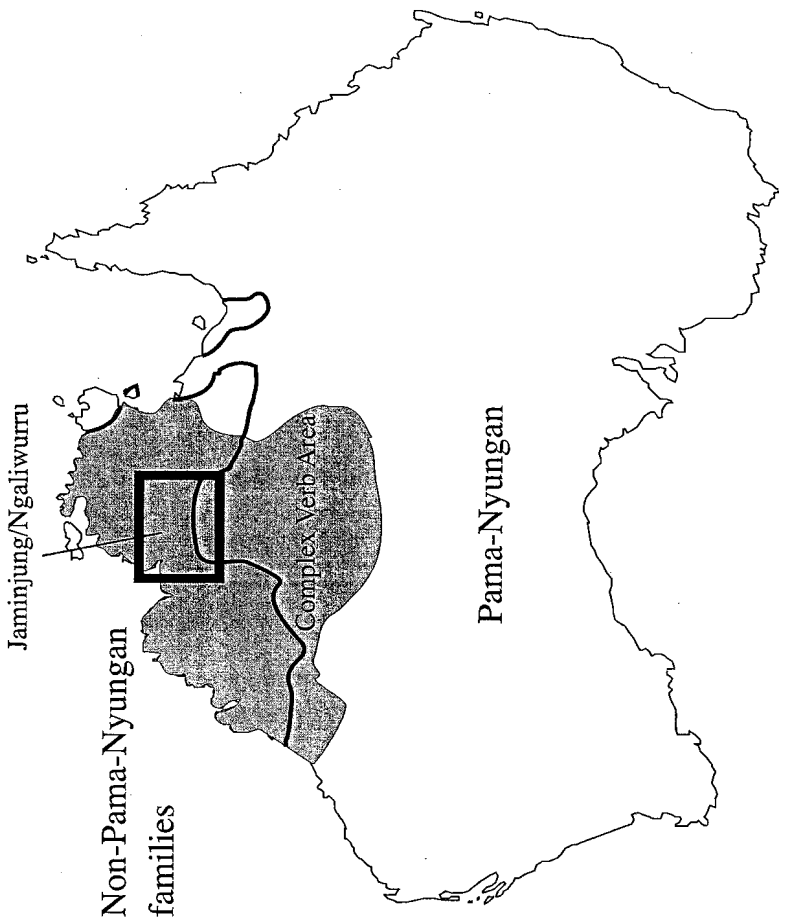
-	morpheme boundary
=	clitic boundary
.	separates categories encoded by a portmanteau morpheme
:	morpheme break not indicated in the text line
..	short pause
...	long pause
+	next/preceding line still in the same intonation unit
:(::)	lengthening
\	falling intonation ('sentence-final intonation')
,	pause but non-sentence-final (mostly rising) intonation
/	rising intonation
^	emphatic stress
'	stress
[ ]	overlap (marks both overlapping strings)
xxxx	unintelligible; number of x's = number of syllables perceived
<x x>	doubtful transcription
<xx xx>	very doubtful transcription
wed (underline)	Kriol
L(LL)	laughter

Conventions used to indicate source of data

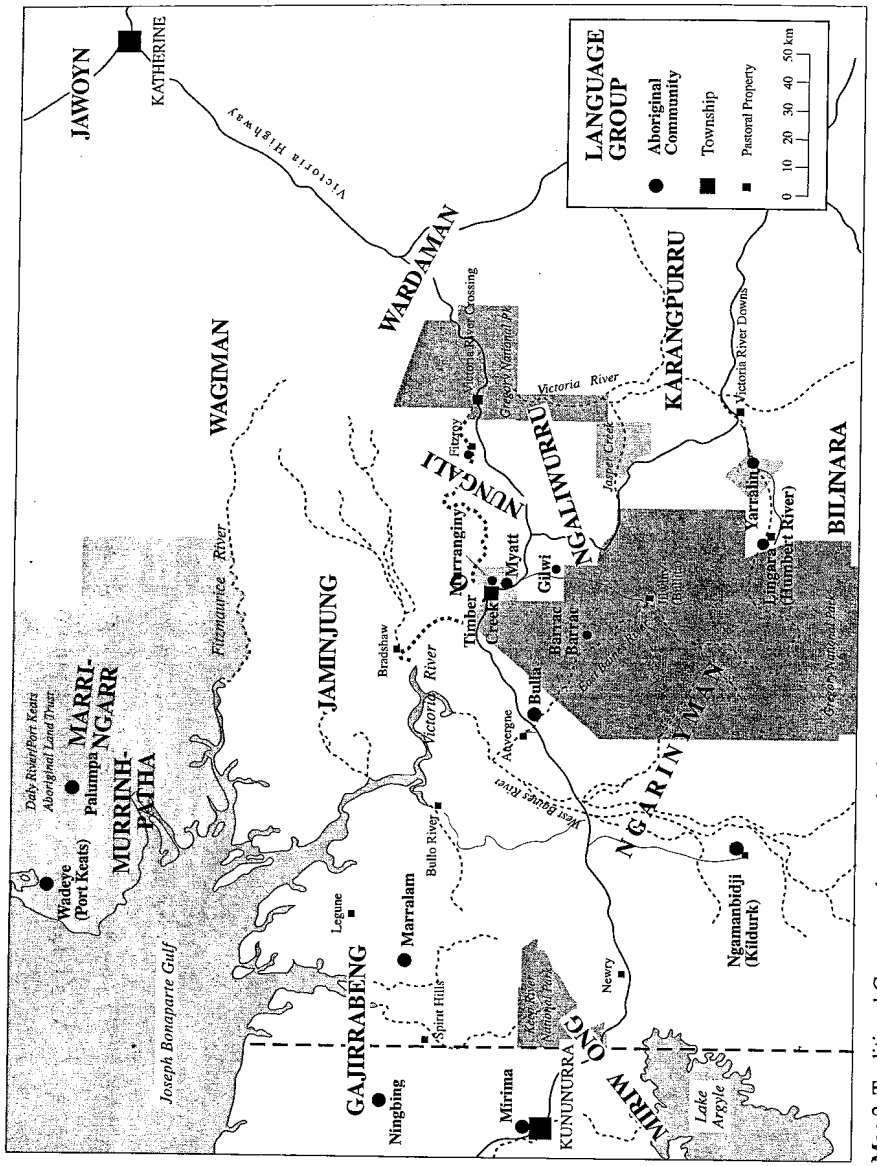
All examples coming from my own fieldwork are followed by the speaker's initials and a reference number, indexing the example in the database used. The system of cross-referencing is as follows. For data that were not tape-recorded but comes from fieldnotes (and also most of the material that was tape-recorded on the first field trip in 1993), three capital letters (with just mnemonic significance) are followed by a three-digit number identifying each clause.

For tape-recorded material, the label for the examples corresponds to the tape label. The following system of tape labelling is used. A capital letter (e.g. 'C') indicates the year of recording. A two-digit number corresponds to the tape number in that year (e.g. C03). The correspondences are: C — 1994, D — 1995, E — 1996, F — 1997, G — 1999. An additional 'V' after the first letter marks video recordings (e.g. FV04). A three-digit number identifies each intonation unit.

For data quoted from other published or unpublished sources, the source is always given; some of these materials have in addition been incorporated into the database and are labelled according to the same system as data from my own fieldwork.



Map 1. Location of Jaminjung/Ngaliwurru and other Australian languages with complex verbs



Map 2. Traditional Country and present-day location of Jaminjung and Ngaliwurru people

INTRODUCTION

CHAPTER 1

1. Overview

One of the fascinating aspects of studying languages is the window they provide on the way people categorise their world and their experiences. On the one hand, each language reflects a unique way of categorising. On the other hand, there are enough striking similarities between languages to enable one to establish general principles underlying human categorisation.

The basic system of categorisation resides in the vocabulary: the lexicon of each language carves up semantic space in different ways. Not only do meaning and use of 'translation equivalents' rarely completely coincide across languages, but one language may also use a simple expression where another one only has complex expressions available (cf. Boas 1963 [1911]: 20).

In most if not all languages, the vocabulary itself is subject to further categorisation: lexical items can be classified according to their syntactic and morphological properties, resulting in the familiar divisions into part of speech categories, as well as more fine-grained subclasses of these. For example, much recent linguistic research has been devoted to the syntactically relevant predicate classes in different languages. These classes are usually covert, in the sense that class membership is not marked explicitly, but can only be deduced from the behaviour of the item in question. It has been shown that this type of classification is to a large degree semantically based, and in this way also reflects human categorisation.[1]

In addition, a number of languages also have overt systems of categorisation. Perhaps the best-known case is nominal classification: through the use of nominal classifiers in certain constructions, entities are 'sorted' into a finite number of categories. A lot of cross-linguistic research has been concerned with establishing the basis for this categorisation (see §5.1.1 for references).

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[1] E.g. Breu (1985), Dixon (1991), Dowty (1979), Drossard (1987), Essegbey (1999), Lehmann (1991, 1992a, 1993), Levin (1993), Levin & Rappaport (1995), Sasse (1991), Tsunoda (1981b), Van Valin (1986), Vendler (1967).

A number of Australian Aboriginal languages, including Jaminjung and Ngaliwurru – two closely related varieties which are spoken in the Victoria River district in the north of the continent – provide an interesting window on categorisation within the domain of event expressions, in terms of lexical categorisation, morpho-syntactic categorisation, and overt categorisational systems. This is related to the particular structure of their lexicon. In these languages, inflecting verbs constitute a closed class; in Jaminjung and Ngaliwurru this class has less than 35 members. Verbs from this closed class will also be referred to as 'generic verbs'; they may occur as verbal predicates on their own, or form phrasal complex predicates with members of an open class of predicative lexemes. These are distinct from both verbs and nominals and will be termed 'coverbs' here. Coverbs do not inflect and cannot form a predicate on their own, at least not in finite clauses, where they always have to combine with a generic verb carrying the verbal inflections.

By way of introduction, examples for both simple and complex predicates in Jaminjung are provided in (1-1). The simple predicate in (1-1a) consists of the inflecting verb *-ma* 'HIT'. The two complex predicates in (1-1b) and (1-1c) consist of the same verb and the coverbs *bag* 'break' in (1-1b), and *walig* '(move) around' in (1-1c). Coverbs and generic verb roots are in boldface.

(1-1a) gani-**ma**-m jurruny-ni
3sg:3sg-HIT-PRS lower.arm-ERG/INSTR
'he hits him with the hand' (DP, KNX054)

b) miri **bag** burra-**ma**-nyi gurrubardu-ni
leg break 3pl:3sg-HIT-IMPF boomerang-ERG/INSTR
'they used to break its legs with a boomerang' (kangaroo) (IP, F01042)

c) **walig** gani-**ma**-m barrig
round 3sg:3sg-HIT-PRS paddock
'he walks around the fence (in a full circle)' (MJ, D05068)

This structure of the lexicon has consequences for all three types of categorisation. On the level of the vocabulary, the consequence is that most predicative expressions (to be precise, all predicates minus the thirty-odd inflecting verbs that can function as simple predicates, if one disregards nominal predicates) are complex rather than simple, in contrast to their translation 'equivalents' in many other languages. The questions arising here are: What are the patterns of lexicalisation in a verbal lexicon that is structured in this way? More precisely, what semantic relationships exist between the components of the complex predicates? Are they comparable to the relationships found in the complex predicates of other languages?

On the level of covert categorisation (in terms of categories and subcategories established in terms of their morpho-syntactic behaviour), languages like Jaminjung and Ngaliwurru are interesting because they have two formally distinct parts of speech whose members largely correspond to 'verbs' in many other languages. This leads to the question of whether there is a semantic basis for the inclusion of lexical items in the small, 'privileged' class of generic verbs, and whether any subclassification of the open class of coverbs into predicate classes is possible on formal grounds. Since coverbs do not inflect and have hardly any derivational possibilities, there seems to be little basis for a subclassification based on morphology at first sight. And since they usually do not occur as the main predicate of a clause on their own, there also seems to be little basis for a subclassification based on syntactic possibilities. Still, covert subcategories of coverbs can be distinguished by the sets of verbs that they combine with to form complex predicates. Here the question arises whether the subclasses established in this way correspond in any way to predicate classes established – by different means – for other languages.

Most importantly, the generic verbs in Jaminjung and Ngaliwurru participate in a system of overt categorisation. This is because one of these closed-class verbs is obligatory in every finite clause, either on its own as a simple verb, or as part of a complex verb. In other words, a Jaminjung or Ngaliwurru speaker has to select one of a small number of verbs in every finite clause, and thereby 'sorts' all event expressions into a relatively small number of categories. In order to make a claim that this selection indeed reflects a system of categorisation, it has to be shown, of course, that the choice of a verb has a semantic basis, rather than being random or lexically determined by a given coverb. If this can be demonstrated, one can ask what constitutes the conceptual basis of event categorisation in this language. An answer to this question can be provided by accounting for the meaning of each of the closed-class verbs, and their conditions of use.

In this study, all the questions raised so far will be addressed, although the most detailed discussion will be devoted to the questions concerning the third type of categorisation, that of overt event classification. The main claim put forward in this study is that the majority of complex predicates – including seemingly bewildering cases like (1-1c) above – are semantically compositional. In other words, the closed-class verbs are meaningful even when they occur as part of complex verbs, and the selection of a particular verb is based on its meaning.

In order to achieve this goal, it is necessary to factor out the semantic contribution of the generic verb, the coverb, and the complex predicate construction itself to the complex expression. Moreover, one has to assess the potential contribution of the argument expressions that the complex predicate occurs with, as well as that of the further linguistic and nonlinguistic context, and that of general principles of interpretation, to the interpretation of the expression as a whole.

kinds of data that form the basis of this study (§1.3), and to the theoretical framework on which this investigation is based (§1.4).

Chapter 2 provides a description of the main grammatical features of Jaminjung and Ngaliwurru, which forms the background for the remaining chapters. It also serves to establish coverbs – the uninflecting predicative lexemes – as a lexical category distinct from verbs and nominals.

In Chapter 3, the syntactic behaviour of coverbs and verbs (both as simple predicates and as parts of complex predicates) is examined. Canonical complex verbs – of the type illustrated in (1-1b) and (1-1c) above – are established as a construction type distinct from other types of coverb-verb combinations.

The argument structure of simple and complex verbs is described in Chapter 4. The adoption of a Construction Grammar framework, which distinguishes between semantic and morpho-syntactic arguments, provides the foundation for a compositional treatment of complex verbs. It enables us to state that both coverbs and verbs contribute semantic participants to the complex predicates, but that these correspond to a single set of arguments on the morpho-syntactic level. It is therefore a prerequisite for the unificational approach to the semantics of complex verbs developed in Ch. 6. Since differences in argument structure can be accounted for partly by differences in constructions, rather than differences in lexical representation, this approach also enables us to pursue a monosemic analysis of coverbs and verbs.

Chapter 5 constitutes the core of this study. Here, the meaning and use of each of the closed-class verbs, both as a simple verb and as part of complex verbs, is examined, in order to provide evidence for the claim that the verbs participate in a system of overt event categorisation. Particular care is given to a distinction between the semantic and the pragmatic basis for the selection of verbs.

In Chapter 6, subclasses of coverbs are established, based on the sets of verbs that coverbs of each class combine with. This method arrives at both formally and semantically circumscribed classes, thus further supporting the claim that the combination of coverbs with verbs is not random, but follows patterns which have a semantic basis. The semantic contribution of both verbs and coverbs to the complex can now be assessed in more detail. It will be explored whether to what extent the unification of verbs and coverbs in a complex verb construction is based on semantic compatibility.

Chapter 7 provides a summary of the preceding chapters, and places the results in a cross-linguistic perspective. It will be argued that Jaminjung and Ngaliwurru, and other Northern Australian languages in a contiguous geographic area, indeed exhibit unique patterns of lexicalisation and complex predicate formation, which allow for the classificatory use of a closed class of verbs. On the other hand, it

can also be shown that these patterns reflect tendencies that are rather common cross-linguistically.

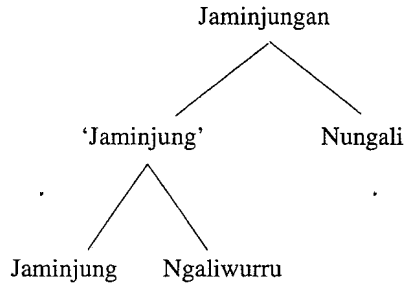
1.2 Jaminjung and Ngaliwurru and their speakers

1.2.1 Language names and genetic affiliation

Jaminjung and Ngaliwurru are two closely related linguistic varieties spoken in the Victoria River Area of Northern Australia, in the general area indicated on Map 1 at the beginning of this chapter. Jaminjung and Ngaliwurru are – somewhat more distantly – related to one other variety, Nungali, now almost extinct. Together, these varieties constitute a language family that has been referred to as 'Jaminjungan'/'Djamindjungan' or 'Yirram'[2] in the literature (Hoddinott & Kofod 1976a, b, c; Chadwick 1997; Green 1995). A fourth variety, Jilngali or Yilngali, is mentioned in the literature (Capell 1940: 418), but could not be identified. It is possible that this was a name used by a neighbouring speech community to refer to Jaminjung (cf. also Cleverly 1968: 4; Bolt et al. 1971a: 1).

For the subgroup consisting of Jaminjung and Ngaliwurru, Chadwick (1984, 1997) suggests the term 'Baj', supposedly corresponding to the word for 'speech' in both varieties. However, *baaj* is only the Ngaliwurru term for 'speech, language'; the corresponding Jaminjung word is *liiny*. For the sake of simplicity, I will use 'Jaminjung' as a cover term for both varieties and provide a more precise identification only where necessary. The relationships within the Jaminjungan family are represented in Fig. 1-1.

Fig. 1-1. *The Jaminjungan language family*



2 *Yirram* is the form of the dual clitic in all the languages of this group.

The Jaminjungan languages constitute one of the non-Pama-Nyungan or 'Northern' language families of Australia (the boundary between the non-Pama-Nyungan and the Pama-Nyungan families is indicated by a thick black line in Map 1). Although probably all languages on the Australian mainland are ultimately related, no closer genetic relationships have been established with any certainty between most of the non-Pama-Nyungan families, or between these and the Pama-Nyungan family, which occupies most of the Australian continent (cf. e.g. Dixon 1980, Blake 1988).

For Jaminjungan, Chadwick (1984, 1997) suggests a distant genetic relationship to another non-Pama-Nyungan family, the Barkly languages, which include Jingulu/Djingili (Chadwick 1975, Pensalfini 1996) and Wambaya (Nordlinger 1998b). The larger family consisting of Jaminjungan and Barkly languages is also referred to as the Mindi (Mirndi) family (e.g. by Green 1995), based on the form of the dual inclusive pronoun *mindi* which is one of the features distinguishing the languages in this group from all other surrounding languages. The Jaminjungan and Barkly languages today are not geographically contiguous, but separated by members of the Ngumbin subgroup of Pama-Nyungan. They are also structurally very divergent (in particular, the Barkly languages do not have complex verb constructions of the type investigated here), and have only a very small number of cognate forms. Several cognates, moreover, can be identified as borrowings from the Ngumbin languages, rather than shared retentions. The existence of some cognate verb forms (see §2.4.2.1) does support a genetic relationship. However, the verification of the suggested genetic relationship, and the reconstruction of the prehistory of these language groups, are a matter of ongoing research and will not concern us here.

Within the Jaminjungan family, Nungali (Bolt et al. 1971b) differs from both Jaminjung and Ngaliwurru in its lexicon and in its verbal and nominal morphology; it is probably best regarded as a separate language. The most substantial difference between Nungali and the other two varieties is that only Nungali has noun class prefixes. This is also reflected in the language name *Nungali*, which has as its first syllable a Class prefix *nu-*, added to the base stem *ngali*. The meaning of the stem is not known, but it also seems to appear in the name *Ngaliwurru*, where it is followed by the proprietive or 'having' suffix *-burru ~ -wurru* (*Nungaliwurru* instead of *Nungali* is also sometimes heard, and correspondingly *Ngali* instead of *Ngaliwurru*). The etymology of the language name 'Jaminjung' is also unclear.

For this study, only data from Jaminjung and Ngaliwurru have been taken into account. These two varieties are phonologically, morphologically and syntactically almost identical (see Ch. 2 for details), and can therefore be considered dialects of a single language from a linguistic point of view. The percentage of shared vocabulary is high but it is difficult to come up with an actual figure, since speakers living in geographically distant communities will

show a higher divergence in vocabulary. This seems to be due partly to influences from different neighbouring languages, such as Ngarinyman (for Ngaliwurru speakers) and Miriwoong or Gajirrabeng and Murrinh-Patha (for Jaminjung speakers). On the other hand, speakers of Jaminjung and Ngaliwurru who today live in geographical proximity to one another (as in the communities around Timber Creek), often use lexical items of both dialects interchangeably.

Because of these difficulties, the dialect is not generally indicated with the examples throughout this study (however, it is indicated for each of the texts in the Appendix). Rather, the speaker is identified in each case by his or her initials, and a list with each speaker's language group affiliation, place(s) of residence, and degree of multilingualism is provided in §1.3.3 below.

1.2.2 Geographical location

Jaminjung, Ngaliwurru and Nungali people traditionally occupied a contiguous area along both sides of the lower Victoria River. This major tidal river and its tributaries constitute the most prominent geographical feature of this area. The rivers cut through steep-rising plateaus, forming mostly narrow valleys and gorges, and only partly wider plains (around the West Baines River). Not surprisingly, the direction of the flow of water plays an important role in the Jaminjung and Ngaliwurru system of spatial orientation (see §2.2.2.4).

Climatically, the Victoria River District is part of the subtropical monsoon area in the northernmost part of Australia. There is heavy rainfall and flooding in summer (December to March), followed by an essentially dry and cooler season in winter (April to July), and a 'buildup' of increasing heat (August to November) until the next rainfall.

Both the areas traditionally occupied by the Jaminjungan and some surrounding language groups, and the Aboriginal communities where Jaminjung and Ngaliwurru speakers can be found today, are indicated in Map 2 (this map represents the area that is framed by a box in Map 1). Due to depopulation and population shifts, there are many uncertainties as to the areas associated with the Jaminjung, Ngaliwurru, and Nungali language varieties. Roughly, Jaminjung country is located between the Fitzmaurice River in the north and the Victoria River in the south, although a small stretch of country south of the Victoria River and west of the East Baines River is also identified as Jaminjung by some people. Jaminjung is bordered in the north by Murrinh-Kura (closely related to Murrinh-Patha) and Wagiman country, in the east by Wardaman, in the south by Nungali and Ngarinyman, and in the west by Gajirrabeng (Gajerrawoong).

As far as I know, no Jaminjung people now live in their traditional country. Until recently, when a large part of it (formerly Bradshaw station) was acquired by the

army, Jaminjung country was still legally owned by cattle stations. Jaminjung speakers today live in Mirima Camp ('Reserve') in Kununurra, in Timber Creek, and in several communities and smaller outstations near these towns, including Ningbingi, Marralam, Ngamanbidji (Kildurk), Bulla, and Gilwi, as well as in Wadeye (Port Keats), and even in Katherine, but only constitute a minority in each of these places.

Ngaliwurru people traditionally occupied the Stokes Range/Jasper Gorge area south of the Victoria River. In the north, Ngaliwurru country is bordered by Nungali country, in the east and south by Karangpurru country, and by Bilinarra and Ngarinyman country in the south and west.

Interestingly, as far as we know, traditional Nungali country geographically separates Ngaliwurru and Jaminjung country, despite the closer linguistic relationship between the latter two, as opposed to Nungali. Nungali country extends east of Ngaliwurru country along both sides of the Victoria River, bordering on Wardaman country at Langgayi (Victoria River Crossing). Since only a few people identify themselves as Nungali today, and the Nungali language is no longer spoken, Ngaliwurru and Nungali tend to be presented as 'one group' in the statements of traditional owners (cf. Bauman et al. 1984: 30f., quoted in Riddett 1990: 48f.).

The majority of Nungali and Ngaliwurru people have been able to remain in their traditional country, in the communities Murranginy (One Mile), Myatt (Five Mile), Gilwi (Eleven Mile), and on Fitzroy Station. Other Ngaliwurru speakers live in communities in Ngarinyman or Bilinarra country such as Barrac Barrac, Yarralin, and Lingara, or in the township of Katherine. As the result of three land claims in 1984, 1986, and 1992, the land rights for some small areas of Ngaliwurru/Nungali country were returned to the traditional owners. These involve the areas around the township of Timber Creek, around Kidman Springs/Jasper Gorge, and the Fitzroy Cattle Station. Most of the area, though, remains under the control of cattle stations, or has been converted into a National Park.

1.2.3 Social organisation

Jaminjung, Ngaliwurru and Nungali people led the nomadic life of hunter-gatherers, until European settlement led to major disruptions of this lifestyle (see §1.2.4). The language groups would be subdivided into smaller clans, with specific rights over smaller areas of country ('estates'). Traditional owners of the country – in terms of clan membership – are still recognised and identified today, and the attachment to land continues to be of great importance in all aspects of culture.

In their daily life, people were not restricted to movements in the area they owned, but could move over considerable distances for the purpose of hunting and gathering. They also engaged in trade, and maintained ceremonial and inter-marital relationships with members of neighbouring language groups, such as the Ngarinyman, Bilinarra, Miriwoong, Gajirrabeng (Gajirrawoong), Murrinh-Patha, and Wardaman. These relationships continue to be of importance to the present day. The close contact between neighbouring language groups resulted in a high degree of multilingualism, which is reflected in a high percentage of loanwords, and a high degree of structural convergence, across genetic boundaries (see §7.1).

Education, e.g. in the knowledge of the environment, hunting techniques, song and dance, and mythology would have begun very early in life. There was a clear division of labour according to gender. Especially for men, there were also periods of formal instruction (described to me as *blackbala university* by one middle-aged Ngarinyman man), which accompanied rituals for several stages of initiation. Traditional knowledge is still passed on, and ceremonies are held at least occasionally, although, like other aspects of the traditional lifestyle, ceremonial life has been severely disrupted. Hunting, fishing and foraging also still play an important part in people's lives although they do not usually rely on this for subsistence.

Interpersonal rights as well as obligations were, and continue to be, determined to a large extent by kinship ties. Kinship terms designate not only a person in a direct relation of descent or marriage, but always include the so-called 'classificatory' kin. Effectively, in this way a kinship relation can be determined to every person in the social universe. Avoidance behaviour has to be observed between in-laws (especially a man and his mother-in-law), as well as brother and sister, and children of opposite-sex siblings (cross-cousins).

The kinship system is complemented by a subsection system, whereby each individual is assigned to one of eight subsections ('skin' in Aboriginal English) by descent, each further subdivided into a male and female section (see e.g. McConvell 1985a, 1997). The subsection system in principle determines the choice of marriage partner, although the restrictions are loosened with genetic distance, and are no longer strictly adhered to today. The subsection name of a person continues to be the most frequent term of address.

1.2.4 Contact history

Like Aboriginal people elsewhere in the region, Jaminjung, Ngaliwurru and Nungali people have suffered, and continue to suffer, from the effects of European settlement and the establishment of cattle stations in their traditional country.

The contact history began in 1834, with Stokes's exploration of the Victoria River, and a subsequent expedition (1855/56) led by Gregory. The establishment of cattle stations began soon afterwards, in the 1880s.

There can be no doubt that the early contact history in the Victoria River area was extremely violent. Aboriginal oral history speaks of resistance to the settlement, and numerous massacres and killings as 'punitive measures' for spearing of cattle and sometimes of people. An account of an early massacre in Ngaliwurru country which can be dated roughly to the 1910s is reproduced as Text IV in the Appendix (further accounts can be found e.g. in Rose 1991). The spread of previously unknown diseases also took their toll among the Aboriginal people of the region.

At first, the survivors were forced to leave their traditional country if it was in the grazing area of the cattle stations, and seek refuge in less accessible areas. Sooner or later most of the Aboriginal inhabitants would be forced to join the work force of the cattle stations, as essentially unpaid labour.[3] Almost all older Jaminjung and Ngaliwurru people who are alive today worked on cattle stations earlier in their lives, as stockmen, cooks, builders, or domestic workers. Some people also worked for the police as 'trackers', a particularly ambiguous role.[4] The Aboriginal people I have met tend to speak of this work in a matter-of-fact way, and also with considerable pride of their achievements and skills in tracking, horsemanship, handling cattle, and other aspects of station life. However, their accounts also leave no doubt that their work was extremely hard, and that they continued to suffer from mistreatment, injustice, and condescending treatment on the part of the European station personnel, although conditions would vary considerably with the individuals involved.

The government policy of taking children of mixed descent away from their families, in order to have them raised in missions, institutions or adoptive families, has recently received renewed attention (under the term 'The Stolen Generation') due to several prominent legal cases. Almost every Jaminjung and Ngaliwurru family was affected by this practice, which was enforced up until the early 1950s. Some of the fluent Jaminjung and Ngaliwurru speakers today are people of mixed descent who managed to escape the fate of being taken away.

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3 In many areas of Australia, the other alternative was to enter into a mission. As far as I know, no missions were established in Jaminjung and Ngaliwurru country, although apparently some Jaminjung people moved to Port Keats Mission (now Wadeye) in Murrinh-Patha country.

4 For descriptions, including first-hand accounts, of the lives of Aboriginal men and women on cattle stations in the area see e.g. Berndt & Berndt (1987), Rose (1991), Riddett (1990), and Shaw (1992). For accounts of the role of police trackers, see e.g. Bohemia & McGregor (1995) and Balme & Toussaint (1999).

The 'employment' of Aboriginal men and women on cattle stations decreased considerably in the seventies, after strikes of Aboriginal workers on some stations and increased awareness on the part of the 'outside world' had led to the introduction of equal wages. Forced labour now gave way to unemployment, and land and power still remain largely in the hand of non-Aboriginal people.

Today, most Aboriginal people of the area do not live on stations, but in state housing, either on the fringes of the townships of Kununurra, Timber Creek, and Katherine, or in independent communities on what is usually only a tiny stretch of Aboriginal-owned land. More recently, several outstations have been established, i.e. small communities in a family's traditional country, usually in remote areas (see §1.2.2 above). There is an ongoing struggle to regain at least some of the country by means of land claims, and to protect sacred sites.

Many people today depend on the welfare system, although some have work on stations, as health workers, in administration, or producing traditional artefacts or paintings, usually for the tourist market. In some communities, a government program of community development (CDEP) has been established, which provides part-time employment for work in and around communities. People of retirement age receive a small pension. Alcoholism is a serious problem in all age groups.

Most communities have their own primary schools, but few young people successfully complete secondary, let alone tertiary, education. The schools are mainly run by non-Aboriginal people, and the failure to account for cultural differences can be seen as one of the reasons for these results.

1.2.5 Present-day speech community

The effects of European settlement summarised in §1.2.4, as elsewhere on the continent, are also reflected in the situation of the Aboriginal languages in the area. Today there are no clearly identifiable Jaminjung and Ngaliwurru speech communities, and both dialects are in severe danger of disappearing. For Nungali, the number of speakers was reported to be extremely low as early as 1967 (Bolt et al. 1971c: 1), and today there are only a few old people with very limited knowledge of Nungali, mainly in terms of vocabulary.

Many actual fluent speakers of the languages do not identify themselves as Jaminjung or Ngaliwurru by descent, but have acquired the language at some stage (usually early on) in life. All older speakers are multilingual, sometimes in four or more languages, which reflects the traditional relationships between the Jaminjung and Ngaliwurru and neighbouring language groups mentioned in §1.2.3.

Today, the language of much of the daily interaction, even among older people, is Kriol, an English-based creole language (see e.g. Sandefur 1979, 1991, Harris 1986, 1991, Harris & Sandefur 1985). Even when the traditional languages are spoken, code-switching and borrowing are very common (see e.g. McConvell 1985b; cf. also §3.5). For children, Kriol is the first language, and Jaminjung and Ngaliwurru are no longer acquired. In interaction with non-Aboriginal people, Kriol (or an acrolectal variant of Kriol), or Aboriginal English are used, depending on the age of the speaker and his or her exposure to English.

The actual number of remaining Jaminjung and Ngaliwurru speakers is very difficult to estimate, both because middle-aged people are fluent in the traditional languages to varying degrees, and because I have not been able to visit every community where speakers are reported to be living. My estimate lies somewhere between 50 to 150 speakers (for Jaminjung and Ngaliwurru taken together), scattered over a large area (see §1.2.2 above).

At present no language program for Jaminjung or Ngaliwurru exists at any of the community schools or via the radio, although some younger Jaminjung people have enrolled in Batchelor College (a tertiary Aboriginal College) in courses involving vernacular literacy and interpreting. None of the older, fluent speakers is literate either in English or in Jaminjung/Ngaliwurru.

The regional Language Centres in Kununurra (Mirima Dawang Woorlab-gerring) and Katherine (Diwurruwurru-Jaru Aboriginal Corporation) serve as production centres for language materials and as archives for research materials, and also run language programs, but no language program so far has targeted Jaminjung and Ngaliwurru directly. Many older people are distressed by the loss of the traditional languages and the associated knowledge, and are keen to have these documented. Still, as far as I could observe, local initiatives to actively maintain the languages are very limited. This is no doubt due to a preoccupation with other battles – land claims and the protection of sacred sites, as well as simply overcoming the difficulties of daily life – and perhaps also to a general feeling of resignation.

1.3 Fieldwork and data

1.3.1 Previous research on the language

Linguistic documentation and description of Jaminjung and Ngaliwurru is comparatively scarce. The present study is based largely on my own fieldwork, but has profited considerably from the – largely unpublished – work of others.

In 1938, Arthur Capell collected Jaminjung, Ngaliwurru and Nungali data, including texts, which remain unpublished (but see Capell 1939, 1940). It appears that around 1930, Gerhard Laves also did some work on Jaminjung, but I have no information on the extent to which Jaminjung is documented in his fieldnotes.

John Cleverly undertook about eight months of fieldwork on Jaminjung in 1966 and 1967, and wrote an (unpublished) grammatical sketch (Cleverly 1968). Janet Bolt worked on Ngaliwurru and Nungali for four months in 1967. Her field notes were compiled into grammars of Ngaliwurru and Nungali by William Hoddinott and Frances Kofod (Bolt et al. 1971a, b), on the model of Cleverly's Jaminjung grammar. All three grammars present a fairly detailed coverage of the morphology and include a word list of around 500 items and some texts, but the syntactic description is very sketchy, and there is only a very brief account of complex verb formation.

In 1971, Michael Walsh recorded extensive vocabulary and some grammatical information. Frances Kofod made some further recordings of Jaminjung, and Patrick McConvell has worked with some Ngaliwurru speakers. Caroline Jones recorded a number of texts in Ngaliwurru, and also lexicographical data, in 1994 and 1995. Mark Harvey undertook intensive research for several months in 1996 on Jaminjung and Ngaliwurru as well as Nungali. Mark Harvey, Frances Kofod, Caroline Jones, Patrick McConvell and Michael Walsh have very generously shared their material with me, and some of it was included in my database. Where I quote their data, the source is always acknowledged.

The only published descriptions of selected aspects of Jaminjung, Ngaliwurru and Nungali linguistic structure[5] are brief papers by Hoddinott and Kofod (1976a, b, c) and Schultze-Berndt (1998).

1.3.2 Fieldwork setting

My own fieldwork was undertaken during six trips to the Northern Territory between April 1993 and August 1999, amounting to 26 months in total. Fieldwork was basically conducted with funding from outside. In comparison with fieldwork under the control of an Aboriginal community (cf. Wilkins 1992), this has certain 'advantages': the freedom to determine one's research goal and time schedule. It also has its drawbacks: the insecurity as to one's role with respect to the community, and the constant need, on both sides, to negotiate one's expectations.[6]

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5 For works taking primarily a diachronic perspective, see the references in §1.2.1.

6 For a fuller personal account of some of the difficulties involved, see Schultze-Berndt

During the first field trip in 1993, I lived in Bulla Camp for seven months, because the community offered a house that was not otherwise used during that period. On subsequent field trips, I stayed partly with linguist friends in Kununurra and Katherine, and partly in a Caravan Park in Timber Creek. Thus, I did not permanently live with Jaminjung and Ngaliwurru speakers or their families. However, I attempted to spend as much time as possible, under these circumstances, with speakers and other people with whom I had developed a personal relationship.

This type of 'participant observation' involved overnight visits to people living in outstations, overnight bush trips, shorter fishing and hunting trips, or – more rarely – visits to specific significant sites. It also involved joining people in their communities or in public places during everyday activities – meals, card games, gossip, waiting for a bus, looking after children, and so on. It also often meant offering transport, for example between a community and the shop or clinic. For some months, I also became involved in tutoring younger Jaminjung, Ngaliwurru and Ngarinyman students who were enrolled in a tertiary degree in vernacular literacy, and I devised some computer materials with spoken Jaminjung and Ngaliwurru vocabulary for use by children. During the last few field trips, video recordings of bush trips or at sites of mythological or historical significance became increasingly popular with the speakers and their families, and provided a good opportunity not only for checking textual materials when showing them to various interested parties, but also for returning some language materials to the community.

The more formal recording sessions (which rarely extended to more than one or at most two hours per day) took place in the communities of the speakers, or else in a shady spot in the vicinity. For these sessions, speakers were paid the rate set by the local Language Centres. Time spent recording or doing intensive elicitation was limited by several factors, among them age and bad health of the speakers, and other commitments, such as childcare or family problems.

Since Jaminjung and Ngaliwurru speakers are dispersed through a number of small communities in a large area (see §1.2.2, and Map 2), fieldwork involved an extensive amount of travelling (easily 2000 km per month).

1.3.3 Contributors

Over the years, I was able to work with approximately 30 Jaminjung and Ngaliwurru speakers, and of these more regularly with a dozen speakers. Most of the contributors are women, and all the people who I worked with regularly were

(1995).

older than 45 years. The latter all contributed a range of text types and materials (see §1.3.4).

All contributors are listed in Table 1-1 below, with their name[7] and subsection name, and their initials as used in the examples. In addition, information on language group affiliation by descent, (further) languages spoken, and close kin relationship (in European terms) to other speakers is included, to the best of my knowledge.[8] The main place(s) of residence during 1993-97 is given in brackets. Those speakers who were regular contributors are indicated with an asterisk following the initials. People deceased by 1999 are indicated by a † following the name.

If not otherwise noted, speakers are/were fluent in the languages they are affiliated to, with the exception of the people of Nungali descent, none of whom are fluent speakers of Nungali. Probably several speakers for whom it is not indicated also speak Ngarinyman, Miriwoong or Murrinh-Patha, depending on their place of residence and kinship ties. All speakers are in addition fluent in Kriol. For the relationship between the dialects Jaminjung and Ngaliwurru, see §1.2.1.

7 Only the names used in official dealings with non-Aboriginal people are given here. Although these sometimes correspond to the traditional, 'Aboriginal' name, personal names are generally of a more private nature in Jaminjung/Ngaliwurru culture.

8 The information comes from discussions with the contributors, supplemented by valuable information from Mark Harvey (p.c.) and Frances Kofod (p.c.). It is likely to contain errors and should be cross-checked before quoting e.g. for the purpose of establishing land rights.

Table 1-1. *Jaminjung and Ngaliwurru contributors*

Name and Subsection	Initials	Language group affiliation, relationships, main place of residence
Biddy Simon (Namirra)	BS	Jaminjung/Murrinh-Patha (Marralam)
Dolly Bardbarriya (Nangarla)	DB*	Gajirrabeng but with Jaminjung as main language, also fluent in Ngarinyman (Bulla)
Doris Bilminga† (Nambijin)	DBil	Jaminjung/Gajirrabeng/Miriwoong, spoke Jaminjung (Kununurra)
Daisy Bitting (Nanagu)	DBit*	Murrinh-Patha/Jaminjung/Gajirrabeng; married to JLe (Kununurra)
Darby Diyawatulwan (Julama)	DD	Nungali, fluent in Ngaliwurru and Wardaman (and other languages) (Timber Creek)
Deborah Jones (Nangari)	DJ	Ngaliwurru/Nungali, semi-fluent in Ngaliwurru; daughter of JJ (Myatt)
Duncan McDonald (Jabarda)	DM*	Nungali/Ngaliwurru, married to DMc (Gilwi)
Dinah McDonald (Nangari)	DMc*	Jaminjung; married to DM (Gilwi)
Doris Pannikin (Nangarla)	DP*	Murrinh-Patha/Jaminjung/Gajirrabeng; sister of IP (Kununurra)
Doris Roberts (Nanagu)	DR*	Ngaliwurru, also speaks Ngarinyman; married to LR (Barrac Barrac / Timber Creek)
Eileen Huddleston (Nangarla)	EH	Jaminjung (Kununurra)
Eileen Roberts (Nangarla)	ER*	Ngarinyman; also fluent in Jaminjung (Bulla / Palumpa)
Isa Pretlove (Nangarla)	IP*	Murrinh-Patha/Jaminjung/Gajirrabeng; sister of DP (Kununurra)
Josephine Jones (Nawurla)	JJ	Nungali/Ngaliwurru (Myatt)
Joe Lewis (Julama)	JLe	Nungali/Ngaliwurru; married to DBit (Kununurra)
Judy Marchant (Namirra)	JM*	Ngaliwurru, also knows some Nungali; daughter of MW (Timber Creek, Fitzroy Station)
Josie Moore (Nalyarri)	JR	Ngarinyman, knows some Jaminjung; daughter of ER (Bulla/Katherine)
Lena Dalmarrang† (Namirra)	LD	Nungali/Ngaliwurru, spoke Ngaliwurru and Ngarinyman, sister of DM (Bulla / Lingara)
Laurie Roberts (Jalyirri)	LR	Ngarinyman, also speaks Ngaliwurru; son of ER, married to DR (Timber Creek)
Mabel Daly (Namij)	MD	Ngaliwurru; daughter of LD (Lingara)
Mignonette Jamin (Nangarla)	MJ*	Murrinh-Kura, also fluent in Jaminjung, Gajirrabeng, and Miriwoong (Ningbing, Kununurra)
Major Migaminy Raymond (Jabarda)	MM	Jaminjung/Murrinh-Patha (Kununurra)
Margaret McDonald (Nangarla)	MMc	Jaminjung/Nungali/Ngaliwurru; daughter of DMc and DM (Gilwi)
Margaret Wilinygari (Nanagu)	MW*	Ngarinyman, also fluent in Ngaliwurru, knows some Nungali (Myatt)
Nida Galgal (Namij)	NG*	Ngaliwurru/Ngarinyman; sister of VP (Timber Creek / Bob's Yard)
Nancy Roberts (Nalyarri)	NR	Ngarinyman, semi-fluent in Ngarinyman and Jaminjung; daughter of ER (Bulla)
Polly Warndanga (Namirra)	PW*	Jaminjung/Murrinh-Patha (Marralam/Kununurra)
Violet Balidi (Namij)	VP*	Ngaliwurru/Ngarinyman; sister of NG (Timber Creek/Bob's Yard)
Violet Raymond (Nalyarri)	VR	Ngaliwurru, also speaks Jaminjung (Timber Creek)

1.3.4 Kinds of data, and methods of data collection

As can already be gathered from the remarks in the previous sections, fieldwork methods and the procedure of data collection were quite eclectic. The primary goal was to record as much natural speech as possible from as many speakers as I could.

The lexical database compiled so far consists of approximately 2000 single word entries (of which approximately 520 are coverb entries), and in addition approximately 1700 complex verb entries. The textual database on which this study is based comprises more than 16,200 (intonation) units (see below), which have been transcribed, glossed, translated and annotated. This includes around 1500 units from the various sources listed in §1.3.1, and some 2000 units which were not tape-recorded, but overheard or dictated.

Where the data were tape-recorded and transcribed, the units correspond to intonation units, that is, units of speech delimited by a significant change in pitch contour, usually coinciding with a noticeable pause. These are considered to be the information units into which the speaker decided to divide the text (cf. Chafe 1987, Halliday 1985: 274). Intonation units often, but not necessarily correspond to clauses (see also §2.6). Units from sources other than tape-recorded texts usually correspond to clauses. Intonation units are usually written in separate

lines, but for reasons of space, two shorter units are sometimes included in a single line.

The divisions made here are fairly coarse and based on auditory impression only. There is a usually clear distinction between medial (slightly rising pitch) and final (falling pitch) intonation unit boundaries (cf. also Cleverly 1968: 34ff. and Bolt et al. 1971a: 33ff). These are distinguished in the notation by the symbols "," and "\", respectively. An instrumental study of prosodic features, and a more detailed rendition of prosodic characteristics, e.g. a distinction between primary and secondary units, would clearly have been desirable, but was beyond the scope of this study.

The transcription was undertaken by myself. For a subset of recordings, such as longer texts, speakers were consulted for clarification. A substantial amount of data were videotaped, which often provided valuable information about the context.

The database covers a variety of text types, including short spontaneous directives (cf. Himmelmann 1998: 179f.), conversations, narrative and procedural texts, and elicited utterances. These types cannot always be clearly delimited from one another, since elicitation often faded into a short narrative, or a conversation, especially when more than one speaker was present during a recording session (which was often the case).[9] For these reasons, the text type is usually not indicated for the examples reproduced here. Note also that narratives were often not monologues, but rather co-constructed by two or more speakers. The topic of the narratives were mainly accounts of joint activities, especially hunting trips, or recent and historical events and life histories. Traditional myths are very scarce, which may partly be due to the fact that most of the Jaminjung people live outside their traditional country and have not visited significant sites for a long time (this is not true to quite the same extent for Ngaliwurru people; see §1.2.5 above).

A substantial amount of data was not obtained by elicitation in the narrow sense, but comes from staged communicative events (in the terminology of Himmelmann 1998: 185f.). These include narratives that were prompted (e.g. when I asked a speaker to give an account of a trip just undertaken), or elicited comments on a situation set up verbally or non-verbally, e.g. by enacting. A number of nonverbal stimuli also elicited interesting data (sometimes in other areas than the stimuli were originally designed for); these therefore figure quite prominently in this study. Mostly, these stimuli were designed by members of the Cognitive Anthropology Research Group (now Language and Cognition Group)

9 As an example of a speech event somewhat intermediate between elicitation and conversation, consider the online comment on parachute jumping reproduced as Text I in the Appendix.

at the Max-Planck-Institute for Psycholinguistics, Nijmegen; these are listed in Table 1-2. In addition, I also obtained several 'Frog Story' narratives, based on the picture book 'Frog, Where Are You' by Mercer Mayer, and following the procedure outlined in Berman & Slobin (1994) and Slobin (1993).

Table 1-2. *MPI Elicitation Tools*

Name and purpose of stimulus	**Type of stimulus**	**Stimulus designed by**
Men & Tree – Description of spatial arrangement, photo-to-photo matching	photos	Eve Danziger and Eric Pederson (cf. Danziger & Hill 1993: 11-13)
Farm Animals – Description of spatial arrangement, photo-to-object matching	photos	Eric Pederson (cf. Danziger & Hill 1993: 15-16)
COME & GO Questionnaire	Abstract scenes as basis for own enactment etc.	David Wilkins (Wilkins 1993b)
Topological Relations Picture book	Line drawings	Melissa Bowerman and Eric Pederson (Bowerman 1993)
Motion elicitation 'Shoebox'	toy manipulation	David Wilkins (Wilkins 1995a)
Enter/Exit Animation	video (animation)	Sotaro Kita (Kita 1995, Wilkins et al. 1995)
Change of State (vs. impact without change of state)	video (acting)	James Essegbey, Roberto Zavala and Eva Schultze-Berndt (Essegbey 1999)
'Sand Drawings'	Line drawings	David Wilkins
TEMPEST (Temporal relation elicitation stimulus)	video (acting)	Jürgen Bohnemeyer (Bohnemeyer 1998)

In verbal elicitation I relied as little as possible on direct translation of isolated sentences, but rather on scenarios that were constructed verbally, either of an imaginary nature or with some relation to the non-linguistic context. The language used on my part in this kind (and in fact in most kinds) of interaction was English, or what I considered my best shot at Kriol.

Most importantly, the textual database only contains what speakers have actually said, and no data obtained through acceptability judgments, since problems with this procedure are well known. This does not mean that I did not make any attempts to obtain acceptability judgments, in particular in the area of investigation under focus here. Thus, I would often construct an utterance

containing a complex verb (i.e. combinations of a verb and a coverb; see Chs. 3 to 6) that I had not previously encountered. A frequent reaction was not a metalinguistic statement, but an utterance where the suggested verb was replaced with one of the 'correct' verbs (much more rarely, the coverb was replaced). If more than one speaker showed this reaction, and effects from contextual inappropriateness could be excluded, I considered this a 'negative acceptability judgment'. If a speaker took up the suggested combination and constructed an actual utterance around it, and if this could also be replicated with another speaker, this was considered a reliable 'positive acceptability judgment'. Utterances elicited in this way were also often included in the database.

A further procedure that proved fruitful in eliciting and checking coverb-verb combinations was prompting with just a coverb. Most speakers would respond with a full utterance containing one of the appropriate verbs, and often a list of possible combinations could be elicited in this way. (The reverse procedure – prompting with just a verb – was not very fruitful, that is, speakers would not readily list possible combinations).

Of course translations by speakers, and the clarification of the meaning of particular lexical items or utterances were also often sought. Translations were often offered spontaneously by one of the speakers present, or even embedded in the omnipresent spontaneous code-switching which was already commented on in §1.2.5. Such translations were noted verbatim since their significance often became apparent to me only later, with my growing appreciation of Kriol. Where they shed light on a particular point of relevance for this study, they have been included, flagged as 'Original Translation', with the example in question.[10]

All the materials included here document everyday speech. I have no evidence that an avoidance language is in use by Jaminjung and Ngaliwurru speakers (although it is quite possible that one existed which has by now fallen out of use). Neither could I obtain any information on an ancillary sign language that would go beyond some common conventional signs.[11]

It should be kept in mind throughout that under the circumstances just described, the depth of coverage that can be attempted in a study like this is very different from that for a language with a healthy speech community and a long history of research. I am only too aware of the many gaps and inadequacies in the

[10] For reasons of convenience, I have often resorted to using English orthography in transcribing Kriol utterances, especially for acrolectal Kriol. Only part of the Kriol utterances are represented in the phonemic orthography generally used in Kriol literacy programs (cf. e.g. Sandefur 1979).

[11] For information on avoidance languages in Australia, see e.g. Dixon (1971), Haviland (1979), and the contributions in Heath et al. (1982). For sign languages in other parts of Australia, see e.g. Kendon (1988) and Wilkins (1997a).

description. I only hope that the analyses offered here at least do not badly misrepresent the genius of the Jaminjung and Ngaliwurru language.

1.4 Theoretical framework

This study is not based on any single framework, but draws on various approaches. It has a 'functionalist' bias, that is, it is based throughout on the assumption that language is used to convey meaning. In other words, speakers usually have a reason for chosing a certain linguistic expressions rather than another. Consequently, in this view, the goal of linguistic description is not so much to define all 'well-formed' utterances that a speaker of a given language may produce, but rather to account for the choices speakers make in producing an utterance.

The following sections provide an outline of the constructional approach to grammar taken here (§1.4.1), the principles adopted for the description of lexical semantics (§1.4.2), and a clarification of the term 'event' as used throughout this study (§1.4.3). Only the most important principles and terms are introduced here; specific notational conventions that will only be of relevance in certain parts of this study are introduced once they are needed.

1.4.1 The construction-based approach to grammar

In this study, I follow the traditional approach of describing language structure in terms of constructions of varying complexity. These are regarded as constituting complex symbolic units (i.e. complex signs) in their own right. This view is thus opposed to the 'autonomous syntax' approach, according to which grammar is based on rules and constraints which operate independently of either semantics, pragmatics, or general cognition. The construction-based approach to grammar can be traced to the Structuralists (e.g. Bloomfield 1970 [1933]: 162f., Hockett 1958, Frei 1962; cf. also Matthews 1981 Ch. 1). It is also one of the fundamental tenets of the schools of Cognitive Grammar (e.g. Langacker 1987, 1990, Lakoff 1987), Construction Grammar (e.g. Fillmore 1988, Fillmore et al. 1988, Kay & Fillmore 1999, Zwicky 1987, Goldberg 1995, Lambrecht 1994, Michaelis & Lambrecht 1996, Zhang 1998), and the Wierzbicka school (e.g. Wierzbicka 1988, Wilkins 1989, Ameka 1991), and is explicitly or implicitly adopted in many works with a typological-functionalist orientation. While these approaches differ in detail of representation and in some of their assumptions, they all share the fundamental assumption that grammatical constructions are meaningful.

1.4.1.1 Defining constructions

Grammatical **constructions** in the sense employed here are variously characterised as 'schematic symbolic units' (Langacker 1987: 58), 'schematic templates' (Langacker 1990), or 'construction-based templates' (Van Valin & LaPolla 1997).[12] Langacker describes the construction-based view of grammar as follows:

> ... I conceive the grammar of a language as merely providing the speaker with an inventory of symbolic resources, among them schematic templates representing established patterns in the assembly of complex symbolic structures. Speakers employ these symbolic units as standards of comparison in assessing the conventionality of novel expressions and usages, whether of their own creation or supplied by other speakers. (Langacker (1990: 16)

Constructions as 'patterns' or 'templates' have to be distinguished from actually occurring linguistic **expressions**. Expressions are 'based on', 'sanctioned by', or 'instantiate' constructions. That is, constructions are complex signs that exist independently of the lexical forms that instantiate them. The difference can be characterised[13] following Hockett (1958), if 'habit' is replaced with 'construction':

> A language is a complex system of habits (p. 137) (...) An act of speech, or utterance, is not a habit, but a historical event, though it partly conforms to, reflects, and is controlled by the habits. Acts of speech, like other historical events, are directly observable. Habits are not directly observable; they must be inferred from observed events... (p. 141)

Constructions can be defined as patterns which are non-compositional, in the sense that the meaning of a complex expression that instantiates this pattern could not be arrived at solely by relying on the meanings of its parts, or the meanings of other constructions. In other words, if the meaning of a complex expression can only be fully stated with reference to the properties of the pattern itself, this pattern has to be recognised as a construction in its own right – which, in a sense, is idiomatic (Fillmore et al. 1988: 501; Goldberg 1995: 13f., cf. also Bloomfield 1970 [1933]: 162f., Frei 1962). For example, in a language like German, where declarative and interrogative sentences are only distinguished by word order and by intonation, the illocutionary force cannot be derived from the meaning of the lexemes or grammemes in the sentence, but only by recognising the type of construction that this sentence instantiates. 'Interrogative' vs.

12 In early structuralist works, yet other terms can be found, e.g. 'tagmeme' (Bloomfield 1970 [1933]: 166ff.) and 'catène' (Frei 1962).

13 For a particularly clear statement of the difference, see also Frei (1962: 133ff.)

'declarative' can be used to characterise the *significatum* side of the construction, its **constructional meaning**.

Maintaining the view that constructions are meaningful is one thing, being able to state this meaning, quite another. In typological-functionalist linguistic works, it is common to describe constructions in terms of their prototypical functions. For example, the function of a transitive construction could be characterised as 'Proto-agent acting on proto-patient' (cf. Dowty 1991). The problem with the prototype account of constructional meaning is, of course, that it does not capture the language-specific properties of a construction. The only way to adequately describe the meaning of language-specific constructions is to supplement a characterisation of its function with a description and extensive exemplification of the range of uses to which it is put (cf. Halliday 1985: xxvi). This basically descriptive approach is the one followed here.

Constructions in the sense just outlined can describe patterns traditionally treated under the heading 'morphology' (e.g. a pronominal prefix slot followed by a slot for a verb root), as well as patterns traditionally termed 'syntactic' (e.g. a noun phrase followed by a verb phrase). This approach therefore easily accommodates expressions that are not easily classified as either 'complex words' or 'syntactic expressions', including the complex predicates that form the focus of this investigation. A further justification for this conflation is that syntactic and morphological constructions are diachronically related by processes of grammaticalisation (see e.g. Lehmann 1985b, 1995; Bybee 1985). This approach to morphology will be of some importance in the treatment of pronominal affixes in Ch. 4.

Constructions, moreover, also include templates that are already partly lexically filled, if this lexical filler constitutes a necessary part of the larger pattern. These could be constructions that are usually treated as idioms, e.g. 'X *let alone* Y', discussed by Fillmore et al. (1988). Constructions that contain grammatical formatives (e.g. in Jaminung NP-*gu* V, where *-gu* is a dative case marker) also fall under this definition (cf. also Himmelmann 1997: Ch. 2).

Therefore, one consequence of the Construction Grammar perspective is that 'grammar' is part of an extended lexicon which contains constructions in addition to simple signs. This view is defended, for example, by Goldberg (1995: 4). To avoid misunderstandings, I will use 'lexicon' in the more traditional sense,[14] with reference only to signs whose signifier has a full phonological specification. This will be kept distinct in terminology from the 'grammar' (or 'morpho-syntax'), defined as the full set of constructions, i.e. those symbolic units which are at least partly schematic (uninstantiated).

14 See §1.4.1.3 below for a discussion of the relationship between lexicon and grammar.

Constructions in this sense can be identified and described in terms of the (classes of) **lexical fillers** (e.g. 'determiner nominal' for a noun phrase construction, '*be* dynamic verb-*ing*' for the English progressive construction), or in terms of other constructions that they are made up of (e.g. NP VP), their arrangement, and their constructional meaning. Most linguistic expressions are instantiations of several overlapping constructions. These often correspond to the familiar phrase structure constituents; for example, a clausal construction can contain various types of noun phrase constructions, among other elements. However, it is important to recognise that constructions are not limited to the subtrees admitted by phrase structure rules (see e.g. Fillmore et al. 1988: 501, Langacker 1990: 28). This makes a Construction Grammar approach ideally suited to dealing with a language like Jaminjung with essentially free word order.

The integration of lexical fillers into certain constructions is enabled or 'licensed' by the compatibility of the meaning of a lexical item and the meaning of the construction (e.g. Goldberg 1995: 43ff.). Construction grammar is thus essentially a **unification-based** approach. Constructions can be related in two ways (and even in both ways at once): first, they may show formal similarities; examples include constructions related by grammaticalisation, e.g. the constructions instantiated by *I am going to London* vs. *I am going to retire*. Second, constructions may be paradigmatically related by virtue of being able to take the same fillers as another construction, and therefore contrasting with it in meaning (e.g. voice alternations such as active vs. passive, or declarative vs. interrogative sentences).

1.4.1.2 The construction grammar approach to argument structure

Of particular importance in this study will be **argument structure constructions** (Goldberg 1995). In most other approaches to argument structure (e.g. Valence Grammar, Dependency Grammar, Lexical Functional Grammar, Government and Binding), and also in some versions of Construction Grammar (cf. Kay & Fillmore 1999: 11), argument structure is described in terms of the inherent grammatical relationality or valency of lexical items. In other words, relational lexical items are conceived of as possessing grammatical slots which need to be filled by other items that appear in the construction, and at the same time determine the nature of those items. In the construction-based approach followed here, on the other hand, argument structure constructions are thought of as existing independently of lexical items.

In both approaches, the grammatical behaviour of lexical items is regarded as motivated by their meaning, while it is recognised that it is never completely predictable on the basis of meaning. In the 'syntactic valency' approach, grammatical relationality is said to be motivated by semantic relationality (e.g. Lehmann 1985a, 1992b). In the construction-based approach, semantic

relationality can be described independently of syntactic argument structure. Semantic arguments will be distinguished from constructional arguments by using the term **'participant'** for the former, following the terminology used in some typological-functionalist frameworks (cf. the contributions in Seiler & Premper 1991), and also by Goldberg (1995). The term **'argument'** will be restricted to constructional argument slots.

Participants are inherent in the lexical semantics of a relational predicative lexeme (e.g. a verb), and can be given labels that reflect verb-specific roles (e.g. 'giver'), or roles common to a class of verbs (e.g. 'recipient'). Thus, no universal set of participant roles (thematic roles) is assumed here. **Arguments,** in the usage adopted here, are slots in a construction and can be described both in terms of their formal manifestation (e.g. 'subject', 'first pronominal prefix', 'locative-marked noun phrase'), and in terms of the constructional meaning associated with these slots (e.g. 'Actor', 'Location'). Argument role labels will be distinguished from participant role labels by the use of a capital initial letter.

Participants can be encoded as arguments in an argument structure construction according to the principle of unification. This requires that participant roles and argument roles must be construed as semantically compatible (cf. Goldberg 1995). For example, in English, the 'giver' participant of the verb *give* can be encoded as a subject argument, since the subject in an active clause represents the most actor-like argument, and this, for *give*, corresponds to the 'giver'.

Arguments as defined here comprise both 'complements' and 'adjuncts'. It has long been recognised that the distinction between complements and adjuncts is a problematic one.[15] Following Tesnière (1959), complements have often been notionally defined as those arguments which are inherent in the semantics of a given predicate, i.e. they correspond to semantic participants of the predicate, and are hence governed by the predicate (Matthews 1981: 124). Adjuncts, on the other hand, are defined as modifiers of a predicate, external to its semantics. Formal criteria that are adduced for argument status include obligatoriness or, as a weaker criterion, 'latency' (Matthews 1981: 125f.): a complement, even if not obligatorily present, is 'understood'. Finally, representation by an unmarked noun phrase or a noun phrase marked by 'syntactic case' as opposed to a preposition or a 'semantic case' is also taken as evidence for complement status (see also Helbig 1992: 72ff.). The problem of distinguishing complements and adjuncts on the basis of these criteria arises because they often receive the same formal marking. The markers involved (e.g. case markers or adpositions) can often be given a meaning (the Jakobsonian 'Gesamtbedeutung', Jakobson 1971 [1936]) which remains constant across 'complement' and 'adjunct' functions.

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[15] See e.g. Matthews (1981: 123ff.), Andrews (1985: 90-92), Lehmann (1991: 206), Helbig (1992), Blake (1994: 34f.).

Although complements can often be distinguished from adjuncts by syntactic tests (such as accessibility to relativisation), such tests cannot be easily found in all languages (see §4.1.1).

For these reasons, I will use the terms **core** and **peripheral arguments**, as defined by Andrews 1985, rather than the terms 'complements' and 'adjuncts'. Core arguments have to be identified by language-specific criteria (e.g. by their status as syntactic pivots, the fact that they are formally unmarked, or marked with certain cases). These will usually correspond to 'complements'. Peripheral arguments (e.g. those marked with an oblique case like the dative) may correspond to 'complements' or 'adjuncts'. In a constructional account, the difference can be described as follows: peripheral arguments may either encode a participant which is inherent in the semantic valency of a verb, or they may be arguments that are contributed solely by a construction, and thus fall outside the valency of the verb. However, core arguments will usually allow one to at least establish the basic valency of a predicate. It is therefore useful to distinguish between **central**[16] and **marginal** participants. Central participants are expressed as (language-specific) core arguments across all constructions where a given predicate occurs. This distinction captures, to some extent, what has been referred to as the syntactic valency of lexical items. For example, the difference in argument structure between English *rob* and *steal* can be described in that the 'victim' is a central participant of *rob* but marginal for *steal*, and vice versa for the 'thing stolen', and that it is the central participant which has to be expressed as a core argument, here a direct object.

Thus, one could argue that the 'syntactic valency' approach and the construction-based approach merely describe two sides of the same coin: the conventional association of certain lexical items with certain constructions. Through recognising the independent nature of argument structure constructions (or valency frames), however, it is possible to avoid the type of regular polysemy that is necessary in a strictly 'lexicalist' approach (cf. e.g. Rappaport et al. 1993). That is, it is not necessary to postulate a different verb sense corresponding to a different argument structure (for a detailed discussion see Goldberg 1995: 9ff).

Finally, a strictly lexicalist approach becomes difficult to maintain when the grammatical behaviour of a complex expression is jointly determined by the constituents of this expression. This is the case for the complex predicates in Jaminjung. An alternative analysis can be implemented in any framework that allows for unification. It is based on the concept of 'argument fusion' or '**argument sharing**': the relational properties of two (or more) lexemes join forces, as it were, to determine the relationality of a complex predicate. In a

[16] Cf. Drossard (1991), inter alia; alternative terms are 'most involved' (Lehmann 1991) or 'profiled' participants (Goldberg 1995).

construction-based framework, this can be represented by mapping two or more participants directly onto a single constructional argument role. This approach will be explored throughout Ch. 4.

Throughout this study, the term 'valency' will be reserve for semantic valency; I will speak of monovalent, bivalent and trivalent coverbs and verbs in the sense that they have one, two or three central participants. The terms 'transitive' and 'intransitive' will be reserved for formal properties of verb stems: Verbs in Jaminjung take one of two paradigms of pronominal prefixes, an intransitive and a transitive one (see §2.4.1.2). 'Syntactic transitivity', i.e. the number of core arguments in a clause, will be described by referring to the presence of one, two or three core arguments (as defined in §4.1), or the possibility of one or more core arguments with a given predicate.

1.4.1.3 The relationship between grammar and lexicon

In most mainstream linguistic frameworks, the lexicon and the grammar are kept strictly apart. In this view, the grammar describes all expressions that can be derived by general rules, while the lexicon is the repository of everything that is idiomatic – first and foremost, the morphemes, but also all non-compositional complex expressions. The inclusion of compositional expressions in the lexicon is regarded as redundant.

In the view adopted here, the **lexicon** comprises all expressions that are conventionalised in a language. This is true even when these expressions are semantically transparent, and fully sanctioned by constructions that form part of the **grammatical knowledge** of any speaker of this language. In this view, there is no contradiction in saying that an expression is remembered as a fixed, conventionalised expression ('stored in the lexicon'), while at the same time the patterns (or rules, if one prefers) on which the expression is built are available for productive, creative use ('stored in the grammar'). Following e.g. Pawley & Syder (1983), Pawley (1986), Langacker (1987: 29ff., 41f.), and Grace (1987: 86f.), this can be argued to be a more realistic view of the linguistic knowledge of a speaker, even though the lexicon in this case has to be regarded as much larger than in the traditional view.

This point has been emphasised here because it is crucial for the description of complex verbs proposed in this study. Complex verbs (including the particle verbs of English and other European languages) have proved a notorious problem for theoretical frameworks which posit a strict division between a lexicon as a 'list of irregularities' and syntax as 'rule-governed combinations'; see e.g. the discussions in Simpson (1991: 115ff.), Mohanan (1994: 234ff.), Goldberg (1996), Ackerman & LeSourd (1997), and Hampe (1997).

I will argue that, in Jaminjung, the majority of complex verbs are semantically compositional, and instantiate a single type of construction. Differences in reading will be derived from the semantic nature of the elements that are combined, and by pragmatic rules. Given this analysis, according to the traditional view these complex verbs should not be listed in the lexicon. However, there is no doubt that all (or most) of the complex verbs in the data examined here are highly conventionalised expressions, or **collocations**, and as such have to be part of the lexicon, both in the sense of 'mental storage' and in the lexicographer's sense.

A further argument for this approach is that conventionalisation, and therefore also compositionality, is clearly a matter of degree. This can be captured to some extent with the distinction between **encoding idioms** and **decoding idioms**, proposed by Makkai (1972). A decoding idiom (such as *pass out* in English) cannot be interpreted unless one has learned its meaning. An encoding idiom, on the other hand, is easily interpreted on the basis of the meaning of its components. However, insofar as it cannot be predicted that they are part of the conventional repertoire, these expressions still constitute idioms that one has to learn in order to be a competent speaker of a language (this corresponds to the colloquial meaning of 'idiomatic'). For example, the Dutch word *hoeveelheid* can easily be interpreted by an English speaker who knows the meanings of *hoe* 'how', *veel* 'many', and *-heid* '-hood'; still, hardly any English speaker who was looking for a translation of English *amount* would spontaneously produce this word if she had not previously learned it.

In this sense, a large percentage of complex expressions in a given language are encoding idioms, since they have to be licensed by convention, and are therefore lexicalised, at least under the definition of the lexicon assumed here. Collocations are a type of encoding idiom. Consequently, I will avoid the term 'lexicalised' in the reading of 'idiomatic, non-compositional'. The term 'idiomatic' will be used instead, and should be read in the sense of 'decoding idiom'. A refinement of the claim that Jaminjung complex verbs are semantically compositional would therefore state that they may be encoding idioms, but not decoding idioms. It is in this sense that the term **'compositionality'** should be understood throughout this study.

1.4.2 The representation of meaning

This section gives an outline of the approach taken in this study to the semantic description of Jaminjung complex predicates and their constituents – in particular the semantically generic closed-class verbs.

1.4.2.1 The nature of lexical meaning

One of the assumptions made here with respect to the nature of lexical meaning is that semantic representations are rich and holistic, or, as some authors have put it, are of an encyclopaedic nature (cf. Haiman 1980b, Cruse 1986: 19, 1988, Taylor 1989, 1996). It is important to note that this does not amount to the claim that everything that is part of the encyclopaedic knowledge associated with a given word by a speaker is part of the lexical semantics of that word.[17] On the contrary, the distinction between lexical meaning and pragmatic interpretation will be of great importance throughout this study. However, I maintain that the difference is one of degree, rather than type, in other words, semantic knowledge could be characterised as a subset of encyclopaedic knowledge (otherwise it would be difficult to account for the lexicalisation of implicatures; cf. e.g. König & Traugott 1988). Only meaning components that are conventionally shared by the members of a speech community will count as lexically encoded.

Thus, as already indicated in §1.1, the lexicon reflects a **categorisation** of experience. In other words, lexical items, at least in part, encode socio-culturally construed **attributes of denotata**. The terms **semantic features** and **semantic components** (used interchangeably throughout this study) should be understood in this sense. Although I will follow a decompositional approach in describing the semantics of Jaminjung verbs and coverbs, through the identification of components common to all denotata of utterances in which they occur, there is no need to postulate that semantic components are universal, or correspond to primitive, unanalysable features. This approach is therefore also compatible with the conviction that semantic features are, as it were, secondary, and categorisation is enabled primarily through the recognition of holistic, gestalt-like properties of denotata (e.g. Taylor 1989: 71).

This leads to the question of how semantic components or 'features' should be represented in a linguistic description. If semantic features are taken to be language-specific, there also is no universally applicable **metalanguage.** In this study, I have avoided the highly formalised metalanguage employed in many decompositional semantic approaches (e.g. Dowty 1979, Jackendoff 1990). This is not only because I did not want to be constrained from the start, in the exploration of the meaning of Jaminjung predicates, by the meta-language chosen, but also because there is a more fundamental problem with the application of this metalanguage to a language which itself, in its complex predicates, manifests a system of overt decomposition. In particular, one might expect the closed-class verbs of this language to correspond rather closely to the decompositional semanticists' primitives of analysis such as 'CAUSE',

[17] Cf. Taylor (1989: 83): "To say that the dictionary is encyclopaedic is not equivalent to saying that the dictionary is an encyclopaedia."

'BECOME', or 'DO'. As will be shown throughout Ch. 5, the meanings of generic verbs in Jaminjung do not correspond very well to these notions.

The metalanguage employed here to explicate the meaning of lexical items is therefore simply semi-standardised English. This does not always lead to elegant explications, but is sufficient to characterise recurrent semantic components in Jaminjung predicates, identify the contrasts between predicates, and capture the relations between polysemous senses. In Ch. 5, the semantic description of generic verbs is also sometimes complemented by a graphic representation. Both graphic representation and explication by an English paraphrase should be understood as tools to capture semantic invariants for the benefit of readers of English, not as a psychologically real representation of the meanings of these items for speakers of Jaminjung.

The phrasing 'socio-culturally construed attributes of denotata' employed above also points to a difference between the approach taken here and truth-conditional semantics. **Semantic invariants**, corresponding to those construed attributes that all possible denotata of a given expression have in common, can be determined without reference to truth-values; rather, they reflect a construal of the world on the part of the speaker (cf. e.g. Lyons 1977: 209f.).

1.4.2.2 Monosemy vs. Polysemy

Monosemy, that is, isomorphism between form and meaning,[18] is adopted here as a heuristic guideline for linguistic analysis (see e.g. Haiman 1980c,1985; Kirsner 1985, Taylor 1990), but not as an absolute principle. This will be of particular importance for the semantic analysis of the generic verbs of Jaminjung, undertaken in Ch. 5. The method resulting from adopting a monosemic bias can be stated as follows:

> Assume that any meaning that is not present in all contexts of a word is not part of the word's inherent meaning (Ruhl 1989: 234)

Monosemy can often be maintained by distinguishing carefully between the **meaning** – the actual, lexical semantic invariants – and the contextual **interpretation** of a linguistic expression. (In addition to these two terms, the term **'reading'** will be used, in a neutral, non-specific way, i.e. it can read either as 'meaning' or as 'interpretation'.) The distinction can be maintained, first, by separating the meaning contributed by the various lexical items to the interpretation of a complex expression from the meaning contributed by the construction itself.

[18] The possibility of homonymy is left out of consideration here, since it is assumed that homonymy can usually be identified on the basis of formal and comparative evidence (cf. Haiman 1980c: 318, Taylor 1989: 104).

Second, the distinction between meaning and interpretation involves a distinction between semantics and pragmatics, i.e. those parts of an interpretation that can be attributed to the meaning of either the construction or its fillers, and those that are merely **inferred** on the basis of pragmatic principles to be discussed in §1.4.2.3 below. In this context, those semantic components of a lexical item that remain invariant throughout all contexts will also be referred to as **entailments**.

The monosemic bias notwithstanding, there are many cases where **polysemy**, i.e. the existence of several **senses**, has to be recognised. Polysemy is recognised where the number and kinds of entailments of a lexical item are increased (**semantic narrowing**) or reduced (**semantic bleaching**) in specific uses of the item. Most metaphorical and metonymic uses of lexical items are also regarded as reflecting polysemy. This approach is not uncontroversial. The alternative possibility is to assume a mechanism of contextual modulation (Cruse 1986: 52) or 'coercion' (Pustejovsky 1993; see also e.g. Ross 1981, Ruhl 1989). This applies especially where a certain reading only arises in specific contexts. For example, the Jaminjung verb *-ijga* 'GO', which as a simple verb always has a locomotion reading, can have a metaphorical reading of 'change of state' if, and only if, it occurs in a complex construction with a coverb which itself encodes a type of state change (see §5.3.2.2). Here it seems tempting not to assign a separate sense of 'change of state' to the verb, but to allow for a derivation of this interpretation from the context. However, this extreme monosemist approach will not be followed here. This is because it makes it difficult to capture differences in meaning between semantically related items of different languages, which are due to different patterns of metaphorical or metonymic extensions (unless it is possible to formulate language-specific inferencing rules with general application). For example, a verb like *see* may 'naturally' extend to cognition (as in *I see what you mean)* in English and other European languages but not, generally speaking, in Australian languages (Evans & Wilkins 1998), and this extension should therefore be recognised as a polysemous sense of the English verb. And in Wagiman, a language that is not related, but geographically close to Jaminjung, the motion verb corresponding to *-ijga* 'GO' does not take on a change of state reading.

For polysemous lexical items, several criteria can, in principle, be adduced in order to distinguish the **basic** (default, least restricted) sense from **extended** senses (cf. Cruse 1986: 72; Taylor 1989: 116ff.). Among these criteria are differences in frequency, historical priority, order of acquisition, default interpretation by speakers, interpretation with respect to a 'basic' domain, or occurrence in the least restricted environments. Last criterion is the one most easily applied in the case of Jaminjung (the criteria of historical priority and order of acquisition cannot be applied at all). In particular, if a generic verb has one sense both as a simple verb and as part of certain complex verbs, but a

second sense only as part of certain other complex verbs, the second sense will be considered to be the extended one, and the first the basic one.

In line with the monosemic bias, my practice will be to use the same gloss for the same form throughout (except obviously in the case of homonymy). This holds for both lexical and grammatical morphemes and should be kept in mind in particular for the generic verbs (where the gloss often merely approximates the meaning of a verb). In other words, in glossing, the identification of a lexeme or grammeme has priority over a transparent relationship between glosses and free translation.

1.4.2.3 The contribution of pragmatics to interpretation

In distinguishing between the meaning and the interpretation of an expression, I follow a neo-Gricean approach. This complements the adoption of monosemy as a heuristic, since many specific interpretations can be analysed as coming about through pragmatic inferences, not semantic entailments (cf. Levinson 1983: 132). Inferences are of course guided by context (the particularised conversational implicatures), but to some extent are also guided by general principles (the generalised conversational implicatures).

The pragmatic maxims originally proposed by Grice (1967, reproduced in Grice 1989) have been reduced to fewer, and more general, principles by most of his followers. Two principles will be of relevance for the description of the Jaminjung verb system. Following Atlas & Levinson (1981) and Levinson (e.g. 1983, 1995, in press), these are termed Principle of Quantity (Q principle), and Principle of Informativeness (I principle).

The **Principle of Quantity** is essentially based on Grice's First Maxim of Quantity (Grice 1967 [1989]: 26), "Make your contribution as informative as is required (for the current purposes of the exchange)". Inferences arise out of mutual awareness of speaker and hearer of the principle, and of their respective needs (cf. Levinson 1995: 191). Thus, if the speaker uses an expression x, and there exists an informationally stronger expression y of roughly equal length, the hearer can, by the Q-Principle, infer that the speaker was not in the position to use y, since if she was in the position, she would have violated the Q principle by using the weaker expression. (For our purposes, 'expression x is (informationally) **stronger** than expression y' can be read as 'the extension of expression x is included in the extension of expression y'). For example, if someone tells me *I just heated the soup*, I can safely assume that the soup is quite edible and did not get burnt, since if the latter was the case I would surely have been told. There is nothing in the semantics of *heat* that precludes the interpretation 'heat and thereby burn', since one could cancel the inference by saying *I just heated the soup, and in fact I burnt it.* The Q principle, thus, can also be summarised as "What is not said is not the case". It will be employed, in

Chs. 5 and 6, to account for restrictions in the use of verbs with a general semantics. The Q principle allows as to predict that a more specific verb is (usually) employed rather than the more general verb, even where the meaning of the latter is also consistent with the event that is expressed.

It is important that the exploitation of the Q principle relies on metalinguistic knowledge, that is, on the knowledge about the existence of alternative expressions of roughly equal length (or formal markedness) in the language (cf. also McCawley 1978). This type of metalinguistic knowledge is also recognised when reference is made to 'preemption' or 'blocking' (cf. Matthews 1991: 76) of non-existent (but possible, i.e. compositional) forms another form. To use an example given above, the word *howmanyhood* in English, although compositional, is preempted by the existence of the word *amount*. The Q principle therefore corresponds to a specific type of preemption, of an informationally weaker by an informationally stronger form.

The **Principle of Informativeness** incorporates Grice's Second Maxim of Quantity, "Do not make your contribution more informative than is required." This principle allows a hearer to arrive, by inference, at a stronger statement than what is semantically contained in what the speaker has said. A simple example is *Jonathan is drinking again*; this will normally be read as 'Jonathan has resumed drinking alcoholic beverages', since a statement to the effect that Jonathan is consuming liquid of some sort hardly counts as an informative statement under normal circumstances. Again, the inference can be cancelled, and would not arise, for example, if the hearer knew that Jonathan had been in a coma. The I principle can also be paraphrased as "Read as much into an utterance as is consistent with what you know about the world" (Levinson 1983: 146f.).

From this brief characterisation, it will have become clear that the two principles have contradictory effects: the Q principle licenses the inference that a stronger statement could not be made. The I principle, in contrast, licenses the inference to a stronger statement (cf. Atlas & Levinson 1981, Levinson 1983: 146f.). Horn (1984, 1989) relates the effects of both principles to two antinomic forces identified by Zipf (1949: 19ff.). Both are based on the general principle of **Least Effort**: the I principle allows the **speaker** to minimise her effort, since she can use the most general, i.e. least informative, expression at hand, and rely on the hearer to enrich it to arrive at the more specific, intended interpretation. The maximal exploitation of this principle, according to Zipf, would lead to the use of just a single word to achieve any imaginable communicative effect; it is therefore termed 'Force of Unification'. The application of the Q-Principle, on the other hand, allows the **hearer** to minimise his effort. If the hearer can rely on the speaker to use the most informative expression that she can commit herself to, he does not have to make the effort to further enrich the message himself. The maximal exploitation of this principle would lead to the use of infinitely many words, in order to have a different expression available for every distinction in

meaning imaginable – hence the term 'Force of Diversification' is chosen by Zipf.

From the extreme potential results that are invoked by Zipf to characterise each of these forces – the existence of just a single word, or of a different words for every shade of meaning – it is already clear that the two forces counterbalance each other in actual language use. This counterbalance, in fact, is incorporated into the original formulation of the two Maxims of Quantity by Grice (by the phrase "... more informative **than is required**") (Horn 1989: 195). Their antinomic character has been identified as a crucial force underlying language variation and language change (see Horn 1984, 1989: 192f., and the references cited there). Because of their complementary effect, the predictive value of these principles is of course limited, but this makes them no less useful as descriptive tools.

The Principle of Quantity and the Principle of Informativeness were discussed in some detail, because they will be referred to throughout Ch. 5, in the description of the meaning and use of the closed-class verbs. Moreover, variation observed in the use of the Jaminjung verbs will be shown to reflect the antinomic tendencies just described.

1.4.3 The notion of 'event'

Since this study investigates event categorisation in Jaminjung, a clarification of the notion 'event' is in order here. For our purposes, an **event** can be defined as a conceptual representation,[19] as linguistically encoded, which can be assigned boundaries, and/or a 'location', in time. Thus, the term 'event' is used here in a technical, broad sense comprising all situation types, not in the colloquial, narrow sense where 'event' contrasts with 'activity' or 'state'. It is equivalent to the terms 'situation' as used, e.g., by Lyons (1977: 483) and Lehmann (1991), and the term 'state of affairs' as used, e.g., by Dik (1997).

In the literature, it is frequently claimed that complex predicates encode 'single events'.[20] In this view, the components of a complex predicate can be described as encoding different **subevents** of a unitary overall event or **'macro-event'**. An intuitively appealing characterisation of the notion of 'single event' is that it is linguistically represented by a single clause. It invokes the 'functional similarity' of clauses with a complex predicate to a 'clause built around a single verb' (Durie 1997: 321) in a language where predicates – supposedly – mostly

[19] Where necessary, the terms **'real-world event'** and **'real-world situation'** will be used (interchangeably) in making reference to extra-linguistic facts.

[20] See e.g. DeLancey (1991b: 13), Givón (1991), Lord (1993: 3), Durie (1997: 320ff.), Talmy (1991), and Van Valin & LaPolla (1997: 480).

correspond to simple verbs (but see §7.2.3). The crucial difficulty here is to determine what 'functional similarity' means. Mere translation equivalence as postulated by a non-native speaker (e.g. a linguist) is obviously a problematic criterion. From a Whorfian perspective, one would have to argue that a complex predicate has to involve, on some level, a conceptual representation which differs from that of a simple predicate, and therefore may not simply be equated with its simple-predicate translation equivalent in another language. This is a point discussed in some detail by Pawley (1987) and also addressed by Givón (1991).

In §3.2, (canonical) complex predicates in Jaminjung will be defined with respect to prosodic units: all components of the complex predicate have to be part of the same intonation unit. In the case of the Jaminjung complex predicates defined in this way, fortunately, we do not have to rely on non-native speakers' translation equivalents to assess their functional equivalence with simple predicates. As already mentioned in §1.2, all Jaminjung speakers are also speakers of Northern Territory Kriol (see also §3.5). Compared with Jaminjung, Kriol makes very little use of complex predicates. This is illustrated in (1-2) and (1-3) below, where the Kriol clauses in (1-2b) and (1-3b) represent the translation equivalents spontaneously offered by native speakers for the Jaminjung clauses in (1-2a) and (1-3a). In both cases, a simple Kriol verb corresponds to a complex Jaminjung verb: the complex verb consisting of *gulyu* 'rinse, wash' and the verb *-angu* 'GET/HANDLE' is translated as *washim* 'wash' in (1-2b). The combination of *yurl* 'chase' and *-wa* 'BITE' is translated as *jeisim* 'chase' in (1-3b). Many more spontaneous equivalents of this type are documented in the corpus.

(1-2a) mali gurrany **gulyu** nganth-**angga**-m ngarrgu
thing NEG rinse 2sg:3sg-GET/HANDLE-PRS 1sg.OBL

b) yu nomo **washim** bla mi kloth
2sg NEG wash:TR for 1sg clothes
'you don't wash clothes for me' (DP, FRA201)

(1-3a) **yurl**=biyang gani-**wa** wirib-di \
chase=NOW 3sg:3sg-BITE.PST dog-ERG

b) imin jeisim, dog bin **jeisim** that blekbala
3sg:PST chase:TR dog PST chase:TR DEM Aboriginal.person
'it chased him, the dog / it chased him, the dog chased that person' (DP, F02228)

It is important to note that the Kriol translations here are not semantically equivalent to the Jaminjung complex verbs. The verb *-angu* 'GET/HANDLE', which is part of the complex verb translating as 'wash' in (1-2), entails that the event involves contact between the agent and the patient of the washing (see §5.4.1.1), something which is only implied in the Kriol (or English) translation.

Even more strikingly, the use of the verb *-wa* 'BITE', in combination with the coverb *yurl* 'chase', makes explicit that the chasing involved a threat of biting (it does not entail that the biting was realised, see also §5.4). If it had involved a threat of hitting, the corresponding verb *-ma* 'HIT' would have been used. In the Kriol translation, as in its English equivalent, this semantic distinction is not made; the difference can only be inferred from the nature of the 'chaser' argument (dogs are more likely to bite than to hit if they catch someone). In sum, therefore, the combination of elements in a complex verb in Jaminjung may serve to make explicit certain aspects of an event that are only implied in the Kriol translation.

However, the Kriol translations were obviously chosen by Jaminjung speakers themselves as fulfilling an equivalent function to the corresponding complex verbs in Jaminjung. The conclusion to be drawn from this fact is that simple and complex verbs may be equivalent on a functional, but not necessarily on a semantic level. The same point is made by Givón (1991: 120) when he concludes that the (serial verb) complex predicates examined in his paper 'perform roughly similar speech-processing tasks' to simple predicates. The notion of 'unitary (macro-)event' should therefore be taken to refer to a unit of conceptual packaging for the purpose of structuring discourse, not to a semantic unit.

Unitary events, thus, are those presented by the speaker of a language as a coherent chunk of information. (Therefore, of course, the requirement that they are encoded within the same prosodic unit is crucial). What is presented as one event does not depend on the number of predicates or on the overall semantic complexity of the expression used, nor does it, of course, correspond to any clear-cut boundaries in the real world. However, speakers follow language-specific (or culture-specific) conventions of what may be regarded as a unitary event (see e.g. Pawley 1987, Durie 1997, Bisang 1992: 31f.), which are, presumably, delimited by universal cognitive predispositions. The cross-linguistically valid restrictions on what may be expressed as a single event are still the topic of ongoing investigations. The language-specific restrictions on complex verb formation in Jaminjung (and hence, the restrictions on what is conventionally represented as a single event by Jaminjung speakers) are the topic of this study.

ESSENTIAL GRAMMATICAL FEATURES OF JAMINJUNG AND NGALIWURRU

CHAPTER 2

This chapter serves a twofold purpose. First, as the title implies, it describes those aspects of the grammar of Jaminjung and Ngaliwurru that will be essential for following the general line of argumentation and for understanding the examples in subsequent chapters. Illustrating examples are kept to a minimum; where possible, examples are given by referring to the texts in the Appendix.[21]

Second, this chapter also serves to establish coverbs – the uninflecting predicative lexemes which constitute an open class – as a distinct part of speech. Jaminjung has three major parts of speech, nominals (§2.2), coverbs (§2.3), and verbs (also referred to as generic verbs; §2.4). These can be distinguished by their morphological properties and syntactic distribution, which are described in some detail in this chapter. Notions that are expressed by members of a separate adverb class in some other languages are expressed in Jaminjung by members of the subclasses of adverbial nominals (for locational and time expressions) and adverbial coverbs (for manner and phase expressions).

The minor parts of speech, particles, clitics, and interjections (§2.5), are only dealt with in a cursory manner. Likewise, both phonology (§2.1) and the syntax of the clause (§2.6) are only given a brief discussion. Complex verb constructions and argument structure constructions are also left out of consideration since they will be discussed in more detail in Chs. 3 and 4, respectively. Very little will be said about discourse organisation and its reflections in the syntax of the clause. This is because the grammatical encoding of information structure in Jaminjung involves an intricate interplay of word order, prosodic features, and the use of certain particles and clitics, which still demands further investigation.

Generally, Jaminjung shares its main characteristics with many other non-Pama-Nyungan languages of Northern Australia: it has free word order, and argument roles are marked both by bound pronominals which are prefixed to the verb and by case-marking on the noun phrase. It has a closed class of inflected verbs, forming complex verbs with members of an uninflected class of coverbs. A

[21] The notational convention adopted in reference to the texts in the appendix is a roman number for the text, followed by a slash and an arabic number for the line; for example, II/3 should read 'line 3 of Text II.

further characteristic is the scarcity of word-class changing derivational morphology. Nominal stems may be derived from coverb roots, but not vice versa. Verbs cannot be nominalised at all, and nominals cannot be verbalised. Therefore, the terms 'nominal', 'coverb' and 'verb' will be used to refer either to the lexical category (roots and stems) or the word form consisting of a stem and inflections, unless otherwise indicated; the relevant reading should be clear from the context. Note in particular that the treatment of the lexical categories in §2.2 to §2.5 takes the category of the lexical roots as a starting point in order to demonstrate the distinctive behaviour of nominal, coverb and verb roots. Therefore, derivational morphology is discussed in the section on the base category, not the resulting category.

2.1 Phonology

2.1.1 Phoneme inventory

Jaminjung and Ngaliwurru are rather typical of Australian languages in their phoneme inventory. Both dialects distinguish five points of articulation for stops and nasals, and three for laterals. The Jaminjung dialect has an additional lamino-dental stop. Voicing is not distinctive; consonants from the stop series are phonetically voiced in onset position, and voiceless in coda position. Occasionally, geminate stops occur at morpheme boundaries; these are always voiceless. Both dialects also have an alveolar trill and a labio-velar glide, a postalveolar glide, and a lamino-palatal glide. In addition, a glottal stop is found at some morpheme boundaries in the speech of some speakers. This does not appear to have phonemic status, but since its status is not clear at present, it will be represented in the transcription, with the orthographic symbol <'>.

The consonant inventory is presented in Table 2-1. The symbols of the practical orthography[22] adopted here are given in angular brackets.

[22] There has been no official agreement so far on a standard orthography for the language. I have adopted the orthography used for Miriwoong at Mirima Dawang Woorlab-gerring (Kununurra), except that the vowel /u/ will be represented orthographically as <u>, not <oo>.

Table 2-1. *Jaminjung / Ngaliwurru consonant inventory*

	Bilabial	**Apico-alveolar**	**Apico-post-alveolar (retroflex)**	**Lamino-dental**	**Lamino-palatal**	**Velar**
Stop	p <b>	t <d>	ʈ <rd>	t̪ <th>[23]	c <j>	k <g/k>[24]
Nasal	m <m>	n <n>	ɳ <rn>		ɲ <ny>	ŋ <ng>
Lateral		l <l>	ɭ <rl>		ʎ <ly>	
Trill		r <rr>				
Glide	w <w>		ɹ <r>		j <y>	

The regular vowel inventory comprises only three vowels, /i/, /a/ and /u/. A small number of coverbs, e.g. *deb* 'knock', also have a mid vowel /e/; these are probably loans from surrounding languages with a four- or five-vowel system. A few monosyllabic words contain a long vowel (e.g. *baaj* 'speech, word, language'); but vowel length does not appear to be distinctive. Non-phonemic vowel lengthening is often employed in discourse to indicate duration; the length of the vowel here is iconically related to the duration of the event described. This type of lengthening is represented by the lengthening sign ':(:::)' (see III/25, V/3 and V/22 in the Appendix for examples).

2.1.2 Phonotactic constraints

In general, phonological words in Jaminjung and Ngaliwurru are at least bimoraic, that is, they are at least disyllabic, or, if monosyllabic, contain a long vowel. Coverbs constitute an exception to this rule, since they may consist of a single closed syllable with a short vowel (see also §2.3). In addition, the following phonotactic constraints hold (the list is not exhaustive, and not ordered).

(i) Words do not begin in a vowel, or in a trill <rr>, retroflex glide <r>, or lamino-palatal lateral <ly>.

[23] This phoneme is only present in Jaminjung, not in Ngaliwurru. Ngaliwurru cognates of Jaminjung words which contain this consonant have the palatal stop instead (orthographically <j>). In these forms the sound which corresponds to Jaminjung <th> and Ngaliwurru <j> is represented orthographically by <J>,.

[24] The grapheme <k> is used to represent the velar stop following the alveolar and postalveolar nasals, in order to distinguish this consonant combination (<nk>) from the velar nasal (<ng>).

(ii) Only one consonant is permitted in syllable onset position.

(iii) Consonant clusters in the syllable coda only appear in word-final position. The only attested consonant clusters consist of a lateral or the alveolar trill as the first element, and a peripheral stop (<b> or <g>) or the velar nasal as the second element. Only coverbs exhibit all of these clusters, nominals only have a subset of them, and verb forms and particles never have word-final clusters.

2.1.3 Morpho-phonological alternations

General morpho-phonological alternations are lenition and assimilatory denasalisation.

Lenition reduces both the velar stop <g> and the labial stop (<b>) to a glide (<w>) intervocalically. This accounts for the allomorphy of a number of case markers, and of pronominal and modal verb prefixes. A few forms also show an alternation of the lamino-palatal stop (<j>) and the corresponding glide (<y>), e.g. *=jirram* ~ *=yirram* 'two/dual' (clitic).

Assimilatory denasalisation in syllables preceding or following non-nasal consonants is only found for the ergative marker *-ni* -> *-di,* and in verb forms. For example, the verb stem *-minda-* 'EAT' has the potential/future alternant *-bida,* by a merger of the potential/future prefix *-b-* with the stem-initial bilabial nasal, and denasalisation. Assimilatory denasalisation also spreads to the prefix; compare *gani-minda-ny* '3sg:3sg-EAT-PST' and *gadi-bida* '3sg:3sg-FUT:EAT'.

Further morpho-phonological alternations which only affect verb stems are discussed in §2.4.2.3 below.

2.1.4 Stress

Details of the stress patterns of Jaminjung and Ngaliwurru are unclear at present. Primary word stress generally falls on the first syllable of a phonological word. However, in forms longer than two syllables, heavy syllables may attract stress when they are in non-initial position.

In canonical complex verbs, main stress falls on the coverb, at least when it precedes the verb; the verb receives secondary stress. This stress pattern can serve to distinguish coverb – verb combinations from the combination of an adverbial nominal with a verb (see also §2.2.2.4, §3.2).

2.2 Nominals

Nominals in Jaminjung can be identified by their ability to function as constituents of noun phrases, as sentence adverbials, or as predicates in ascriptive, copula-less clauses (see §2.6.3). They can be further divided into subclasses based on their predominant function, and, in some cases, based on distinct morphological marking.

These properties, in principle, distinguish nominals from other lexical categories, including coverbs. However, as we will see in §2.3.1.2, there is some minor overlap between the classes of nominals and coverbs.

The structure of the noun phrase is described in §2.2.1. Nominal subclasses are discussed in §2.2.2. An overview of the nominal derivational and inflectional morphology is provided in §2.2.3. Free pronouns are discussed in a separate subsection (§2.2.4) because they exhibit some additional functions in comparison with the other nominal classes.

2.2.1 The noun phrase

The existence of a phrasal unit 'noun phrase' has been questioned for some Australian languages (see e.g. Blake 1983, Hale 1983, Heath 1986). Rather, it has been argued that coreferential nominals are always in apposition. In this way, both the so-called 'discontinuous noun phrases', and the lack of a distinction between nouns and adjectives, can be accounted for.

For Jaminjung, several phenomena suggest the existence of a weakly grammaticalised phrasal category 'noun phrase'. However, this term will be restricted to nominal constituents under a single intonation contour, which are not separated by pauses or other constituents (cf. Merlan 1994: 226). The status of coreferential nominals separated by an intonation break (the 'fractured' noun phrases of McGregor 1989b), or by other constituents ('discontinuous noun phrases'), is left out of consideration here.

Apart from the prosodic criterion just given, two other criteria can serve to identify noun phrases in this narrow sense. First, the noun phrase is the domain of case marking. The position of the case marker with respect to the noun phrase is 'free' (in the terminology of Dench & Evans 1988: 5), that is, it may follow any constituent of a noun phrase. Optionally only one, or more than one constituent may be marked. The position of the case marker is probably conditioned by differences in information structure (cf. McGregor 1989b, 1990: 276ff.), but the conditioning factors have not been sufficiently investigated for Jaminjung.

Second, some nominals are restricted to either head or modifier (including determiner) function in a noun phrase, although others have both possibilities (see §2.2.2). Therefore, the 'apposition' analysis would not work for all noun phrases in Jaminjung, since it presupposes the functional equivalence of all nominals.

A noun phrase minimally consists of a referential head, which can be accompanied by one or more modifiers in either order, and optionally by a demonstrative functioning as determiner. The term 'modifier' is used here in a broad sense, comprising quantifiers (e.g. numerals) and qualifiers (e.g. adjectival nominals, possessive noun phrases). Apparently, the only restriction in constituent order within a noun phrase concerns the determiner: a demonstrative can only occur once in a noun phrase, and always precedes any modifier (if present). That is, the determiner either precedes both modifier(s) and head noun (in either order), or it separates the head noun and a following modifier.

Some of these ordering possibilities are illustrated in (2-1) to (2-6). All of these represent spontaneous utterances (in the sense that they were not elicited by translation). The noun phrases are in boldface.

Head only:

(2-1)
guyawud	burru-yu	**wirib** \
hungry	3pl-BE.PRS	dog

'the dogs are hungry' (DP, F02222)

Determiner – head:

(2-2)
guyawud	ga-yu=gun	**thanthu**	**wirib**
hungry	3sg-BE.PRS=CONTR	DEM	dog

'it IS hungry, that dog' (DB, D01106)

Head – modifier:

(2-3)
ya,	ngab	gan-ba,	**wirib**	**mulanggirrng-ni** \
yes	miss	3sg:1sg-BITE.PST	dog	fierce-ERG

'yes, it missed me when trying to bite, the fierce dog' (IP, F03640)

Determiner – head – modifier:

(2-4)
yan-ba=mindag=gun	**thanthu**	**wirib**	**mulanggirrng**
IRR:3sg:1-BITE=1du.incl.OBL=CONTR	DEM	dog	fierce

'it might bite you and me, that fierce dog' (IP, F03667)

Determiner – modifier – head:

(2-5)
DP:	**thanthu=gun**	**mangurrb-bari**	**wirib,**
	DEM=CONTR	black-QUAL	dog
IP:	ngayin	burrb	gani-bida...
	meat/animal	finish	3sg:3sg-FUT:EAT

'DP: that black dog- IP: -it will eat up the meat' (DP/IP, D31065-6)

Head – determiner and Head – determiner – modifier :

(2-6)
ngayin=gun	**thanthu**	burrb	gani-bida	ngarrgina \
meat=CONTR	DEM	finish	3sg:3sg-FUT:EAT	1sg:POSS

... **wirib**	**thanthu**	**mangurrb-bari**
dog	DEM	black-QUAL

'it will eat up that meat of mine ... that black dog' (DP, D31068)

The structure of the noun phrase, with the two possibilities of determiner position, is schematically represented in (2-7), disregarding case marking. The only constituent of a noun phrase can also be a demonstrative, in which case it can be regarded as head. Not considered here are generic-specific constructions and part-whole constructions; these can be treated as complex heads. For subordinate clauses in the function of relative clause, which may take up the position of head in the noun phrase, see §2.6.4.

(2-7) *Structure of the noun phrase*

a) (Det) (Modifier*) Head (Modifier*)

b) Head (Det) (Modifier*)

2.2.2 Nominal subclasses

Nominals can be divided into subclasses according to their syntactic functions (following e.g. Hale 1983: 33ff. and Dench 1995: 53). Free pronouns (§2.2.2.1) and nouns (with further subclasses; §2.2.2.2) function mainly as heads of noun phrases. Adjectival nominals (§2.2.2.3) can function either as modifiers or as predicates in nonverbal clauses. Adverbial nominals (§2.2.2.4), with the further subclasses of locationals and time nominals, function as sentence adverbials. Finally, demonstratives (§2.2.2.5) can function both as determiners or heads in a noun phrase, and as adverbials. Interrogatives do not really constitute a subclass of nominals, but are a functional class which cross-cuts lexical categories and subcategories, and whose members partly also function as indefinites. Nominal interrogatives comprise the forms *nanggayin* 'who/someone',

nganthan 'what/something', *ngajang* 'how many', *warnang* 'where', and *nyangulang* 'when'.

2.2.2.1 Free pronouns

Free pronouns form a closed class. Three sets of stems can be distinguished, the absolutive stem, the oblique stem, and the possessive stem. The latter may function as head and modifier. The absolutive stem and the oblique stem both only function as heads and, taken together, have the same inflectional possibilities as nouns. However, there are certain complications in matching form and function for the free pronouns. They are therefore discussed in more detail in a separate section (§2.2.4).

2.2.2.2 Nouns

Nouns comprise the subclasses of proper nouns, kinship terms, common nouns, and numerals. All nouns have the same case-marking possibilities, and typically only function as heads of noun phrases (e.g. *wirib* 'dog' in examples 2-1 to 2-6 in §2.2.1 above).

Numerals may function both as heads, as shown in (2-8) below, and as modifiers (see e.g. I/4, I/18 and V/13 in the Appendix). They constitute an essentially closed class, comprising the forms *jungulug* 'one', *jirrama* 'two', *murrgun* 'three' and *lubayi* (Ngaliwurru: *bardawurru*) 'many'.

(2-8) **jirrama** buny-angga warlnginy
two 3du-GO.PRS walk
'two are walking' (DB, D14105)

Kinship terms can be singled out as a subclass of nouns because they may take special possessive suffixes, *-(ng)guluwa* 'your relation' (KIN2), and *-(C)unthu* 'his/her relation' (KIN3); no possessive suffix exists for the first person possessor. For an example of a kinship possessive marker, see (2-41).

2.2.2.3 Adjectival nominals

All forms which may function as a modifier in a noun phrase and/or as a predicate in a verbless ascriptive clause can be subsumed under the adjective class. Both functions are illustrated for *jarlag* 'good' in (2-9) and (2-10).

(2-9) janyungbari-bina yagbali-bina, \ shiftim yirr-ijga-ny \
another-ALL place-ALL shift:TR 1pl.excl-GO-PST

jarlag-bina gulban-bina \
good-ALL ground-ALL

'to another place, we moved, to (a place with) good ground' (i.e. ground soft enough to dig for yam) (NG, E01057-8)

(2-10) malany birri nga-w-arra, jarragja-ngarna mali ngiya +
test TRY 1sg:3sg-FUT-PUT talking-ASSOC thing PROX

+ majani **jarlag**, majani marring \
maybe good maybe bad

'I will try and try it out, this tape player, it is maybe good, maybe bad' (DBit, E05040)

Most adjectives identified in this way may also form verbal predicates with the two verbs *-yu* 'BE' and *-ijga* 'GO' in their auxiliary function (see §5.2.1.2 and §5.3.2.3). In contrast to the verbless predicates, verbal predicates formed with an adjectival nominal, as in (2-11), describe (contingent) states rather than properties.

(2-11) nga-ngawu, gurrany **jarlag** ga-**yu** +
1sg:3sg-SEE.PST NEG good 3sg-BE.PRS

+ wangarr gan-unggu-m \
mad 3sg:3sg-SAY/DO-PRS

'I saw him, he is not well, he is acting mad' (DP, E05006)

Adjectival nominals in Jaminjung cover the semantic areas of dimension, physical property, age and value. The other semantic classes suggested by Dixon (1982b) as universal candidates for an adjective class – colour, speed, and human propensity – are encoded by coverbs, in the subclasses of states (§6.2), adverbial coverbs (§6.19), and coverbs of bodily and emotional condition[25] (§6.4.3), respectively. However, it should be pointed out that there is some degree of overlap between the classes of adjectival nominals and coverbs, in particular in the semantic areas of value and physical property. Thus, sometimes the same lexeme shows properties of both classes (see §6.2 for details and examples).

2.2.2.4 Adverbial nominals

Adverbial nominals comprise the subclasses of locationals and time nominals. The core set of locationals, in turn, comprises two directionals based on river

[25] The coverb *wangarr* in (2-11) is an example of a coverb from this class.

drainage, *manamba* 'upstream' and *buya* 'downstream' (Ng. *buyagu)*, and two directionals based on verticality, *Jangga* 'above' and *thamirri* (Ng. *jamurrugu)* 'below'.[26] Directionals may also be derived from a demonstrative with the directional suffix *-wurla*, as shown in (2-12). Unmarked directionals have a locative interpretation. Directionals take special allative and ablative suffixes; the locational ablative is *-yun*, the locational allative, illustrated in (2-12), is *-ngining* in Jaminjung and *-ngarnang* in Ngaliwurru.

(2-12) pigipigi mung ga-yu **yina-wurla-ngining \ manamba-ngining**
pig look.at 3sg-BE.PRS DIST-DIR-L.ALL upstream-L.ALL
'a pig is looking that way, upstream' (Farm Animals 7) (DMc, E13088)

While directionals are easily identified by their special spatial case forms, class membership is more difficult to determine for other locational expressions (cf. also Merlan 1994: 254f.). Usually, these forms are not inflected, and although they may take ablative case, this does not sufficiently distinguish them from coverbs of spatial configuration (see §6.1). Certain forms, including *warriya* 'far', *ganjagawu* 'close', and *balarrgu* 'outside', are considered here to be locational nominals rather than coverbs, because, unlike coverbs, they do not form a close prosodic unit with the finite verb. This suggests that in this case they function as clausal adverbials, rather than as part of the predicate. This is illustrated for *balarrgu* 'outside' in (2-13).

(2-13) waljub ga-gba, jarriny-gi, ga-jga-ny=biya yina \
inside 3sg-BE.PST hole-LOC 3sg-GO.PST=NOW DIST

balarrgu=biya
outside=NOW

'it was inside, in the cave, it went away then over there, outside' (MW, E15181-2)

However, this criterion does not allow one to arrive at a completely clearcut distinction. Moreover, it does not correspond to semantically defined classes; consider *waljub* 'inside' in (2-13) above, the semantic antonym of *balarrgu* 'outside', which however has to be regarded as a coverb (see §6.1)

Time nominals, like *gaburrgad* 'yesterday', *jalang* 'today', *gabugabu* 'afternoon', *ngidbud* (J.)/ *mirdang* (Ng.) 'night' or *garrijgiyung* 'morning/ tomorrow', are usually not inflected. However, they occasionally take spatial cases,[27] and can therefore also be regarded as members of the adverbial subclass of nominals.

[26] Compass directionals were provided in elicitation by some speakers, but never used spontaneously.

[27] See e.g. III/36 and III/38 in the Appendix, and (2-35). The form *garrijgiyung* 'morning/tomorrow' can be analysed as *garrij* 'cold' + *-gi* 'LOC' + *-ung* 'COTEMP'; however, the resultant expression is clearly lexicalised.

2.2.2.5 Demonstratives

The core set of nominal demonstratives comprises six forms, listed in Table 2-2. A three-way distinction is made between a proximal and a distal demonstrative (based on distance from the speaker), and a third form which is not based on distance, but whose function can be roughly characterised as (re)introducing a contextually 'given' referent. It can be used to refer to an entity 'given' in the nonverbal context, but also anaphorically to refer to a previously mentioned entity. In its adnominal form it functions as a general determiner, on its way to grammaticalising to a definite article (cf. Himmelmann 1997). It is therefore not surprising that it is far more frequent than the proximal and distal forms. The gloss chosen here is simply DEM; examples for its function in noun phrases were already provided in (2-1) to (2-6) in §2.2.1 above.

All three demonstratives occur in two forms, labelled 'adverbial' and 'adnominal' in Table 2-2. The 'adverbial' forms, though, may in addition also function as head nouns and as adnominal modifiers. The 'adnominal' forms mainly function as determiners, and occasionally as head nominals, but never as adverbials.

Table 2-2. *Nominal demonstratives*

	Adverbial	**Adnominal**
PROX	ngi(yi)ya	(ngi)yinJu
DIST	yina(ya)	(ngi)yina
'given' (DEM)	JanJiya	JanJu

2.2.3 Nominal morphology

Derivational morphology on nominal roots does not change their word class, and only comprises a few forms, discussed briefly in §2.2.3.2. Reduplication, treated in a separate section (§2.2.3.1), can also be considered derivational rather than inflectional.

Inflectional nominal morphology mainly comprises a rich set of case markers (§2.2.3.3). The proprietive and privative suffixes, whose status (case marker or derivational affix) is somewhat unclear, are treated in a separate section (§2.2.3.4). Unlike the related language Nungali, and a number of neighbouring

languages, Jaminjung and Ngaliwurru do not have noun class prefixes. Nor is number inflectionally marked, although number of humans is distinguished in free pronouns, and may be indicated by reduplication (§2.2.3.1) and by two clitics, *=jirram* ~ *=yirram* 'two/dual', and *=mulu* 'COLLective' (see §2.5.2).

2.2.3.1 Reduplication

Reduplication of nominals always has the function of indicating multiplicity of referents. For certain nouns with human referents, number marking by reduplication appears to be obligatory. The reduplicated forms are derived by initial partial reduplication and seem to be fully lexicalised. Some examples are *mululurru* 'older women' (*<mulurru)*, *ngarlangarlangan* 'young girls at puberty' (*<ngarlangan)*, *guragurang* 'older men' (Jam.; *<gurang)*, *galwalwarrang* 'females' (*<galwarrang),* and *maljalju* 'males' (*<malju)* (a number of examples can be found in Text IV in the Appendix).

Full or partial reduplication in the function of marking multiplicity is also possible with adjectival nominals in attributive or predicative function; here it is not restricted to human referents. An example for a reduplicated nominal in attributive function is given in (2-14).

(2-14) gardawarlng gana-ma-ya **wuju-wuju** mali jalig-gina
egg 3sg:3sg-HAVE-PRS RDP-small thing child-POSS
'the egg has little things inside for kids' (Kinder Surprise Egg) (JM, CHE102)

2.2.3.2 Derivational suffixes

In the absence of word-class changing derivation, derivational morphology on nominals is restricted to a few forms, which are comparatively rare; these are summarised in Table 2-3. The first two of these are also found as nominalisers on coverbs (see §2.3.2.3).

Table 2-3. *Nominal derivational suffixes: overview*

Form	Gloss	Section
-ngarna	'ASSOCiative'	2.2.3.2.1
-gina	'Function' (= POSSessive)	2.2.3.2.2
-nguji	'ETC.'; 'X and others'	2.2.3.2.3
-mawu	'HABITAT', 'X-dweller'	2.2.3.2.4

2.2.3.2.1 *-ngarna* 'ASSOCiative'

A derivational suffix of the form *-ngarna* is found, in related functions, in several languages of the region. In Jaminjung, it characterises the derived nominal as being habitually associated with the entity, place, or action designated by the base. The kind of association can differ considerably; for example, the derived nominal in (2-15) can be read as 'school-attending', but the one in (2-16) below as 'louse-having'.

(2-15) buru yirr-anjama-ny jalig-gu **garrij-ngarna-wu**
return 1pl.excl:3sg-BRING-PST child-DAT cold/school[28]-ASSOC-DAT
'we took them back for the school kids' (pandanus leaves to make baskets) (VP, TIM021)

2.2.3.2.2 *-gina* 'Function' (= POSS)

The possessive suffix *-gina*, in its derivational function, characterises the derived nominal as being related through its function to the entity denoted by the base. This suffix is used particularly productively to derive terms for introduced artefacts. An example *wulngan-gina*, derived from *wulngan* 'sun/day', which can be used to refer to 'suncream' but also 'watch'. Both associative and function marking were combined in the following on-the-spot coinage for 'banana'.

(2-16) nambul-ngarna-gina
louse-ASSOC-POSS
'banana' (lit. 'thing for the one associated with lice (= monkey)') (LR)

The same suffix also serves as an adnominal and adverbal case, marking possession as well as (intended) function of an entity, as in (2-14) above (see also §2.2.3.3.12).

2.2.3.2.3 *-mawu* 'HABITAT'

Another derivational suffix, *-mawu*, is restricted to nominals which designate an environmental feature, and indicates that this environment serves as the habitat of a plant or animal species. (According to Mark Harvey (p.c.), *-mawu* is also used with place-names to refer to land owners). In all recorded uses the derived nominals are used as predicates in nonverbal ascriptive clauses. In (2-17), two

[28] The polysemy of *garrij* 'cold' / 'school' has arisen through calquing from the Kriol form *kul* which translates both English *cool* and *school* (in broad Kriol at least, initial fricative-stop clusters are reduced). The homophony must have given rise to a semantic association because of the airconditioning in schools.

tree species, which are similar in other respects, are contrasted in terms of their habitats (see III/42 for a further example).

(2-17) yawayi, garlijba **wagurra-mawu** \
yes kapok.tree rock-HABITAT

buyud-mawu, wardi \
sandground-HABITAT tree.species

'Yes – the *garlijba* (tree) – a hill dweller. A sandground dweller – the *wardi* (tree)' (EH, E1806-7)

2.2.3.2.4 *-nguji* 'ETC'

Expressions formed with a nominal and the suffix *-nguji* 'ETC' can be translated as 'X and others', 'X among other things'. The position of the suffix before any case marker, as illustrated in (2-18), suggests that it is a derivational suffix. It may also follow proper names; in this case the resulting expression refers to a group (usually related by kinship ties) around an individual X (see III/10 for an example).

(2-18) mayi, ngayin-ku wurdbaj burrinyji yirrag \
man meat/animal-DAT look.around 3pl-GO.IMPF 1pl.excl.OBL

gumirrinyji-**nguji**-wu ngalanymuwa-**nguji**-wu \
emu-ETC-DAT echidna-ETC-DAT

'(as for) the men, they would go hunting for animals for us, for emu among other things, and for echidna among other things' (Field notes 1999)

2.2.3.3 Case suffixes

Case markers are treated here as inflectional suffixes. On phonological grounds, they could also be regarded as postpositions or perhaps clitics, since they may (occasionally) be separated from the nominal by a pause, and may have scope over a whole noun phrase, i.e. the case marker only needs to be present on one constituent of the noun phrase (cf. McGregor 1990: 276f.). This distinction is only one of degree of grammaticalisation, and is of no relevance for the purpose of this study.

Several functions of case markers can be distinguished (cf. e.g Dench & Evans 1988). They all serve to relate one constituent to another, but may operate on different syntactic levels. In their prototypical function, case markers operate on the clause level, relating arguments to their predicates. Case markers in an adnominal function relate a noun phrase which serves as an attribute embedded in another noun phrase to its head noun. Several case markers in Jaminjung

have both an adverbal and an adnominal use; both functions will be discussed in the corresponding subsection in §2.3.3.3.

Case marking under agreement between a secondary predicate and its controller – termed 'referential' function by Dench & Evans (1988), following Austin (1981b) – can be found, if rarely, in Jaminjung, but will be left out of consideration here. Case agreement in a part/whole construction is treated briefly in §4.2.3.2.

The 'complementising' function of case identified by Dench & Evans (1988) for other Australian languages, that is, case marking of embedded subordinate clauses, also has correlates in Jaminjung: some case markers may occur on non-finite adverbial clauses with a coverb as predicate; see §2.6.5. A summary of the case forms and their functions is provided in Table 2-4.

Table 2-4. *Case forms and functions: overview*

Form[29]	Gloss	Adverbal Function	Adnominal Function	Complementising Function	Section(s)
(unmarked nom.)	'absolutive'	√	–	–	2.2.3.3.1 4.2.1.3
-ni ~ -di [30]	'ERGative/ INSTRumental'	√	–	–	2.2.3.3.2 4.2.1.1
-gu ~ -wu	'DATive'	√	√	√	2.2.3.3.3 2.6.5.1 4.2.1.4
-ngulung	'PURPosive'	√	–	–	2.2.3.3.4
-garni ~ -warni	'MOTIVative'	√	–	–	2.2.3.3.5
-nyunga (Jam.)	'ORIGin'	√	√	√	2.2.3.3.6 2.6.5.4
-ngunyi (Jam.) *-giyag* (Ngali)	'ABLative'	√	–	√	2.2.3.3.7 2.6.5.5 4.2.1.2
-bina	'ALLative'	√	–	√	2.2.3.3.8 2.6.5.2–3
-gi ~ -g (Jam.) *-gi ~ -ni* (Ngali)	'LOCative'	√	–	–	2.2.3.3.9
-mindij	'TIME'	√	–	√	2.2.3.3.10 2.6.5.6
-mij	'COMITative'	√	–	–	2.2.3.3.11
-gina	'POSSessive/ function'	√	√	–	2.2.3.3.12
-julu ~ -yulu	'GENitive'	–	√	–	2.2.3.3.13

[29] Allomorphy of the case markers, unless otherwise indicated, is due to regular lenition of both velar and labial stops to a glide (/w/) following vowels (see §2.1.3).

[30] In an earlier publication (Hoddinott & Kofod 1976a), the ergative case in Jaminjung is reported to be formally identical to the locative case. This appears to be a mistake based on the fact that both cases have an allomorph of the form *-ni*. The ergative is always *-ni* in careful speech but often denasalised to *-di* following a stop (see §2.1.3). The locative is *-gi*, with the allomorphs *-g* (mainly Jaminjung speakers) and *-ni* (mainly Ngaliwurru speakers), following a vowel.

2.2.3.3.1 Absolutive (unmarked nominal)

The absolutive form of nominals is always unmarked. The functions of absolutive noun phrases include, but are not restricted to, that of 'intransitive subject' (i.e. the only core argument with intransitive verbal predicates, and the predication base with nominal predicates, as in (2-17) above), and 'transitive object' (i.e. the non-agentive core argument with transitive predicates, as in (2-21) below). An example for an absolutive noun phrase functioning as the single argument of an intransitive clause is given in (2-19).

(2-19)

ga-rna-ya=biya	**guyug**	**luba**	biya::::,	burrb,
3sg-BURN-PRS =NOW	fire	big	NOW	finish

'a big fire burns then, (and) finishes' (VP, E11265)

Moreover, since ergative marking is not obligatory in Jaminjung, agentive arguments may also be in the absolutive case (see §4.2.1.3 for examples). It will therefore be argued in §4.2.1.3 that the absolutive, rather than having a positive 'function', only signals core argument status. The role of the absolutive argument depends in its interpretation on the context, e.g. the semantics of the predicate, the presence of other arguments, or the extra-linguistic context.

A similar variation can be observed with respect to location or goal arguments. Inherently locational nominals, such as place names or the nominal *yagbali* 'place, camp, country' illustrated in (2-20) may also appear in the absolutive, rather than marked with locative or allative case, although the latter possibility is by no means excluded (cf. e.g. II/15 in the Appendix).

(2-20)

gurrany	yawurr-ijga	**ngarrgina**	**yagbali**
NEG	IRR:2pl-GO	1sg:POSS	place

'you shouldn't go to my country' (DB, D13032)

2.2.3.3.2 *-ni ~ -di* 'ERGative/INSTRumental'

As in many Australian languages, in Jaminjung a single case form has the functions traditionally labelled 'ergative' and 'instrumental'. Its range of uses is discussed in some detail in §4.2.1.1, where it is argued that they can be subsumed under a general meaning of 'Effector'.[31] Two examples illustrating the prototypical uses are given in (2-21) and (2-22).

[31] For the sake of readability, this case form will be glossed as 'ERG' or – in 'instrumental' function – 'ERG/INSTR', deviating slightly from the usual principle of using the same gloss for a form in all functions.

(2-21) **jalig** **janyungbari-ni** **gujugu-ni** yurl gani-ma-m wuju
child other-ERG big-ERG chase 3sg:3sg-HIT-PRS small

'the other, big child chases the little one' (two children fighting) (ER, MIX063)

(2-22) burrurrug=biyang gana **gurunyung-ni**
scatter=NOW 3sg:3sg:CHOP.PST head-ERG/INSTR

'he hit it with his head, scattering it' (Change of State videos) (DBit, F02070)

2.2.3.3.3 *-gu ~ -wu* 'DATive'

The range of uses of the dative case is rather typical for Australian languages. Its functions comprise the marking of an 'addressee', a 'purpose', and a 'beneficiary' (see e.g. Tsunoda 1981a: 59 for Jaru). In addition it may also mark the stimulus e.g. of fear. Example (2-23) illustrates dative-marking of both beneficiary *(janju jalig-gu)* and stimulus *(eksiden-ku)*.

(2-23) yarrajgu ga-yu=nu gujarding **janju** **jalig-gu** \
afraid 3sg-BE.PRS=3sg.OBL mother DEM child-DAT

eksiden-ku \
accident-DAT

'she is worried for him, the mother, for that child; (worried) about (him having) an accident' (JM, E15304-5)

In §4.2.1.4, it will be argued that the dative in all these functions can be given a general meaning of marking an 'anticipated reason'. A further function as an adnominal case can be linked to the 'beneficiary' function (cf. Wilkins 1989: 183). This is the marking of a 'possessor' either in a kinship relationship or in a relationship of traditional owner of country to the 'possessum'. As (2-24) shows, the possessor can be indicated with a possessive pronoun in the same clause.

(2-24) **Nawurla-wu** nuwina ngaba
<subsection>-DAT 3sg:POSS elder.brother

'Nawurla's elder brother' (DB, BUL220)

The dative is also found on coverbs, marking a purposive clause (see §2.6.5.1).

2.2.3.3.4 *-ngulung* 'PURPosive'

In addition to the more general dative, Jaminjung also has a special purposive case, *-ngulung*, which appears to have a much more restricted function than the dative, but can be replaced by it, as shown in (2-25). Probably for this reason, this form is very infrequent. In all the attested uses, it indicates the purpose of a deliberate action.

(2-25) gujarding-ni=biyang \ birri-ngarna-ny yinju \
mother-ERG=NOW 3pl:1pl.excl-GIVE-PST PROX

gagawuli-ngulung \ **mamunya-wu,** \ wajgany-gu \
long.yam-PURP round.yam-DAT honey-DAT

'the mothers, they gave (i.e. taught) us this. About long yam. About round yam. About sugarbag.' (VP, E09600-4)

2.2.3.3.5 *-garni ~ -warni* 'MOTIVative'

The function of marking certain kinds of 'purpose' or 'reason' can be fulfilled by another case marker; for lack of a better term, it is glossed here as 'MOTIVative'. The most frequent use of this case form is to indicate the reason for a fight (see IV/23 and V/27 in the Appendix for examples).

In other contexts, *-garni ~ -warni* could be described as indicating a preoccupation, especially where the predicate is the stative verb *-yu* 'BE' (see also IV/2).

(2-26) **gugu-warni** burru-yu bulug-mayan
water-MOTIV 3pl-BE.PRS drink-CONT

'they are just preoccupied with alcohol, drinking' (Orig. Transl.: 'living la grog') (VP, TIM195)

The common denominator in these uses of the motivative case appears to be that it presents the reason for an event as holding simultaneously with the event thus motivated. In other words, Jaminjung and Ngaliwurru differentiate between a simultaneous reason or motivation, an anticipated reason (marked with dative or purposive case, see §2.2.3.3.3-4), and an antecedent cause[32] (marked with ORIGIN case, see §2.2.3.3.6). The distinction, however, is not always clearcut; compare IV/21 and IV/23 in the Appendix for a use of the origin and the motivative case in the same context.

2.2.3.3.6 *-nyunga* 'ORIGin' (Jam.)

The case marker *-nyunga,* which is only used by speakers of the Jaminjung dialect, marks the origin of an entity or an event. This could be a place, as in (2-40), in which case it is interpreted as encoding a permanent affiliation to an entity. It contrasts with the ablative case (§2.2.3.3.7) which marks the starting point of a movement; compare (2-27) with (2-31) below.[33]

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[32] A similar distinction seems to be conveyed by the spatial metaphors underlying the 'causative' use of the English prepositions *over, for* and *from*, respectively.

[33] This distinction is common in other Australian languages; in the literature the gloss 'source' is also used for the case glossed 'origin' here (e.g. Merlan 1994: 81).

(2-27) **warrgayin-nyunga** nga-ruma-ny
far-ORIG 1sg-COME-PST
'I came from far away' (Orig. Transl.: 'when you come from long way country')

Other types of 'origin' include source material, descent, origin of a custom or name (see IV/12), or the source of a commodity. A related function is the marking of the origin of an event, i.e. its (antecedent) cause. Just as with the dative (§2.2.3.3.3), a noun phrase marked with *-nyunga* often stands metonymically for the causing event, as in (2-28).

(2-28) yarl nganthu-nggu-m **wamajngarna-nyunga**
itchy 2sg:3sg-SAY/DO-PRS mosquito-ORIG
'yes, you are itchy from a mosquito (bite)'

The following quasi-minimal pair shows the contrast between (anticipated) reason, marked with the dative (2-29a), and antecedent cause, marked with the origin case (2-29b).

(2-29a) **wirib-gu** marrug nga-rra-m=ni ngayiny
dog-DAT hidden 1sg:3sg-PUT-PRS=SFOC1 meat/animal
'I'm hiding the meat from the dog' (because otherwise it might eat it) (DB, FRA005)

b) marrugja yirr-agba **waitfela-nyunga**
hiding 1pl.excl-BE.PST whitefellow-ORIG
'we were hiding from/because of the whitefellows' (because they were pursuing us) (MJ, FRA082)

The origin case in related functions is also found on coverbs forming a causal or resultative subordinate clause (§2.6.5.4). In the Ngaliwurru dialect, Ablative and Origin are not distinguished and are subsumed under a general ablative marker *-giyag*.

2.2.3.3.7 *-ngunyi* (Jam.) / *-giyag* (Ngali) 'ABLative'

The main function of the ablative is to mark the starting point of a motion event, as in (2-30).

(2-30) yugung ga-ram **warrgayin-ngunyi**
run 3sg-COME.PRS far-ABL
'he comes running from far away'

The ablative (as well as the corresponding locational ablative form *-yun*, restricted to directionals; see §2.2.2.4) is also found marking a spatial region in expressions of static location (see III/47-8 for an example). A presumably related

function is the indication of the part of an object or animal that is being handled (as in English *by the tail*).

The Jaminjung ablative form *-ngunyi* is also used as a contrastive agent marker, which may replace the ergative marker; this function is discussed in §4.2.1.2 (see also (2-33) below for an example). No instances of the Ngaliwurru form *-giyag* in this use have been recorded. Ngaliwurru *-giyag*, on the other hand, covers the function of the Jaminjung 'ORIGIN' case, as already stated in §2.2.3.3.6.

2.2.3.3.8 *-bina* 'ALLative'

The allative case marks the place or entity towards which an event of motion (II/14-5) or caused change of location (2-31) is directed; it does not entail that the moving entity reaches the place.

(2-31) thawu gan-arra-m **ti:-bina**
immersed 3sg:3sg-PUT-PRS tea-ALL
'she is soaking it (bread) in tea' (DB, BUL311)

It may also be used to express the orientation of a 'featured' entity (i.e. an entity which has differentiated sides). This can be accounted for by invoking a type of fictive motion termed 'prospect path' by Talmy (1996: 218). In (2-32), the allative indicates the direction that the relevant feature (*juwiya* 'nose') 'points to' while the use of the verb *-yu* 'BE' indicates stative location as opposed to motion.

(2-32) juwiya **ngunggina-bina** ga-yu \
nose 2sg:POSS-ALL 3sg-BE.PRS
'he is (facing) towards you (with his) nose' (toy man) (DB, D30056)

An allative-marked noun phrase may also be understood to indicate the location of the perceived entity with the verb *-ngawu* 'SEE', as in (2-33). Here, the allative indicates the direction of gaze, also a kind of prospect path.

(2-33) nindu-ngunyi=malang mung gani-ngayi-m buliki **ngarlu-bina**
horse-ABL=GIVEN look.at 3sg:3sg-SEE-PRS cow shade-ALL
'the horse is looking at the cow, towards the shade' = 'the horse is looking at the cow in the shade' (Farm Animals 4) (DB, D30028)

Some further discussion of the functions of the allative marker on noun phrases can be found in §4.2.2.1.2 and §5.2.3. In complementising function, i.e. on the predicate of a non-finite subordinate clause, the allative can yield two different interpretations. In one function, it has a purposive reading (see §2.6.5.2). In its other function, it marks secondary predicates on an affected argument (see §2.6.5.3).

2.2.3.3.9 *-gi ~ -g* (Jam.) / *-gi ~ -ni* (Ngali) 'LOCative'

The locative case, with stative predicates, marks the place at which an entity is statically located. It is non-specific as to the exact spatial region where the entity is located, and as to whether it is in contact with the location (as in (2-34a)), or not (as in (2-34b)).

(2-34a) **langiny-gi** dirrg ga-yu
tree-LOC tied 3sg-BE.PRS
'it is tied around a stick' (ribbon) (Topological Relations Picture book) (DP, D09063)

b) mangurn gurdij ga-yu **langiny-gi**
whitefellow stand 3sg-BE.PRS wood-LOC
'a white person is standing at a tree' (Men & Tree 8) (DB, D30001)

With dynamic predicates (including verbs of locomotion, see §5.3), the locative usually marks a location which holds for the event encoded by the entire clause. However, with verbs of change of locative relation, it can mark an end location (see §5.2.3-4). With temporal nominals, the locative may also indicate 'location in time' (2-35).

(2-35) **ngiyidbud-gi** ga-rdba-ny gugu luba
night-LOC 3sg-FALL-PST water big
'at night a lot of rain fell' (DB, D01131)

2.2.3.2.10 *-mindij* 'TIME'

The status of the 'TIME' suffix *-mindij* is not completely clear at present. It has been grouped with the case markers, first, because, like a subset of the other case markers, *-mindij* has both an adverbal and a 'complementising' function (see §2.6.5.5). Second, it is semantically comparable to the locative case, in that it serves to place an event in time. A noun phrase marked with *-mindij* in its adverbal use refers to a period of time which can be characterised by the entity (or event) designated by the nominal, e.g. 'rain time' in (2-36) (see also III/9).

(2-36) jalang=guji na-ruma-ny, buru na-jga-ny **gugu-mindij**=na
now=FIRST 2sg-COME-PST return 2sg-GO.PST water-TIME=NOW
'you just came now (i.e. recently), you had gone back in the wet season (ESB's travels) (JM, F04138/9)

2.2.3.3.11 *-mij* 'COMITative'

The comitative marks a noun phrase whose referent (animate or inanimate) is construed as involved in an event together with another participant (for examples see IV/26 and IV/28). This concomitant participant will sometimes be

interpreted as an 'instrument', as in (2-37) and IV/4, where the instrument is not construed as Effector and so is not marked with ergative/instrumental case (see also §4.2.1.1).

(2-37) thunuj gan-arra-m.. **mununggu-mij**
carry.under.arm 3sg:3sg-PUT-PRS string-COMIT
'she is carrying it in a bundle with a string' (DP, C10031)

Another use of the comitative is to mark the language spoken in (see II/32 in the Appendix for an example).

2.2.3.3.12 *-gina* 'POSSessive/function'

The suffix *-gina* is used adnominally to emphasise the function of the nominal referent for the possessor, as in (2-38) and IV/24. It is also a transparent part of possessive pronouns; however, these can be used for a wider range of possessors than nouns marked with *-gina*.

(2-38) mangarra **waitbala-gina**
plant.food whitefellow-POSS
'whitefellow's (= imported) vegetable food'

The possessive suffix may also mark the inalienable possessor of body parts, as an alternative to a part-whole construction (see §4.2.3.2).

(2-39) mayany buliki=biya thangga-yun bayirr ga-yu=nu
young cow=NOW above-L.ABL supported 3sg-BE.PRS=3sg.OBL
ngagaj-gi pigibigi-gina-ni
back-LOC RDP:pig-POSS-LOC
'a young cow is leaning on the pig's back' (Men & Tree 7) (DB, D30064)

On nouns, *-gina* 'POSS' may even mark the function of an entity with respect to another entity without any sense of a possessive relationship. It can also be used as a derivational suffix to derive nouns from both other nouns (§2.2.3.2.2) and coverbs (§2.3.2.3.3). In its adverbial use, *-gina* 'POSS' only has the 'function' reading, and appears to be interchangeable with the dative, as illustrated in (2-40).

(2-40) barrawi.. thanthiya **jub-gina**=biji yirra-ngga-m,
soap.tree DEM soap-POSS=ONLY 1pl.excl:3sg-GET/HANDLE-PRS
gurrany **thawaya-wu**
NEG eat-DAT
'the soap tree, that one we only get for soap, not for eating' (DB, PLN023)

2.2.3.3.13 *-julu ~ -yulu* 'GENitive'

A second possessive suffix, *-julu ~ -yulu*, is restricted to adnominal function and always conveys a notion of possession, not of function. It is only attested for human possessors. Unlike *-gina* 'POSS', *-julu ~ -yulu* 'GEN' is also found in expressions of kin relationships, as in (2-41).

(2-41) ngiya=biyang, garlaj-guluwa Jangari, **Noeline-jurlu**
PROX=NOW younger.sibling-KIN2 <subsection> <proper.name>-GEN
'this one now, your little brother, Jangari, Noeline's' (IP, EV03101)

2.2.3.4 Proprietive and privative suffixes

There has been a debate in the literature (cf. e.g. Dench & Evans 1988) on whether the proprietive 'having' and the privative 'lacking' forms, common throughout Australia, should be analysed as derivational affixes, or (inflectional) case markers. In Jaminjung, they could be considered derivational rather than inflectional, since the resulting expressions are always adjectival nominals which always have a predicative function, either as the main predicate in a nonverbal clause, or as a secondary predicate.

2.2.3.4.1 *-burru ~ -wurru* 'PROPRietive'

The proprietive or 'having' suffix marks a nominal predicate which characterises its predication base as possessing the referent of the nominal marked in this way. It can function as the main (ascriptive) predicate in a nonverbal clause, as in (2-42), or as a secondary predicate, as in (2-43). Example (2-42) also illustrates the functional relationship to verbal predication of possession with the verb *-muwa* 'HAVE'. While the verb predicates the existence of the possessed in relation to the possessum, the proprietive encodes the possessive relationship as a property of the possessor.

(2-42) marring yinyju birrigud
bad PROX billycan
jarriny gani-ma-ya
hole 3sg:3sg-HAVE-PRS
jarriny-burru
hole-PROPR
'It is no good, this billycan. It has holes. (It's) full of holes.' (DM, fieldnotes Mark Harvey)

(2-43) galuwirrb buru nga-jga-ny yagbali-bina **gagawuli-wurru**
footwalk return 1sg-GO-PST place-ALL long.yam-PROPR
'(I got a lot of long yam, and) I walked back to the camp with the yam' (VP, TIM156)

2.2.3.4.2 *-marnany* (Jam.) / *-miyardi* (Ngali) 'PRIVative'

The privative has a function complementary to the proprietive, characterising the predication base as lacking the referent of the noun phrase marked with this case.

(2-44) **wagurra-marnany** yiga yirrag
rock-PRIV BUT 1pl.excl.OBL
'but we (have) no money', 'but we (are) money-less' (DB, D13048)

The privative is also found on coverbs; the resulting expressions are functionally equivalent to a negative imperative (see §2.3.2.4).

2.2.4 Form and function of free personal pronouns

2.2.4.1 Pronominal forms

Formally, free personal pronouns fall into three sets, termed here absolutive, oblique (OBL), and possessive (POSS). The oblique and the possessive pronoun stems quite transparently contain the dative marker *-g(u) ~ -wu* (see §2.2.3.3.3), and the possessive marker *-gina ~ -wina* (see §2.2.3.3.12), respectively. However, since these pronouns fulfill a different range of functions from the corresponding case-marked noun phrases, their specific functions are discussed in §2.2.4.2 to §2.2.4.4 below.

As is typical for languages with pronominal cross-referencing, free pronouns are generally infrequent in discourse; they are usually emphatic, and are restricted to animate referents. However, the first two statements do not hold for the oblique pronouns. These are not only relatively frequent, but also have a tendency to cliticise to the verb (or another constituent), to be unstressed, and to cross-reference lexical arguments. Although it has to be recognised that the oblique pronominals represent an intermediate stage of grammaticalisation from free pronouns to bound pronominals, they are discussed together with the free pronouns here.

As in many Australian languages, all personal pronouns distinguish three numbers, three persons, and inclusive and exclusive nonsingular first person. The first person dual inclusive form, *mindi,* presents an irregularity in the system.

An alternative analysis would treat this as the minimal form in a minimal/augmented system (cf. e.g. McKay 1978, 1990; McGregor 1989a). However, since there are no first/second person unit-augmented forms (for a single first and second person and one additional referent), these forms will be glossed as inclusive/exclusive dual and plural, both in the free pronoun system and the formally related system of bound pronominals (see §2.4.1.2). The details of analysis have no consequences for the main topic of this study. The three sets of free pronouns are presented in Table 2-5.

Table 2-5. *Pronominal forms*

	Absolutive	**Oblique**	**Possessive**
1sg	ngayug	ngarrgu ~ =arrgu	ngarrgina
2sg	nami	ngunggu ~ =nggu	ngunggina
3sg	ji	nu ~ =rnu	nuwina
1du.incl	mindi	mindag	mindajgina
1du.excl	yirrinyi	yinyag	yinyajgina
2du	gurrinyi	gunyag	gunyajgina
3du	burrinyi	bunyag	bunyajgina
1pl.incl	yurri	yurrag	yurrajgina
1pl.excl	yirri	yirrag	yirrajgina
2pl	gurri	gurrag	gurrajgina
3pl	burri	burrag	burrajgina

2.2.4.2 Functions of the absolutive pronominal stems

2.2.4.2.1 The absolutive stem as absolutive noun phrase

Absolutive free pronouns, not surprisingly, can be used in the same functions as other absolutive noun phrases (§2.2.3.3.1), i.e. as the single core argument in intransitive clauses, and as non-agentive argument in transitive clauses (see III/4 and III/12 for examples), but also as the agentive argument in transitive clauses (recall that ergative marking is not obligatory). An example for the latter function is given in (2-45).

(2-45) gayayi olrait, **yirri** gardaj yirr-arra-nyi,
waterlily.seeds all.right 1pl.excl grind 1pl.excl:3sg-PUT-IMPF
'the lily seeds all right, we used to grind them' (IP, E17326)

2.2.4.2.2 The absolutive stem as basis for ergative and ablative agent marking

Although there is no ergative split in Jaminjung, ergative marking on free pronouns is very rare. It is only attested for first and third person singular pronouns. Where it does occur, the case marker follows the absolutive stem, as in (2-46).

(2-46) mulurru-ni gani-minda-ny jungulug,
old.woman-ERG 3sg:3sg-EAT-PST one

ngayug-ni nga-minda-ny jungulug
1sg-ERG 1sg:3sg-EAT-PST one
'the old woman ate one, and I ate one' (goanna) (VP, NUN135-6)

Contrastive agent marking with the ablative case is attested with free pronouns, as well as nouns. In this function, the ablative marker is also suffixed to the absolutive stem. The ablative in its spatial function, in contrast, is suffixed to the possessive stem (see §2.2.4.4 below). In (2-47), contrastive agent marking occurs in an intransitive clause, which is exceptional.

(2-47) **ji-ngunyi** ga-ruma-ny, **ngayug-ngunyi** \
3sg-ABL 3sg-COME-PST 1sg-ABL

durl=yirram yiny-gijja-ja[34] \
push=two 1du.excl-POKE-REFL.PST
'she came, and I (did), and the two of us bumped into one another' (DP, E04037-8)

2.2.4.2.3 Adversative use of absolutive pronouns

Unlike many other languages, which treat maleficiary and beneficiary alike, Jaminjung and Ngaliwurru use absolutive rather than oblique pronouns to represent a participant who is indirectly affected by an event, but does not count as a recipient or beneficiary, i.e. is negatively affected. Absolutive pronouns, in this use, tends to be unstressed and cliticised to the verb, like oblique pronouns. The examples in (2-48) illustrate directly the contrast between the 'adversative' use of the absolutive pronoun, and the 'benefactive/recipient' use of the oblique pronoun. In the text from which

[34] The verb *-ijja* 'POKE' is subsequently corrected to *-uga* 'TAKE' by another speaker; this is in line with the secondary sense of 'impact using body weight' of this verb (see §5.3.4.4).

(2-48a) is taken, the speaker describes how a policeman destroyed, and threw away, a sling shot used by children, that is, the children were adversely affected. In (2-48b), the participant whom the boomerang is thrown at is presumably also adversely affected, but is represented here as the recipient (see IV/8-9 for further examples).

(2-48a) diwu' gani-yu **burri** \
throw 3sg:3sg-SAY/DO.PST 3pl
'he threw it away on them' (IP, F01026)

b) yinthu diwu nga-wu-yu **ngunggu** gali
PROX throw 1sg:3sg-FUT-SAY/DO 2sg.OBL boomerang
'I will throw a boomerang at you' (ER, NOT068)

2.2.4.2.4 Evidential use of absolutive dual inclusive pronoun

The absolutive dual inclusive pronoun *mindi* has a further use; here it is not related to the semantic role of any participant in the event, but refers to the speech act participants, comparable to the 'dativus ethicus' in some European languages. Consider (2-49) and (2-50) below.

(2-49) wurdbaj bunthu-yu **mindi** \
look.for 3du-BE.PRS 1du.incl
'the two are looking for him' (speaker describing a picture from the Frog Story book) (IP, F03042)

(2-50) majani guyawud ga-gba **mindi**
maybe hungry 3sg-BE.PST 1du.incl

gani-mindi-ya **mindi** ngabulu gujarding
3sg:3sg-EAT-PRS 1du.incl breast/milk mother
'maybe it was hungry; it sucks (its) mother('s) milk/teats' (commenting on a scene in the camp visible to both speaker and addressee) (JM, SPO025)

The full extent of this phenomenon has not been sufficiently explored; its frequency varies considerably from speaker to speaker, but it is attested for both Jaminjung and Ngaliwurru speakers. Tentatively, I suggest that the dual inclusive pronoun here has an evidential function (which may be related to the 'adversative' function). In the case of the examples above, as well as most of the other occurrences in the corpus, the situation referred to was visible to both speaker and addressee. Presumably, the speaker emphasises the shared nature of the information by presenting the event as if it is affecting both speaker and addressee. In the examples in subsequent chapters, *mindi* in this function is usually translated as 'on you and me' or 'you and me watching'.

2.2.4.3 Functions of the oblique pronominal stems

As already mentioned, the status of the oblique pronominals is somewhat ambiguous. They are usually cliticised and unstressed, they may undergo phonological reduction, and, like true bound pronominals, they may cross-reference lexical arguments. Therefore, they have to be regarded as being in the process of grammaticalising into bound pronominals.

Additional sets of bound pronominal markers, identifying a core grammatical relation of indirect object, have been described for some Australian languages, including Warlpiri (Nash 1986, Simpson 1991), and are of course also found in languages outside Australia. It is argued here that in Jaminjung and Ngaliwurru, bound pronominal clitics cannot be used to identify core arguments (§2.2.4.3.1), except in one of their functions, where they enter into the bound pronominal paradigm for nonsingular first persons (§2.2.4.3.3); this only happens in the Jaminjung dialect.

2.2.4.3.1 Oblique pronominals representing an indirectly affected participant

Oblique pronominals in Jaminjung, superficially, appear to have a variety of readings. They may cross-reference dative-marked noun phrases in all of the readings mentioned in §2.2.3.3.3, including addressee, recipient, beneficiary, and purpose. In addition, oblique pronominals may also represent participants in a spatial role. The addressee reading is illustrated in (2-51) and the spatial goal reading in (2-52) below; in the Appendix examples can be found for the beneficiary reading (II/5, III/39, III/44) and the purpose reading (IV/4), as well as for some of the other uses. For an example of a location reading, see (2-39) above, and V/31.

Oblique pronominals in these functions cliticise to the verb, but (more rarely) also to constituents other than the verb, or even to more than one constituent in a clause, as in (2-51). In this respect, Jaminjung seems to be developing in the direction of the neighbouring Jarragan languages which already possess a complex system of pronominal clitics which are not restricted in their position (Kofod 1994).

(2-51) "e'e:" / Nangari=**rnu** nga-yu=**rnu**=ngarndi \
INTERJ <subsection>=3sg.OBL 1sg-SAY/DO.PST=3sg.OBL=SFOC2
'"uhuh" I said to Nangari' (VP, E11029)

Unlike true bound pronominals, though, oblique pronominal clitics are not obligatory with any (simple or complex) verb. Rather, like the free pronouns, oblique pronominal clitics are more or less restricted to reference to higher animates (cf. Blake 1987: 37f.), although there are also a few counterexamples in the data. In fact, they seem to be near-obligatory if a noun phrase marked with the dative or a local case and referring to a higher animate is present, regardless

of the semantics of the predicate. This is illustrated in (2-52), where an allative-marked free pronoun is cross-referenced with an oblique pronominal clitic. This contrasts with (2-53), where the referent of the allative-marked noun phrase is inanimate, and is not additionally represented by an oblique pronominal.

(2-52) buwu ga-w-irdbaj=**ngarrgu** **ngarrgina-bina**
enter.water 3sg-FUT-FALL=1sg.OBL 1sg:POSS-ALL
'she will dive in after me (i.e. following me)' (DR, D27188)

(2-53) jag ga-rda-m \ **gugu-bina** buwu \
go.down 3sg-FALL-PRS water-ALL enter.water
'he jumps down, diving into the water' (JM, E15364)

The conclusion to be drawn from this discussion is that the oblique pronominal clitic is best characterised as representing any affected participant that does not qualify for Undergoer status (in a sense to be made more precise in §4.2.2.1.2), i.e. an 'indirectly affected' participant. Indirect affectedness in this sense will normally only be marked for higher animates.[35]

2.2.4.3.2 Oblique pronominals cross-referencing the predication base in ascriptive verbless clauses

Oblique pronominals also cross-reference a first or second person predication base in verbless clauses (see §2.6.3). In all attested examples, they follow the nominal predicate, as in (2-54) (see also II/27 in the Appendix).

(2-54) damarlung! jamin gujugu=**ngunggu** **nami**
nothing mature big=2sg.OBL 2sg
'"no!, you are old (enough to fight for yourself), you!' (MJ, C11020)

2.2.4.3.3 Oblique pronominal clitics as part of the bound pronominal paradigm in Jaminjung

In the Jaminjung dialect, but not in Ngaliwurru, the number and exclusive/inclusive distinction is neutralised for non-singular first person Undergoers in the bound pronominal paradigm (see also §2.4.1.2.2). Here the oblique pronominal clitics are (obligatorily) used to maintain the distinction, supplementing the pronominal prefix which appears in first person singular form throughout.

(2-55) gurrany yanggi ya-**wun**-karra=**yinyag** mangarra-wu!
NEG ask IRR-2du:1-PUT=1du.excl.OBL plant.food-DAT
'don't ask us two for food, you two!' (IP, F03696)

[35] See McGregor (1998b) for a similar analysis of the oblique clitic in Gooniyandi.

(2-56) **gan**-buga=**yirrag**=biyang murrgun \
3sg:1-FUT-TAKE=1pl.excl.OBL=NOW three
'she will take us three then' (JM, E16564)

2.2.4.4 Functions of possessive pronominal stems

The pronouns in the possessive set are used to represent a possessor, either as an adnominal modifier as in (2-57), or as an independent noun phrase, characterising the referent as possessed, as in (2-58).

(2-57) **wirib..** **nuwina-ni** yurl gani-wa,
dog 3sg:POSS-ERG chase 3sg:3sg-BITE-PST
'her dog chased it (to bite it)' (IP, F03487)

(2-58) **"ngarrgina** dalag gan-arra-ny!?" nga-yu=nu
1sg:POSS send 3sg:3sg-PUT-PST 1sg:3sg-SAY/DO.PST
'"did she send mine?" I said to her' (IP, F01233)

The possessive stem is also the base for suffixation with the spatial cases locative, allative and ablative. Its use with a locative is illustrated in (2-59), its allative use in (2-33) and (2-52) above. It is possible that in this use of the possessive pronouns, a 'possessed' location is always understood.

(2-59) yirrgbi gurru-w-iyaj birang **ngarrgina-ni**
talk 2pl-FUT-BE behind 1sg:POSS-LOC
'you will have to talk in my absence' (Orig. Transl.: 'you got to talk behind la me') (MMc, TIM015)

2.3 Coverbs

As has been repeatedly pointed out above, in Jaminjung and Ngaliwurru the function of 'verbs' in many other languages is fulfilled by members of two distinct parts of speech. The term 'verb' (or 'generic verb') is reserved here for members of a closed class of lexemes which obligatorily take verbal inflections. In addition, there is an open class of uninflecting lexemes which translate into languages like English or German as either verbs or adverbs and also have properties which are intermediate between members of these two classes in other languages. Members of this class will be termed 'coverbs' here.[36]

[36] In glossing coverbs, the nearest available English translation equivalent will be used.

Of the alternative terms found in the literature on Northern Australian languages, the most frequent are 'preverb' (used especially in descriptions of Pama-Nyungan languages, e.g. Nash 1986, Simpson 1991, Tsunoda 1981a) and 'verbal particle' (e.g. Cleverly 1968, Hoddinott & Kofod 1976c, Merlan 1994). Other terms that have been proposed are 'base' (Capell 1979), 'non-finite verbal word' (Rumsey 1982a), 'compound verb stem' (Hoddinott & Kofod 1988, Green 1989), 'pre-stem' (Metcalfe 1975, 1980), 'participle' (Cook 1987, 1988), and 'uninflecting verb' (McGregor 2000). Especially where the inflecting elements form a close phonological unit with the non-inflecting elements, the latter are also often treated as the main or 'lexical' verbs (e.g. Birk 1976; McGregor 1990; Reid 1990, Walsh 1996).

The term 'coverb' is used here, in accordance with a number of other authors (Kofod 1995, 1996b, Wilson 1999), because, unlike 'preverb', it does not suggest a fixed order with respect to the verb, and because, unlike 'verbal particle', it does not have the connotation of a minor word class restricted in size. It also captures the dependent nature of members of this class, which in finite clauses have to combine with a verb carrying person and tense/aspect/mood inflections, and serves as a reminder that this class covers both verbs and adverbs of many other languages. Note that my use of the term 'coverb' differs from that of some other authors (e.g. Bisang 1992, Lord 1993, Lehmann 1995: 104ff.; see also §7.2.1), who use it to refer to grammaticalised serial verbs in case-marking function, especially in discussions of South-East Asian languages. For the purposes of this study, no confusion should arise from the two distinct uses of the term, since grammaticalised verbs of this type do not exist in the languages under investigation.

Whatever the terminology adopted, there is a general agreement in the literature on Northern Australian languages that the lexical category corresponding to the Jaminjung coverb is distinct from both verbs and nominals, with only occasional overlaps (cf. e.g. Blake 1987: 119, and the references cited above). Most of the criteria adduced by these authors can also be applied to Jaminjung; they include phonological and phonotactic peculiarities of the coverb class, differences in syntactic functions, and to some extent distinctive morphological marking. The evidence for regarding coverbs as a distinct lexical category – with some marginal zones of overlap to other parts of speech – is summarised in §2.3.1. Coverb morphology is discussed in §2.3.2. The syntactic functions of coverbs as part of complex predicates, as secondary predicates, and as semi-independent main predicates are treated in more detail in a separate chapter (Ch. 3). The use of

This could be an infinitival verb form (e.g. 'drink') or a participle (e.g. 'hidden'), an adverb (e.g. 'inside'), or a phrase ('go.up', 'enter.3D.container'). Differences in glossing should not be taken to imply differences in word class status of the forms in question.

coverbs as main predicates in case-marked subordinate clauses is described in §2.6.5. A detailed subclassification of coverbs into semantically circumscribed classes, defined formally by cooccurrence patterns with inflecting verbs, is presented in Ch. 6.

2.3.1 The coverb as a distinct lexical category

Coverbs can easily be distinguished from verbs in that only the latter may take verbal inflections (see also §2.4). The uninflecting nature of coverbs is reminiscent of the adverb class of many languages, and indeed one could argue that 'adverbs', in Jaminjung, form a subclass of the coverbs (§2.3.1.1). There is also a marginal overlap between the classes of coverbs and nominals, but in principle, the two classes can be distinguished by taking into consideration a number of intersecting criteria (§2.3.1.2). The distinction between coverbs and particles is straightforward: coverbs always receive phrasal stress, while particles are generally prosodically dependent on another element in their tone unit (see also §2.5).

It is also worth noting that members of the coverb class exhibit phonological and phonotactic peculiarities, which however can only be regarded as sufficient, not as necessary criteria for coverb status.[37] Unlike members of any other word class, coverbs may form monosyllabic words, may have certain clusters in word-final syllable codas (e.g. /rrb#/ as in *garrb* 'gather, pick up many things'), and may contain the mid vowel /e/ (as in *deb* 'knock down'; see also §2.1.1). A subset of coverbs can be argued to be sound-symbolic (see Schultze-Berndt to appear); coverbs in Jaminjung as well as their counterparts in other Australian languages therefore have also been compared to ideophones in other languages (see §7.1.3 and references there).

2.3.1.1 Coverb and adverbs

The standard linguistic definition of 'adverbs' also applies, to some degree, to Jaminjung coverbs. Adverbs are defined as invariable elements which modify the verb, are optional, and occur in a position that is reserved for this class (van der Auwera 1994: 39 ff.).

Coverbs, like adverbs, do not inflect, and they are restricted to certain positions. Optionality, though, is a difficult criterion, since although coverbs are not grammatically obligatory (all verbs can constitute a predicate without a coverb), the meaning and, occasionally, also the argument structure of a clause may be

[37] For similar observations see e.g. Kofod (1996b: 14) for Gija, McGregor (1990: 190 and 1996b) for Gooniyandi, Wilson (1999: 47f.) for Wagiman, Nordlinger (1990: 99) for Bilinara, and Tsunoda (1981a: 44ff., 177) for Jaru.

completely changed if the coverb is omitted. In other words, it is not always easy to determine whether coverb-verb constructions are endocentric or exocentric (see also §3.2.5 for further discussion). For example, a coverb of manner of motion, like *warrng-warrng* 'walk' in (2-60), may be interpreted as an (optional) modifier of a locomotion verb.

(2-60) nga-**jga**-ny ngiya-ngunyi **warrng-warrng**
1sg-GO.PST PROX-ABL RDP-walk
'I went walking from here' (MJ, E04223)

The same verb, *-ijga* 'GO', also has a reading of change of state with coverbs of change of state such as *bag* 'break' in (2-61) (see also §5.3.2.2 and §6.6), and here the coverb cannot be omitted without resulting in a nonsensical expression, that is, it cannot be regarded as a modifier.

(2-61) thanthu minyga gurdbu ngunggina **bag** na-**jga**-ny
DEM what's.it.called lower.leg 2sg:POSS break 2sg-GO.PST
'That whatchamacallit, you broke your lower leg' (ER, cf. II/4)

The 'adverbial' nature of coverb-like elements in other Australian languages has also been pointed out e.g. for Warlpiri by Nash (1986: 42ff.) and for Wagiman by Cook (1988). For Wardaman, a language bordering onto, and structurally very similar to, Jaminjung and Ngaliwurru, the difficulty of establishing a class of adverbs distinct from coverbs[38] is described by Merlan (1994: 59) as follows:

> The class of adverbs cannot, satisfactorily, be entirely distinguished from the (...) [coverb] class. Adverbs by definition occur in construction with verbs and modify them, and generally each may occur with a large number of verbs. [Coverbs], on the other hand, tend to be more restricted in the number of verbs with which each commonly occurs. That is, there is a greater semantic specificity to many [coverbs] which determines the greater selectivity of their occurrence. In Wardaman, there is no set of formal properties by which adverbs can be distinguished from members of other word classes.

Still, Merlan (1994: 60, 165) identifies a separate class of manner adverbs. Possible criteria for adverb status are not only optionality, semantic generality, and variability in occurrence with verbs, but also non-occurrence with the continuous derivational suffix *-mayan* (see §2.3.2.2), and non-occurrence as predicates in case-marked purposive or causal adverbial clauses (see §2.6.5).

By these criteria, a small class of manner adverbs can be identified for Jaminjung. It comprises only a few expressions like *gabardag* 'quick', *miyarra* 'slow,

[38] Since nothing hinges on the choice of terminology, and to facilitate comparison, the term 'coverb' is substituted here, and in the quote, for the term '(verbal) particle' employed by Merlan.

careful, softly' and *lurruj* (J.)/*marnungurru* (Ng.) 'fast, hard, loud'. Alternatively, these could be regarded as a subclass of coverbs, in addition to those identified in Ch. 6. (cf. Wilson 1999: 123ff.). The greater semantic independence from verbs of these manner expressions, in comparison with 'real' coverbs, is also reflected in their position: they are often separated by an intonational boundary from the main predicate, as in (2-62), and if they modify a verb that is already complex, they do not intervene between coverb and verb, but either precede or follow the complex verb.

(2-62) bulgub ba-rrga, **miyarra** \
sneak.up IMP-APPROACH slow
'sneak up on it, carefully' (CP, E11237)

Expressions that function as unmarked locational and temporal adverbials are considered subclasses of nominals, rather than members of the coverb/adverb class. This is in line with observations made for other Australian languages (cf. e.g. Wilkins 1989: 301). However, for some locational expressions it is also difficult to determine whether they should be considered adverbial nominals or coverbs (see §2.2.2.4 for a brief discussion). Since these insecurities concern a relatively small, semantically defined class of forms, the principled distinction between coverbs and nominals can still be maintained. Criteria for this distinction are discussed in the next section.

2.3.1.2 Properties distinguishing coverbs from nominals

The function that most clearly distinguishes coverbs from most subclasses of nominals is their occurrence in combination with a verb, i.e. as part of a complex verb, or in a progressive construction. These constructions are discussed in somewhat more detail in §3.2 and §3.3.

Derivational morphology on coverbs (§2.3.2) partly overlaps with nominal derivational morphology (§2.2.3.2), but there are also clear differences. Only coverb roots can take the quality nominaliser *-bari* ~ *-wari* (§2.3.2.3.1), and productively take the continuous suffix *-mayan* (§2.3.2.2). Only nouns occur with the derivational suffixes *-mawu* 'HABITAT' (§2.2.3.2.3) and *-nguji* 'ETC' (§2.2.3.2.4).

Moreover, coverbs do not occur as a constituent of noun phrases as defined in §2.2.1. This issue is somewhat complicated by the fact that coverbs can take a subset of the nominal case markers. The case markers in this use function as complementisers of a subordinate clause, which has a coverb as its main predicate (see §2.6.5). However, coverbs may not take all of the case markers, and do not combine with a determiner.

When we apply these criteria, we find a few heterosemous roots which may function both as true nouns and as coverbs. Three of these are *nguyang* 'smell (n)' or 'smell (v), be smelly', *ngayimaj* 'breath' or 'breathe', and *janga* 'sore (n), sickness' or 'sore (adj), sick'. Examples for *janga* in both functions are given in (2-63).

(2-63a) thanggagu marnal-ni **janga** gana-**ma**-ya
above ankle-LOC sore 3sg:3sg-HAVE-PRS
'on top of the ankle he has got a sore' (Topological Relations Picture book) (DR, NGA109)

b) bib nga-mili-ny ngardurru,
move.up 1sg:3sg-GET/HANDLE-PST heavy
janga biyang nga-**yu**
sore NOW 1sg-BE.PRS
'I lifted up something heavy, and now I'm sore' (MW, CHE025)

Another nominal 'doubling' as coverb is *dili* 'light (n), torch' or 'light (up), shine (of fire, light)', illustrated in (2-64).

(2-64a) **dili**-marnany burru-yu thalbud=malang
light-PRIV 3pl-BE.PRS house=GIVEN
'without light they are in the house' (DR, BAR059)

b) binyinyi::b, **dili** ga-**rna**-ya \
use.firedrill light 3sg-BURN-PRS
'(put (dry) grass on it, and it will burn,) use the firedrill, it lights up' (DB, F02241-3)

The evidence that *dili* in (2-64b) functions as a coverb and not a noun (in which case (2-64b) would read 'the light burns') is that the referent on which 'burning' is predicated is independently established in the context: it is grass which is set on fire with the help of a fire drill. The noun *dili*, on the other hand, is only used for artefacts that provide light, e.g. firesticks, torches, or car lamps. The existence of a few of these heterosemous forms in no way challenges the principled distinction between nominals and coverbs.

Still, it has to be conceded that in Jaminjung there is some overlap between coverbs and those adjectival nominals which are used predominantly in predicative function. Like stative coverbs, these may combine with the two verbs *-yu* 'BE' and *-ijga* 'GO' in their auxiliary function (see §2.2.2.3 for an example). Unlike coverbs, however, adjectival nominals may also function as the predicate in verbless clauses. Again, this criterion is complicated by the fact that coverbs may occur on their own as semi-independent predicates (see §3.4); unlike verbless clauses with nominal predicates, these are stylistically marked.

Sometimes, though, various criteria yield conflicting results. For example, *jurriya* 'know/knowledgeable' qualifies as a coverb in that it has a derived nominal counterpart *jurriyawari* 'knowledgeable' (2-65), and in that it forms verbal predicates with the verb *-yu* 'BE' in its auxiliary function (2-66).

(2-65) nami **jurriya-wari,** jurdug ba-ijja \
2sg know-QUAL straight IMP-POKE
'you are (a) knowledgeable (person), weave it the right way' (DP, RIV018)

(2-66) marndaj **jurriya** **nga-yu** ngunggu
all.right know 1sg-BE.PRS 2sg.OBL
'all right, I know you (now)' (VP, NUN118)

However, *jurriya* also doubles as an adjectival nominal in a verbless ascriptive clause (see §2.6.3), as in (2-67).

(2-67) gurrany **jurriya** ngarrgu ngiya yagbali
NEG know 1sg.OBL PROX place
'I don't know this country' (DP, E05060)

There are a few other forms which combine properties of nominal adjectives and coverbs; one of them is *marring* 'bad' (see §6.4.3 for examples).

2.3.1.3 Coverbal pro-forms

The existence of distinctive pro-forms constitutes another piece of evidence for the status of coverbs as a word class in its own right. In addition to the nominal demonstratives (see §2.2.2.5), Jaminjung also has a demonstrative coverb, *maja* 'thus; do like that'.

(2-68) thandarlng ga-rra-ja **maja** gani-yu \
stretched 3sg-PUT-REFL.PST do.like.that 3sg:3sg-SAY/DO.PST
'she stretched, she did it like that' (IP, E08381)

A nominal can be derived from *maja*, just as from other coverbs, with the quality nominaliser *-bari ~ -wari* (see §2.3.2.3.1); the resulting form can be translated as 'one like that'.

(2-69) yawayi, gujugu warrag, **maja-wari**
yes big catfish thus-QUAL
'yes, a big catfish, one like that' (indicating size by gesture) (DB, D13088)

In addition to the demonstrative coverb, Jaminjung also has an interrogative coverb, *warndug* 'how, do what', illustrated in (2-70).

(2-70) yalamburrma bul yani-ma burrag=burlu
saltwater.crocodile emerge IRR:3sg:3sg-HIT 3pl.OBL=COLL1

"warndug=biya yurru-yu"
do.what=NOW 1pl.incl:3sg-FUT:SAY/DO

'a saltwater crocodile might come up on them, (and they will say) "what are we going to do?"' (people in a boat) (DP, E04235)

Both the interrogative coverb *warndug* and the demonstrative coverb *maja*, just like ordinary coverbs, can take the continuous suffix *-mayan* (see §2.3.2.2).

(2-71) majani ganunggum=nu,
maybe 3sg:3sg-SAY/DO-PRS=3sg.OBL

"warndug-mayan na-yu, thanthiya?"
do.what-CONT 2sg-BE.PRS DEM

'maybe he says to him "what are you doing there?"' (IP, E13597)

However, the status of these two pro-forms is somewhat complicated by the fact that they may also substitute for quotations, and manner adverbials. The demonstrative coverb *maja* also often accompanies gestures. The issue of the relationship between coverbs and quotations will be further addressed in §2.3.2.2 below, and in §4.2.3.2.

2.3.2 Coverb morphology

As has already been pointed out, coverbs completely lack inflections for any verbal category. Both reduplication (§2.3.2.1) and marking for continuous aspectual character (§2.3.2.2) are treated as derivational here. These are the only derivations on coverbs that do not change word class membership. All word-class changing derivational morphology results in nominalisation (§2.3.2.3); it is not possible to derive verbs from coverbs. The use of the privative suffix with coverbs is treated in a separate section (§2.3.2.4) since it allows for two alternative analyses.

Coverbs, however, may – without any formal sign of nominalisation – take a subset of case inflections. This is because they may function as the main predicate in non-finite adverbial clauses, whose relationship to the main clause is encoded by a case marker in 'complementising' function. Coverbs as main predicates in non-finite subordinate clauses are discussed in §2.6.5.

2.3.2.1 Reduplication

Reduplication of coverbs serves to express extended duration, repetition or intensity of events, as well as multiplicity (or an aggregate) of participants. Usually, this involves full reduplication, although word-initial partial

reduplication is also found (for this reason, all reduplication is treated as initial reduplication for the purpose of glossing).

In its first function, reduplication is very frequent – almost obligatory – with coverbs representing inherently repetitive events, such as walking, or moving one's knees in and out in a dance (2-72).

(2-72) **mang-mang** ganu-nggu-m
RDP-move.knees.outward 3sg:3sg-SAY/DO-PRS

'she is moving her knees in and out in dancing' (DP, C10026)

For punctual coverbs, the interpretation is iterative. The non-reduplicated coverb *durrb*, in comparison with the form used in (2-73), would convey the reading of 'poke s.th. a single time'.

(2-73) **durrb-durrb** ga-ma-ji gayil
RDP-poke 3sg-HIT-REFL tooth

'he cleans his teeth (with a stick)'

Very frequently, reduplication is combined with continuous marking (see §2.3.2.2), as in (2-74), where the interpretation is again iterative.

(2-74) **lag-lag-mayan** yirr-angu
RDP-split-CONT 1pl.excl:3sg-GET/HANDLE.PST

'we were splitting them' (leaves of Pandanus, for basketweaving) (VP, TIM095)

Repetition of an event and multiplicity of participants of course coincide for many events involving multiple theme or patient referents, as shown in (2-75).

(2-75) **wirriny-wirriny** ba-rra
RDP-turn IMP-PUT

'turn them round' (loaves of bread on the fire) (MJ, C10056)

A clear example for a non-repetitive event involving multiple participants is given in (2-76). The reduplication of the positional coverb *mugurn* 'lie, sleep', in combination with a stative verb such as *-yu* 'BE', only conveys a reading of multiple figures, not of repetition. Note that *warrb* in (2-76), also a positional coverb, is inherently specified for multiplicity of a figure (see also §6.1), and is therefore not reduplicated.

(2-76) ginginggi-ni warrb yirr-agba ngarlu-ni,
coolibah.tree-LOC sit.together 1pl.excl-BE.PST shade-LOC

mugurn-mugurn yirr-agba
RDP-lie 1pl.excl-BE.PST

'we sat down under a coolibah tree in the shade, we were lying down' (DMc, TAP050)

Reduplication has to be distinguished from repetition of a coverb to iconically represent a repeated action; reduplicated coverbs only carry a single word stress, while each reiterated coverb receives its own word stress (see §3.4.2 for an example).

Finally, it seems possible to derive a stative, resultative coverb from a coverb of change of state or change of location by reduplication, although this phenomenon is not too well attested in the data. Usually the derivational suffix *-bari ~ -wari* expresses this function (see §2.3.2.3.1).

(2-77) **gad-gad** ga-yu (* gad ga-yu)
RDP-cut 3sg-BE.PRS

'it is partitioned' (description of turtle shell) (DBit, JAM258)

(2-78) **burduj-burduj** ga-yu (* burduj ga-yu)
RDP-move.up 3sg-BE.PRS

'he is up (in a tree)' (referring to boy already up in a tree) (IP, EV03063)

2.3.2.2 *-mayan* 'CONTinuous'

The suffix *-mayan* is used to derive coverbs of continuous activity (see §6.3) from coverbs of other classes. The resulting coverbs encode an event that is presented as ongoing at reference time, e.g. with respect to another event. Coverbs derived with this suffix exhibit a striking functional resemblance to English present participles in *-ing*. They can be used as main predicates in a progressive construction with the verbs *-yu* 'BE' or *-ijga* 'GO' in auxiliary function, as in (2-79) (see also §3.3.1).

(2-79) jiwayurru **buru-mayan** ga-**gba**=biyà
bower.bird return-CONT 3sg-BE.PST=NOW

'the bower bird was going back and forth then' (Bolt et al. 1971a)

Like English present participles, coverbs taking the *-mayan* suffix are also used with verbs other than *-yu* 'BE' and *-ijga* 'GO', as in (2-80) (see also §3.3.2). Unlike English present participles, however, Jaminjung forms in *-mayan* are never used referentially or attributively.

(2-80) **ngabuj-ngabuj-mayan** na-**ram** \ ba-jga \
RDP-smell-CONT 2sg-COME.PRS IMP-GO

'you come (here) sniffing, go away' (order to an imaginary dog) (JM, F04189)

Depending on the semantics of the coverb, continuous marking may lead to a change in aspectual character or valency. For example, *-mayan* can be added to a stative coverb, such as the positional *mun* 'face down, be upside down'. Since the reading of the derived coverb has to be dynamic, it is interpreted as iterative, i.e. as repeatedly assuming a position (cf. also (2-79) above).

(2-81) **mun-mayan** ga-yu
face.down-CONT 3sg-BE.PST

'he is bending up and down'

A change in valency results from the combination of *-mayan* with a coverb which is restricted to an inanimate participant, such as *jurrb* 'lie/be left of multiple entities'. The addition of the continuous suffix not only enforces a dynamic reading, but also adds a second, agentive, participant to the resulting activity coverb, since the single inanimate participant of *jurrb* cannot be ascribed a repeated 'lying down'. From the context of example (2-82) it is clear that the referent of the third person singular prefix on the verb is a human agent, who is stacking books.

(2-82) ... **jurrb-mayan**=mang ga-yu=ni ba-ngawu, **book**,
lie.multiply-CONT=SUBORD 3sg-BE.PRS=SFOC1 IMP-SEE book

' (...) the one who is putting them down, look, the books' (TEMPEST videos) (IP, E08263)

The continuous-marked, dynamic form of some other stative coverbs, such as *guyawud* 'hungry' only adds a nuance of intensity and prolonged situation; compare (2-83) and (2-84).

(2-83) **guyawud** yirr-agba
hungry 1pl.excl-BE.PST

'we were hungry'

(2-84) **guyawud-mayan**=biya yirr-agba gurrija,
hungry-CONT=NOW 1pl.excl-BE.PST digging

'hungry we had been digging / we were being hungry, digging' (DR, E09418)

Interestingly, continuous marking is not restricted to coverbs. The suffix *-mayan* is also attested with nominals in a few cases (however, it does not seem to be a productive derivational affix with nominals). The examples either involve the

numeral *jungulug* 'one', as in (2-85), or the compound *ngayimaj judbung* 'heavy breathing', lit. 'short breath', as in (2-86).

(2-85) ga-da-m **jungulug-mayan**
3sg-FALL-PRS one-CONT
'they fall one by one' (fruits) (DB, D14063)

(2-86) **ngayimaj judbung-mayan** nga-gba=ni, warranya-giyag
breath short-CONT 1sg-BE.PST=SFOC1 remove.cover-ABL
'I was out of breath from scratching' (for crocodile eggs) (DR, D27035)

Even more puzzling is the fact that *-mayan* (which is perhaps better treated as a clitic rather than a suffix in this case) may also follow quotations, as in (2-87). The resulting expression combines with *-yu* 'BE', just like a coverb in the progressive construction.

(2-87) "wanaja na-jga-ny=ngardi::" **mayan** ga-gba=rnu waya
where 2sg-GO-PST=SFOC2 CONT 3sg-BE.PST=3sg.OBL call
'"where did you go!?" he was calling out' (DR, E02153)

A formal relationship between coverbs and quotations is also reflected in the fact that both can be replaced by the propositional demonstrative *maja* 'thus, do like that', and the propositional interrogative *warndug* 'how, do what' (see §2.3.1.3 above and §4.2.3.2-3, §5.6.2).

2.3.2.3 Nominalisation

Most nominalising derivational morphemes on coverbs also derive nominals from other nominals (see §2.2.3.2). The only exception is the quality nominaliser *-bari ~ -wari*, which is only found on coverbs.

2.3.2.3.1 *-bari ~ -wari* 'QUALity nominaliser'

The quality nominalising suffix, applied to coverb roots, derives nominals which denote a property, quality or state. The derived forms belong to the 'adjectival' subclass, since they are usually used either as adnominal modifiers (2-88), or as nominal predicates (2-89).

(2-88) wirib jirrama **mangurrb-bari** bunthu-yu mugurn
dog two black-QUAL 3du-BE.PRS lie/sleep
'two black dogs are lying down' (DR, NGA086)

(2-89) **lag-bari** mali thanthu
split-QUAL thing DEM
'(it's) cracked, that thing' (plastic bottle) (DP, MJ, CHE268)

The quality nominaliser is especially frequent with stative coverbs denoting colour and texture; many of these, like *mangurrb-bari* 'black' in (2-88), occur in their derived form more frequently than in their underived form. However, it seems possible to derive quality nominals from coverbs of most subclasses, e.g. coverbs of change of state like *lag* 'split' in (2-89). One of the exceptions is the subclass of coverbs denoting activities (see §6.3). The exact restrictions on the distribution of *-bari ~ -wari* require further investigation.

2.3.2.3.2 *-ngarna* 'ASSOCiative'

The associative suffix *-ngarna* derives nouns from other nouns (§2.2.3.2.1), or from coverbs. The resultant noun characterises an inanimate or animate entity as habitually performing the event designated by the base (see e.g. *jarragja-ngarna* 'tape recorder', lit. 'talking thing' in 2-10), or as otherwise habitually associated with an event (2-90).

(2-90) mangarra=gayi gàni-mindi-ya, **bud-ngarna**
plant.food=ALSO 3sg:3sg-EAT-PRS cook.on.coals-ASSOC
'it also eats plant food, (of the type) cooked on coals' (pet bird) (VP, E09823)

Just as with nominals, the associative suffix with coverbs is very productive in the spontaneous coinage of new terms for introduced professions and artefacts. For example, in the word for 'nurse', *durrbdurrb-ngarna,* the suffix follows the reduplicated coverb *durrb* 'poke'. A motor, truck or tractor can be referred to as *yuguyugung-ngarna*, derived from the coverb *yugung* 'run'.

2.3.2.3.3 *-gina* 'Function nominaliser' (= 'POSS')

The suffix *-gina* functions both as a derivational suffix and as an adnominal possessive marker on nominals (§2.2.3.2.2, §2.2.3.3.12). It also combines with coverbs to derive function nominals, referring to an entity (or place) that has a function in the event designated by the coverb. These derived nominals can be used as adnominal modifiers (2-91), or as characterising predicates (2-92).

(2-91) **garla-garla-gina** mali
RDP-play-POSS thing
'things for playing (= cards)'

(2-92) garnmurru... **gurrany** **thawaya-gina** (...)
plant.species NEG eat-POSS
'the *garnmurru* tree (is) not for eating' (DB, PLN001)

Like the associative nominaliser *-ngarna,* the function nominaliser is frequently used to derive terms for introduced artefacts, for example *bardbard-gina* 'blanket' from the coverb *bardbard* 'covered'.

2.3.2.4 Verbless negatives with *-marnany* (Jam.) / *-miyardi* (Ngali) 'PRIVative'

Coverbs can occur with the nominal privative suffix *-marnany* (J.) / *-miyardi* (Ng.) (see §2.2.3.4.2). In some cases, the privative marker may also have arguments of the coverb in its scope, as in (2-93).

(2-93) **liny** **marringma-marnany**
speech use.bad.language-PRIV
'no using bad language!' (DBit, CHE322)

Alternatively, privative-marked coverbs can be interpreted as negative ascriptive predicates. In this function, they have the same distribution as the nominal predicates derived with this suffix, as shown by the fact that their predication base, if pronominal, can be cross-referenced by an oblique pronoun, as in (2-94) (compare this with (2-44) in §2.2.3.4.2).

(2-94) **mugurn-miyardi** burrag
lie/sleep-PRIV 3pl.OBL
'they won't sleep', 'they are sleepless' (context: 'the drunken people wake us up') (VP, NUN159)

Most frequently, expressions of this type, just like their English translation equivalents in (2-93) and (2-95), are used with negative imperative illocutionary force.[39] Thus they function as an alternative to the inflected negative imperative in irrealis mood (see §2.4.1.3.1.2).

(2-95) gud ba-iyaj, **mugurn-marnany**!
get.up IMP-BE sleep-PRIV
'get up, no sleeping' (VP, NUN163)

[39] Similar constructions have been described for Wardaman (Merlan 1994: 266f.) and Wagiman (Cook 1987: 256f., Wilson 1999: 57f.).

2.4 Generic verbs

Verb roots can be identified by their obligatory inflectional morphology. As has already been pointed out in §1.1, these verb roots form a closed class with around 30 members. More precisely, 26 verb roots are well attested both in Jaminjung and in Ngaliwurru, and 9 are very marginal in terms of frequency; moreover, two of these nine only occur in the Ngaliwurru dialect. An important indication of the closed-class status of Jaminjung verbs is also the fact there is no way to derive new verb stems (except for the reflexive/reciprocal derivation) from either existing verbs or members of other word classes.

In the literature on Northern Australian languages, the inflecting verbs forming a closed class are often termed 'auxiliaries'. Most commonly, this term is reserved for their function as part of a complex verb, and they are referred to as 'verbs' when forming a predicate on their own.[40] It is one of the main objectives of this study to show that there is no principled difference, either formally or semantically, between verbs on their own and verbs as part of a complex verb; this is the topic of Chs. 3 to 5. For a discussion of the principled difference between auxiliaries in a grammatical function in other languages and the closed-class verbs in Northern Australia see Ch. 7.

A number of descriptions (see §5.1 for references) also use the terms 'classifier' or 'verb class' for the inflecting verbs (or verbs reduced to phonologically bound elements). This term points to the fact that closed-class verbs can be said to categorise events, which will be demonstrated for the Jaminjung verbs in Ch. 5. However, since I do not regard them as grammatical classifiers, but rather as semantically general lexemes with categorising function, I will use the term 'generic verb' (interchangeably with 'verb'), in analogy to 'generic noun'. The semantically general nature of the verbs is also indicated by glossing them with small capitals. As mentioned earlier (§1.4.2.2), each form is paired with the same gloss in all of its uses, and the glosses should not be taken to adequately represent the meaning of the verbs, or their reading in a particular context. The semantics of each of the generic verbs is the topic of Ch. 5.

Since many of the verbs are irregular with suppletive stems, and no clear conjugation classes can be established, an overview of all verbs and their conjugation is provided in §2.4.2.

The syntactic functions of generic verbs will be dealt with in Ch. 3. Since no non-finite forms can be derived from verbs, they are restricted to finite clauses, either as the main predicate (§3.1), or as a part of the main predicate in a complex verb construction (§3.2).

[40] Cf. e.g. Cleverly (1968), Bolt et al. (1971a, b), Rumsey (1982a), Merlan (1982, 1994).

2.4.1 Generic verb morphology

Verbs can easily be distinguished from all other lexical categories, including coverbs, by a rich set of obligatory verbal inflections. These comprise pronominal prefixes (§2.4.1.2), mood prefixes (§2.4.1.3.1), and tense/aspect suffixes (§2.4.1.3.2). For a number of verbs, some tense/aspect categories are expressed by stem suppletion rather than suffixation. The structure of the inflected verb is represented – in a somewhat simplified form – in (2-96).

(2-96) *Structure of the inflected verb*

(Mood1-)Bound.Pronominals-(Mood2-)V.Stem(-Tense/Aspect)

Pronominal prefixes obligatorily occur in all verb forms (except in some imperative forms with singular addressee). Tense and aspect is only marked in indicative mood (with the exception of imperfective future/potential forms; see §2.4.1.3.1.1).

Verbal derivational morphology is limited to the reflexive/reciprocal suffix (§2.4.1.1). There are no other morphological valency-changing devices. Verbs of different valency, combined with the same coverb, often fulfil the same function as applicative markers, causativisers, and other valency-changing morphology in other languages (see Ch. 4 and §7.1.4). There is no word-class changing morphology for verb roots. Verbs cannot be nominalised, and in fact do not have non-finite forms. As shown in §2.3.2.4, §2.6.5, §3.3 and §7.2.1, coverbs may fulfil the functions of non-finite verb forms in other languages. It is important to note that coverbs cannot be productively derived from verbs, or vice versa. Jaminjung differs in this respect from some neighbouring languages like Wagiman (Wilson 1999: 23).

Unless otherwise noted, the verbal morphology is identical for Jaminjung and Ngaliwurru. The only dialectal differences reside in some nonsingular forms of transitive pronominal prefixes (see §2.4.1.2.2).

2.4.1.1 REFLexive/reciprocal derivation

The reflexive suffix *-ji* immediately follows the verb stem. It is suffixed to the present tense stem of the verb (see Table 2-12 in § 2.4.2.4), except for the verbs *-ina(ngga)* 'CHOP' and *-inama* 'CHOP', where the past perfective/imperfective stem is used. The suffix is identical in form to the third person singular absolutive free pronoun (in the past perfective, a portmanteau form *-ja* occurs). Reflexive/reciprocal forms can be derived from almost all transitive verbs; the resulting stems are intransitive, i.e. only take intransitive pronominal prefixes. The only formally transitive verb which has no reflexive form is *-yu(nggu)* 'SAY/DO'; this verb also has reduced transitive properties in other respects (see §5.6).

As in many other Australian languages, reflexive forms can have both a reflexive and a reciprocal interpretation. An example for the reflexive interpretation is given in (2-97), an example for the reciprocal interpretation is V/25-26 in the Appendix.

(2-97) ngidbud-gi nga-**mili**-ja **yurr**
night-LOC 1sg-GET/HANDLE-REFL.PST rub
'at night I rubbed myself' (with medicine) (DB, FRA013)

2.4.1.2 Bound pronominals

As in practically all non-Pama-Nyungan languages, verbs obligatorily take bound pronominals for person/number of at least one argument. In Jaminjung and Ngaliwurru, bound pronominals are always prefixed (although in the Jaminjung dialect, enclitic oblique pronouns also enter into the bound pronominal paradigm; see §2.2.4.3.3, and §2.4.1.2.2 below). The bound pronominals are transparently related to the free pronouns (see §2.2.4.1); like those, they distinguish singular, dual and plural, and first, second and third person, with an additional inclusive/exclusive distinction in the first person dual and plural. It is important to note that the number distinction is maintained for higher animates only; for lower animates and inanimates, generally only the singular forms are used, although there are a few exceptions in the data.

Transitive and intransitive verb stems are distinguished by taking one of the two paradigms of pronominal prefixes; these are discussed in turn. (Note that '(in)transitive' is used throughout this study in reference to bound pronominal marking, not in reference to the syntactic or semantic valency of predicates, or the number of arguments in a clause; see §1.4.1.2 and §4.1.3). The complex interplay of bound pronominal marking and cased-marked noun phrases in the expression of argument structure is discussed in detail in Ch. 4.

2.4.1.2.1 Intransitive bound pronominals

Intransitive pronominal prefixes occur with the five intransitive verb roots as well as with reflexive verb stems. All intransitive bound pronominals are listed in Table 2-6 below. Since a number of them have different forms following the irrealis and imperative prefixes (see §2.4.1.3.1), these forms are listed as well. For example, following the irrealis prefix, the first syllable of some bound pronominals is elided. The major irregularities reside in the second person singular forms: the form following the irrealis prefix is based on the transitive second person singular prefix, *nganJV-*, rather than the intransitive *na-*. In the imperative, second person singular is unmarked.

The vowel in the last syllable of a polysyllabic prefix is always */-a/* in past imperfective forms, and is otherwise often subject to assimilation to the vowel of

the verb stem. For example, the 2sg:3sg past perfective form of *-mili* 'GET/HANDLE' is *nganJi-mili-ny*, but the corresponding past imperfective form is *nganJa-mila.*

Table 2-6. *Intransitive pronominal prefixes*

	Indicative	**Irrealis** (following *ya-*)	**Imperative** (following *ba-*)
1sg	nga-	-ngV-	–
2sg	na-	-nJV-	0
3sg	ga-	-nV-	–
1du.incl	mindV-	-mindV-	–
1du.excl	yiny-	-rriny-	–
2du	guny-	-wuny-	-wuny-
3du	buny-	-wuny-	–
1pl.incl	yurrV-	-rrV-	–
1pl.excl	yirrV-	-rrV-	–
2pl	gurrV-	-wurrV-	-wurru-
3pl	burrV-	-wurrV-	–

2.4.1.2.2 Transitive bound pronominals

The transitive pronominal prefixes are listed in Tables 2-7 to 2-9 below, divided by number of Undergoer. Again, the allomorphs following the irrealis prefix *ya-* are also given (for the imperative forms, see Table 2-10 below). Since details of morphological analysis are irrelevant for the main topic of this study, the transitive prefixes are treated here as portmanteau forms, although many of them are clearly segmentable. A further segmentation would reveal that the order is consistently Actor (A, or 'subject prefix') followed by Undergoer[41] (U, or 'object prefix'). The labels A and U are therefore omitted in the glosses. In other words, a gloss like '1sg:3pl' should be read 'first person singular Actor acting on third person plural Undergoer'.

As a comparison of the intransitive and the transitive paradigms shows, the Actor prefixes are clearly formally related to the intransitive prefixes. Thus, the formal encoding of arguments in the bound pronominals basically follows a nominative-accusative pattern. This is especially obvious for forms representing

[41] For a justification of the terminology ('Actor' and 'Undergoer' rather than 'subject' and 'object') see §4.1.

third person singular Undergoer, which receives zero exponence. Here the transitive paradigm is identical to the intransitive paradigm, with the exception of the second and third person singular A forms.

The transitive prefixes with nonsingular Undergoer, presented in Tables 2-8 and 2-9, require some additional comments. First, there is a major difference between Jaminjung and Ngaliwurru in that only Ngaliwurru has distinct prefixes for dual and plural first person Undergoers. In Jaminjung, the number and exclusive/inclusive distinctions are neutralised in the first person Undergoer forms, and only the singular prefixes are used. Instead, the number and exclusive/inclusive distinction is maintained analytically, by obligatorily adding the corresponding oblique pronominal clitic (see also §2.2.4.3.3).

In both dialects, the distinction between second and third person Undergoer is neutralised in both dual and plural forms. The distinction between dual and plural Actor is also neutralised for the second and third person with nonsingular Undergoers.

A further complication concerns the position of the potential/future prefix (see §2.4.1.3.1.1). This immediately precedes the stem following prefixes with singular Undergoer, but, with nonsingular Undergoers, separates the Actor and the Undergoer prefix. The resulting forms are included in Tables 2-8 and 2-9, as well as the irrealis prefix forms.[42]

[42] 'Etc.' in a table cell for these person/number combinations should read: "Use the first person singular Undergoer form (as listed in Table 2-7) also in irrealis and potential/future forms, and add the same oblique pronominal clitic." For example, the irrealis verb form with 3sg A and 1du.incl U is *(ya-)n-...=mindag.*

Table 2-7. *Transitive pronominal prefixes, singular Undergoer*

A \ U		1sg	2sg	3sg
1sg	Ind.	–	nganyV-	nga-
	Irr.	–	-nyi-	-ngV-
2sg	Ind.	nganJin-	–	nganJV-
	Irr.	-nJin-	–	-nJV-
3sg	Ind.	gan-	ganiny-	ganV-
	Irr.	-n-	-niny-	-nV-
1du.incl	Ind.	–	–	mindV-
	Irr.	–	–	-mindV-
1du.excl	Ind.	–	yinyV-	yiny-
	Irr.	–	-wunyV-	-rriny-
2du	Ind.	gunyin-	–	guny-
	Irr.	-wunyin-	–	-wuny-
3du	Ind.	bunyin-	bunyV-	buny-
	Irr.	-wunyin-	-wunyV-	-wuny-
1pl.incl	Ind.	–	–	yurrV-
	Irr.	–	–	-rrV-
1pl.excl	Ind.	–	yinyV-	yirrV-
	Irr.	–	-wunyV-	-rrV-
2pl	Ind.	gun-	–	gurrV-
	Irr.	-wun-	–	-wurrV-
3pl	Ind.	bun-	bunyV-	burrV-
	Irr.	-wun-	-wunyV-	-wurrV-

Table 2-8. *Transitive pronominal prefixes, dual Undergoer*

A \ U		1du.incl Jaminjung	1du.incl Ngaliwurru	1du.excl Jaminjung	1du.excl Ngaliwurru	2/3du
1sg	Ind					ngawuny-
	Fut	–	–	–	–	nga-b-uny-
	Irr.					-nguny-
2sg	Ind	–	–	nganJin- ..	nganjiny-	nganJuny-
	Fut			=yinyag	nganji-b-irriny	nganJi-b-uny-
	Irr.			etc.	-njirriny-	-nJuny-
3sg	Ind	gan- ...	ganimindi-	gan- ...	ganirriny-	ganuny-
	Fut	=mindag	gadi-bidi-	=yinyag	gadi-b-irriny-	gadu-b-uny-
	Irr.	etc.	-nimindi-	etc.	-nirriny-	-nuny-
1du.incl	Ind					munduny-
	Fut	–	–	–	–	mundu-b-uny-
	Irr.					-munduny-
1du.excl	Ind					yirruny-
	Fut	–	–	–	–	yirru-b-uny-
	Irr.					-rruny-
2du	Ind			gunyin-...	girrirriny-	gurruny-
	Fut	–	–	=yinyag	girribiny-	gurru-b-uny-
	Irr.			etc.	-wurriny-	-wurruny-
3du	Ind	bunyin-...	birrimindi-	bunyin-...	birrirriny-	burruny-
	Fut	=mindag	birri-bidi-	=yinyag	birri-biny-	burru-b-uny-
	Irr.	etc.	-wurrimindi-	etc.	-wirrirriny-	-wurruny-
1pl.incl	Ind					yurruny-
	Fut	–	–	–	–	yurru-b-uny-
	Irr.					-rruny-
1pl.excl	Ind					yirruny-
	Fut	–	–	–	–	yirru-b-uny-
	Irr.					-rruny-
2pl	Ind			gun- ...	girrirriny-	gurruny-
	Fut	–	–	=yinyag	girri-biny-	gurru-b-uny-
	Irr.			etc.	-wirrirriny-	-wurruny-
3pl	Ind	bun- ...	birrimindi-	bun- ...	birrirriny-	burruny-
	Fut	=mindag	birri-bidi-	=yinyag	birri-biny-	burru-b-uny-
	Irr.	etc.	-wurrimindi-	etc.	-wirrirriny-	-wurruny-

Table 2-9. *Transitive pronominal prefixes, plural Undergoer*

A \ U		1pl.incl Jaminjung	1pl.incl Ngaliwurru	1pl.excl Jaminjung	1pl.excl Ngaliwurru	2/3pl
1sg	Ind	–	–	–	–	ngawurrV-
	Fut					nga-b-urrV-
	Irr.					-ngurrV-
2sg	Ind	–	–	nganJVn- ... =yirrag etc.	nganjirri- nganji-b-irri- -njirri-	nganjurrV- nganJi-b-urrV- -njurrV-
	Fut					
	Irr.					
3sg	Ind	gan-... =yurrag etc.	ganirri- gadi-b-irri- -nirri-	gan-... =yirrag etc.	ganirri- gadi-b-irri- -nirri-	ganurrV- gadu-b-urrV- -nurrV-
	Fut					
	Irr.					
1du.incl	Ind	–	–	–	–	mundurrV- mundu-b-urrV- -mundurrV-
	Fut					
	Irr.					
1du.excl	Ind	–	–	–	–	yirrurrV- yurru-b-urrV- -rrurrV-
	Fut					
	Irr.					
2du	Ind	–	–	gunyin-... =yirrag etc.	girrirri- girri-b-irri- -wirrirri-	gurrurrV- gurru-b-urrV- -wurrurrV-
	Fut					
	Irr.					
3du	Ind	bunyin-... =yurrag etc.	birrirrV- birri-birrV- -wirrirri-	bunyin-... =yirrag etc.	birrirrV- birri-birrV- -wirrirri-	burrurrV- burru-b-urrV- -wurrurrV-
	Fut					
	Irr.					
1pl.incl	Ind	–	–	–	–	yurrurrV- yurru-b-urrV- -rrurrV-
	Fut					
	Irr.					
1pl.excl	Ind	–	–	–	–	yirrurrV- yirru-b-urrV- -rrurrV-
	Fut					
	Irr.					
2pl	Ind	–	–	gun- ... =yirrag etc.	girrirri- girri-b-irri- -wirrirri-	gurrurrV- gurru-b-urrV- -wurrurrV-
	Fut					
	Irr.					
3pl	Ind	bun- ... =yurrag etc.	birrirrV- birri-b-irrV- -wirrirri-	bun- ... =yirrag etc.	birrirrV- birri-b-irrV- -wirrirri-	burrurrV- burru-b-urrV- -wurrurrV-
	Fut					
	Irr.					

The transitive pronominal prefixes following the imperative prefix *ba-* are listed in Table 2-10. For first person nonsingular Undergoer, only the Ngaliwurru forms are given; the corresponding Jaminjung forms are again formed analytically, by supplementing the prefixes for first person singular Undergoer with the oblique pronominal clitics *=yinyag* '1du.excl.OBL' and *=yirrag* '1pl.excl.OBL'.

Table 2-10. *Transitive pronominal prefixes in imperative forms*

A \ U	1sg	3sg	1du.excl Ngaliwurru	3du	1pl.excl Ngaliwurru	3pl
2sg	-n-	-0-	-yirriny-	-wuny-	-yirri-	-wurrV-
2du	-wunyin-	-wuny-	-wurriny-	-wurruny-	-wirrirri-	-wurrurrV-
2pl	-wun-	-wurrV-	-wirrirriny-	-wurruny-	-wirrirri-	-wurrurrV-

2.4.1.3 Tense, aspect and mood

In the tense/aspect/mood system of Jaminjung and Ngaliwurru, four mood categories (§2.4.1.3.1) are distinguished: indicative, potential/future, irrealis, and imperative. The last three categories are marked by prefixes to the verb stem, while the indicative is unmarked. Tense or aspect distinctions (§2.4.1.3.2) are only made in indicative and potential mood. Imperfective and perfective aspect are only distinguished in past indicative and potential/future forms. In addition to these inflectional categories, Jaminjung has an analytic progressive construction; this is discussed in §3.3.1.

2.4.1.3.1 Mood

Only the marked mood categories, i.e. potential/future, irrealis, and imperative, are described below. The formally unmarked category, the indicative, covers all other areas in the domain of modality, notably positive declarative and interrogative clauses.

2.4.1.3.1.1 *-b(V)- ~ -w(V)-* Potential/FUTure

Potential/future, simply glossed 'FUT', is marked with the infix *-b(V)- ~ -w(V)*, which follows all singular pronominal prefixes and precedes the verb stem. In (2-96) above, it fills the 'Mood2' slot, as represented again in (2-98).

(2-98) *Position of the FUT prefix*

Pronominal(s)-FUT-V.Stem(-IMPF)

However, in combination with transitive pronominal prefixes with nonsingular Undergoers, the infix instead precedes the Undergoer pronominal prefix, as represented in (2-99). The combined forms are listed in Tables 2-8 and 2-9 above.

(2-99) *Position of the FUT prefix in transitive verbs with nonsingular U*

A.Pronominal-FUT-U.Pronominal-V.Stem(-IMPF)

The potential/future prefix may be prefixed to the unmarked stem, or a stem marked as past imperfective. The unmarked form covers the domains usually labelled 'prediction', 'potential', 'intention', and 'optative'. The more general meaning underlying these possible interpretations could be described as 'non-realised at speaking time, but potentially, and desirably, realised at a point in time subsequent to speaking time'. Potential/future marking cannot be used in negative predictions, where the irrealis form (§2.4.1.3.1.2) is used instead.

An example for desiderative reading is (2-100), a (rhetorical) question posed to two hunters by a 'devil kangaroo' who is able to speak. There is no element of prediction here, since the message the kangaroo conveys is 'you cannot spear me'.

(2-100) nanggayan guny-bi-yarluga?
who 2du:3sg-FUT-POKE

'Who do you two want to spear?' (DB, E10010)

Examples for 'prediction' or 'definite future' readings (with sometimes shades of desiderative reading) are II/5, II/7-8, II/13 and II/14 in the Appendix; an example for the 'optative' reading is V/14.

Its range of uses, as well as its formal position show that the potential/future is a modal, not a tense category, since other modals are prefixed but tense is suffixed or expressed by stem suppletion. The modal character of future time reference is well known (see e.g. Bybee 1985: 156ff, Dahl 1985: 103ff.), and no distinct future tense category exists in Jaminjung. For the sake of readability, however, this prefix has been glossed as 'FUT' throughout.

The potential/future marker can also be prefixed to the past imperfective forms (see §2.4.1.3.2.3, and the overview of verb forms in §2.4.2.4). Both in its form and its function, the past imperfective potential is reminiscent of the French conditional: it expresses 'future-in-the-past' (cf. Byrne & Churchill 1993: 322), or, more precisely, presents an event as 'potentially, and desirably, realised, at a reference time in the past of utterance time'. These forms can often be glossed as 'should have, would have, was about to, wanted to'. The pragmatic inference arising from the use of this form is usually that the event in question was not realised. An example is (2-101).

(2-101) yatha **nga-b-irriga-na** mangarra / dempa / damarlung \
alright 1sg:3sg-FUT:COOK-IMPF plant.food damper nothing

'I was going to bake bread all right, damper, (but) nothing (i.e. I didn't)' (IP, E08124)

However, such an inference does not arise necessarily; in (2-102), from a narrative about the travels of a mythical Emu, the event in question – finding a place to stay – is described as realised in the second clause.

(2-102) yagbali birdij **gana-w-arra-nyi,**
place find 3sg:3sg-FUT-PUT-IMPF

buru ga-jga-ny Gurlugurlu waga ga-rdba-ny \
return 3sg-GO.PST <place.name> sit 3sg-FALL-PST

'he wanted to find a camp, he went back to Gurlugurlu and sat down (i.e. stayed there)' (DM, EV06037-8)

Unlike the unmarked potential/future, the imperfective past form is frequently found in negative statements; as in (2-103) below.

(2-103) gana, damarlung, **gurrany ga-w-irdba** burrurrug
3sg:3sg:CHOP.PST nothing NEG 3sg-FUT-FALL.IMPF scatter

'he hit it, (but) nothing (happened), it wouldn't fall over' (lego wall, in Change of State videos) (DP, F02092)

The nature of the semantic difference between the imperfective potential and the past perfective forms in negative clauses is not completely clear at present.

2.4.1.3.1.2 *ya-* IRRealis

Irrealis mood is marked with the prefix *ya-* in the 'Mood1' slot in (2-96), i.e. preceding the pronominal prefixes. The pronominal prefixes, in this case, are often modified in form; usually their first syllable is elided. The resulting forms are listed in Tables 2-7 to 2-9 above.

The basic meaning of the irrealis form is 'non-realised'; unlike the potential/future form, it does not have an additional component of 'potential and desired realisation'. In positive clauses, the interpretation of the irrealis form is usually 'non-realised, and non-desirable'; it is glossed as *mait* 'might' in Kriol, and often used in warnings (see e.g. III/2). Furthermore, the irrealis form is always used – in combination with the negative particle *gurrany* – in statements of negative ability or negative prediction, and in negative imperatives. Examples can be found in II/10 and V/31 in the Appendix. Uses of an irrealis verb form in both a negative and a positive clause are illustrated in (2-104).

(2-104) garrij, gurrany **yang-iyaj**=biyang ngabulgja,
cold NEG IRR:1sg-BE=NOW bathe

yana- **yan-mangu** garrij-di \
<false.start> IRR:3sg:1sg-HIT cold-ERG

'(it's) cold, I won't be swimming now, the cold might 'hit' me' (DB, E02061)

2.4.1.3.1.3 *ba-* IMPerative

Imperative mood is marked with the prefix *ba-* in the same position as the Irrealis prefix, i.e. preceding the pronominal prefixes. The pronominal prefixes in this case distinguish number of Actor (only second person) and person/number of Undergoer (see Table 2-10 in §2.4.1.2). As shown in (2-105), the second person singular is not represented in imperative forms, and will not be glossed.

(2-105) waj **ba-wunga** wajgany
leave IMP-LEAVE honey

'leave the honey alone!' (DB, E01259)

Note that imperative marking is restricted to positive orders, since negative orders are always marked as irrealis (see §2.4.1.3.1.2 above).

2.4.1.3.2 Tense and aspect

Jaminjung/Ngaliwurru has a tripartite tense/aspect system, comprising present tense, past perfective and past imperfective. (Future time reference is achieved by a more general modal category, labelled potential/future in §2.4.1.3.1.1 above). Since the form of tense/aspect marking is lexically conditioned, the tense/aspect forms of all verbs are listed in Table 2-12 in §2.4.2.4 below.

2.4.1.3.2.1 PReSent

Present tense is marked with the suffixes *-m* or *-ya,* and/or by stem suppletion; the present tense of reflexive verbs is unmarked.

No aspect distinction is made in present tense. The interpretation of present tense forms is always straightforward: the event time overlaps with the speech time. This includes the possibility of a generic interpretation, as in (2-106).

(2-106) mununggu-wurru-ni **yirr-angga-m**
string-PROPR-ERG/INSTR 1pl.excl:3sg-GET/HANDLE-PRS

'we catch it with a fishing line' (short neck turtle) (DR, CHE201)

Further examples can be found throughout Text I in the Appendix, which is a comment on an ongoing event.

2.4.1.3.2.2 PaST perfective

Imperfective and perfective aspect are only distinguished in past tense. Past perfective is marked with the suffix *-ny* or by stem suppletion; the reflexive/past perfective portmanteau suffix is *-ja*.

The perfective is clearly the unmarked aspect category in Jaminjung, both formally and in its range of uses. It presents an event as prior in time to the speech time, and at the same time as bounded. The past perfective is the form most frequently found in narratives; examples can be found throughout Texts II to V in the Appendix.

2.4.1.3.2.3 Past IMPerFective

Past imperfective is marked with the suffixes *-nyi* or *-na* (the latter also following reflexive stems), as well as by suppletive stems, which all end in *-a*.

Most frequently, the past imperfective has a past habitual reading ('used to do'). This is illustrated in (2-107), from an account of the traditional Ngaliwurru lifestyle.

(2-107) **burri-yaluga-na** na, gagawuli, nganjanug, wajgany \
3pl:3sg-POKE-IMPF NOW long.yam what:DAT honey

burr-arra-nyi birdigud-gi, jamam \
3pl:3sg-PUT-IMPF billycan-LOC full

'they used to dig then, long yam, what now, honey. They used to put it in the billycan, right full,' (VP, E09612-4)

However, the past imperfective has a more general function – common to imperfectives cross-linguistically – in presenting an event as unbounded, or 'backgrounded', with respect to another (see e.g. III/11).

The function of the past imperfective combined with the potential/future marking is described in §2.4.1.3.1.1 above.

2.4.2 Generic verb stems

Since a number of verbs are irregular, and the form of tense/aspect marking is lexically conditioned, the tense/aspect forms of all verbs are listed in Table 2-12 at the end of this section (§2.4.2.4). Only a few comments on the verb forms are offered here. These concern the etymology of verb roots (§2.4.2.1), dialectal differences (§2.4.2.2), and suppletion and productive morphophonemic alternations accounting for the stem allomorphy (§2.4.2.3).

2.4.2.1 Etymological remarks

The etymology of most Jaminjung and Ngaliwurru verb roots is unclear; consequently, the semantic analysis of the verbs presented in Ch. 5 will be almost exclusively based on language-internal, synchronic evidence. Specifically, few of the verbs can be identified as corresponding to one of the pan-Australian monomorphemic verb roots listed in Dixon (1980: 402ff.). One of these is *-uga* 'TAKE', which is probably cognate with proto-Pama-Nyungan **-ga(a)* 'take, bring, carry' (Dixon 1980: 404), a form which also has reflexes in several other Non-Pama-Nyungan languages of the area.

The stems *-mili* 'GET/HANDLE', as well as *-ma* (present tense stem of *-muwa* 'HAVE'), and *-ma* 'HIT', can possibly be related to a common Australian verb form *-ma(a)-n* whose original sense may be 'hold in hand' (Capell 1956: 77, Dixon 1980: 405) (see also §5.4.1.1).

Other verb roots or suppletive stems have cognates in at least some Non-Pama-Nyungan languages; relationships can be found to languages both to the east and to the west of the Jaminjungan family. For example, the suppletive present tense stem *-ngga* of *-ijga* 'GO' is cognate with allomorphs of irregular verbs translated as 'go' in Nunggubuyu (Heath 1990: 410), Wagiman (Cook 1987: 217), Wardaman (Merlan 1994: 199f), and Ungarinyin (Heath 1990: 410). The Jaminjung root *-ruma* 'COME' has cognates in suppletive stems of motion verbs based on **-ruma* in a number of non-Pama-Nyungan languages (Heath 1990: 410).

A stance verb root based on **-yV-* 'lie, sleep' is also found in several Non-Pama-Nyungan languages and is possibly cognate with a proto-Pama-Nyungan root (Heath 1990: 413); in Jaminjung, it has a reflex in the present tense stem of the verb *-yu* 'BE'.

The root *-minda* 'EAT' is possibly related to Northern Kimberley *mindjal* 'mouth' (Capell 1979b: 572). The root *-arra* 'PUT' may be cognate with the Gooniyandi verb stem +ADDI (*/-arri/*) which has a similar range of readings (McGregor 1990: 564).

A potential cognate of *-irdba* 'FALL', *-ward-*, occurs in the Jarragan languages, Gija, Miriwoong and Gajirrabeng (Kofod 1996a). Jingulu (Pensalfini 1996) and Wambaya (Nordlinger 1998b: 302) also have a cognate verb meaning 'fall', *bardk- ~ wardk-*. Jingulu has some further cognates, a fact which provides further evidence for a distant genetic relationship of this language family, the Barkly languages, with the Jaminjungan family, as proposed by Chadwick (1984, 1997). The clearest cases are *-maya*, cognate with Jaminjung *-ma* 'HIT' (Chadwick 1997: 104), *nangk-* 'chop with an axe', cognate with *-inangga* 'CHOP', and *mil-* 'get', cognate with *-mili* 'GET/HANDLE' (from Pensalfini 1996).

A number of Jaminjung and Ngaliwurru verbs appear to be historically complex, although they have to be regarded as unanalysable roots from a synchronic perspective. Four verbs have a final element *+ma*, these are *-ina+ma* 'KICK/STEP', *-anja+ma* 'BRING', *-(ma)liny+ma* 'MAKE' and *-yang+ma* 'FEAR'. Of these, *-ina+ma* 'KICK/STEP' is transparently related to *-ina* 'CHOP', and *-anJama* 'BRING' is clearly associated with the present tense stem *-nJa* of *-uga* 'TAKE'. In the latter case, the formal markedness relation between the two verbs of accompanied locomotion also reflects their semantic markedness relation (see §5.3.4-5). Furthermore, the past imperfective form *-wanyi* of *-uga* 'TAKE' corresponds to the potential/irrealis/imperative stem *-wany* of *-anJama* 'BRING'. It also seems likely that *-irdba* 'FALL' is related to the first element in the verbs *-(w)ard+giya* 'THROW' and *-(w)arda+garra* 'FOLLOW'.

Another instance of a transparent formal and semantic relationship between two verb roots is presented by the (marginal) Ngaliwurru verb *-garra* 'excrete' and *-arra* 'PUT' (see also §5.9.1). The formal relationship between Ngaliwurru *-malangawu* 'hear' and *-ngawu* 'SEE' is interesting since the domains of visual and auditory perception are usually quite distinct in Australian languages; however, complex stems for 'hear' based on 'see' can be found in a few other languages of the region (Evans & Wilkins 1998: 23).

Finally, a few verb roots, listed in Table 2-11, are transparently related to coverbs. All of these coverbs belong to the 'continuous activity' class, whose members have a number of recurring non-productive endings including *-ja* (see §6.3). There is no indication, however, that verbs can be productively derived from coverbs (or vice versa).

Table 2-11. *Verb roots with cognate coverbs of continuous activity*

Verb root	Gloss	Coverb	Gloss
-irriga	'COOK'	*wirrigaja*	'cook'
-yaluga (Ng)	'POKE'	*yalugaja* (Ng)	'dig with digging stick'
-malangawu (Ng)	'HEAR'	*malangayij* (J)	'listen, hear'
-garrwa (Ng)	'SWEAR'	*garrwaja* (J)	'swear'

2.4.2.2 Dialectal differences

Although Jaminjung and Ngaliwurru differ to some extent in vocabulary, their verb stems are almost identical.[43] Ngaliwurru has some marginal verbs that are

[43] Notably, also the Nungali verbs listed in Bolt et al. (1971b) are almost identical in form,

not attested in Jaminjung, these are marked as 'Ng.' in Table 2-12 (see also §5.9). Only in one case do speakers of the two dialects use different roots; this concerns the verb glossed as 'POKE', which is *-ijja* in Jaminjung but *-yaluga* in Ngaliwurru (occasionally, the variant *-ijga* was also heard in the Jaminjung dialect).

The forms *-angu* and *-mili* 'GET/HANDLE' probably also originated as dialectal variants, and in fact are claimed to be just that by some speakers. However, they seem to be used interchangeably by speakers of both dialects with no difference in meaning. In addition, both have defective paradigms (with one verb filling in the gaps in the paradigm of the other, see Table 2-12 for details), which suggests that they are on their way to forming a single suppletive paradigm.

Two roots have slightly different forms in Jaminjung and Ngaliwurru: *-irdba* 'FALL' has a past perfective form *-irda* in Ngaliwurru (*-irdba* in Jaminjung). The verb glossed as 'MAKE' is *-ilinyma* in Jaminjung, corresponding to *-malinyma* in Ngaliwurru. A few verb stems differ only in the realisation of a stop as lamino-dental (<th>, Jaminjung) or lamino-palatal (<j>, Ngaliwurru); as elsewhere in this thesis, these forms are represented with an 'archiphoneme' written as <J>.

2.4.2.3 Stem allomorphy

Stem allomorphy in Jaminjung and Ngaliwurru verb forms can be accounted for by both stem suppletion, and productive morphophonemic alternations.

A number of verbs have suppletive present tense, past perfective, and/or past imperfective stems. Since all stem forms are listed in Table 2-12 below, no further comments are offered here. I will (with the exception of a few verbs) generally use the non-indicative stem (i.e. the stem occurring in irrealis, imperative, and potential/future forms) as the citation form.

For ease of reference, some allomorphs that are derived by productive morpho-phonemic alternations have also been included in Table 2-12. Two types of alternation are conditioned by the form of the pronominal prefix; these are Vowel Elision and Velar Insertion. Vowel Elision accounts for the elision of a stem-initial vowel /i/ following a prefix with final /a/, e.g. intransitive third person singular *ga-*, or imperative *ba-*. For example, the third person singular past perfective form of *-irdba* 'FALL' is *ga-rdba-ny*. If stem-initial vowel and prefix-final vowel are identical, they are also reduced to a single vowel.

Velar Insertion accounts for an epenthetic velar before vowel-initial verb stems after a consonant-final pronominal prefix (e.g. *bun-* '3pl:1sg' or *buny-*

although the inflections differ to some extent. The only additional verb attested for Nungali but not for Jaminjung or Ngaliwurru is *-yalgarra* 'send'.

'3du:3sg'). The epenthetic consonant is a velar stop <g> if the verb stem does not contain a nasal, and a velar nasal <ng> if the verb stem contains a nasal. It is not glossed separately, but treated as part of the stem in the glosses.

Some stem forms are related by productive lenition (see §2.1.3) of an initial bilabial stop <b> or a lamino-palatal stop <j> to a glide (<w> and <y> respectively) intervocalically; compare *gan-jangma-ny* '3sg:1sg-FEAR-PST' and *gani-yangma-ny* '3sg:3sg-FEAR-PST'.

For stems with initial bilabial nasal, a special morphophonemic rule of 'Bilabial Merger' applies following the potential/future prefix: the prefix <bV-> and the stem-initial <m> are merged to <b>. For example, the past perfective form *nga-mili-ny* '1sg:3sg-GET/HANDLE-PST' corresponds to a potential/future form *nga-bili* '1sg:3sg-FUT:GET/HANDLE'. The resulting forms may be subject to denasalisation (see §2.1.3).

Furthermore, for forms derived by 'bilabial merger', the epenthetic syllable *-ji-* is inserted after consonant-final pronominal prefixes; compare *nga-bili* '1sg:3sg-FUT:GET/HANDLE' and *gan-ji-bili* '3sg:1sg-FUT:GET/HANDLE. With the verb *-unga* 'LEAVE', this epenthetic syllable is also found even though this stem otherwise behaves like a vowel-initial stem. In the glosses, this epenthetic syllable is treated as part of the potential/future prefix.

Finally, haplology applies to the stems *-ina* 'CHOP' and *-inama* 'KICK/STEP', following the 3sg:3sg pronominal prefix, *gana-*. The resulting forms are *ganam* (present tense of both verbs), *gana* and *ganama-ny* (past perfective), and *ganangga* and *ganama* (past imperfective). The present tense form of *-ruma* 'COME', *-rum* (instead of **-ruma-m*) also results from haplology.

2.4.2.4 Overview of verb stems

An overview of all verb stems and the tense/aspect forms is provided in Table 2-12. For ease of reference, the order of the verbs follows the semantic grouping established in Ch. 5.

Table 2-12. *Verb stems and tense/aspect/mood inflections: overview*

Verbs of location, existence, possession, and change of locative relation

Gloss		Present	Past Perfective	Past Imperfective	Potential/ Future[44]	Irrealis/ Imperative
BE	itr	-yu ~ -Juyu	-agba	-anyi / -agba-nyi	-(w-iy)aj ~ -(b-iy)aj	-(iy)aj
HAVE	tr	-(ma-)ma-ya	-muwa	-(ma-)ma-na	-buwa ~ -jibuwa	-muwa
FALL (J.)	itr	-irda-m ~ -girda-m	-irdba-ny ~ -girdba-ny	-irdirdba	-w-irdbaj ~ -b-irdbaj	-irdbaj
(Ng.)	itr	-irda-m ~ -girda-m	-(g)irda-ny	-irdirdba	-w-irdbaj ~ -b-irdbaj	-irdbaj
PUT	tr	-arra-m ~ -garra-m	-arra-ny ~ -garra-ny	-arra-nyi ~ -garra-nyi	-w-arra ~ -b-arra	-arra ~ -garra-

Verbs of locomotion

GO	itr	-angga	-(i)jga-ny	-inyji	-w-ijga ~ -b-ijga	-ijga
COME	itr	-ram ~ -daram	-ruma-ny ~ -du(ru)ma-ny	-ruma ~ -daruma	-wu-rum ~ -bu-rum	-rum ~ -dum
TAKE	tr	-anJa ~ -nganJa	-uga ~ -guga	-a-nyi ~ -ng-a-nyi	-w-uga ~ -b-uga	-uga ~ -guga
BRING	tr	-anJam ~ -nganJam	-anJama-ny ~ -nganJama-ny	-anJama ~ -nganJama	-w-any ~ -b-any	-any ~ -ngany
LEAVE	tr	-unga-m ~ -ngunga-m	-unga-ny ~ -ngunga-ny	-unga-na ~ -ngunga-na	-w-unga ~ -jib-unga	-unga ~ -ngunga
APPROACH	tr	-arrganJi-ya ~ -garrganJi-ya	-arrga ~ -garrga	??	-b-arrga	-arrga ~ -garrga
FOLLOW	tr	-wardagarra-m ~ -bardagarra-m	-wardagarra-ny ~ -bardagarra-ny	-wardagarra-nyi ~ -bardagarra-nyi	-bardagarra	-wardagarra ~ -bardagarra

[44] The potential/future forms given here only hold for intransitive verbs and transitive verbs with a singular U prefix, where the potential/future prefix immediately precedes the verb stem. For transitive verbs with nonsingular Undergoer, where the potential/future prefix precedes the Undergoer prefix (see §2.4.1.3.1.1), the verb stem is identical to that in irrealis and imperative forms.

Verbs of contact/force

Gloss		Present	Past Perfective	Past Imperfective	Potential/ Future	Irrealis/ Imperative
GET/ HANDLE	tr	-angga-m ~ -ngangga-m	-angu ~ -ngangu	–	–	-angu ~ -ngangu
	tr	-mili-m	-mili-ny	-(ma)mila	-bili ~ -jibili	-mili[45]
HIT	tr	-ma-m	-ma(ngu)	-(ma)ma-nyi	-ba(ngu) ~ -jiba(ngu)	-ma(ngu)
CHOP	tr	-ina-m ~ -ngina-m	-ina(ngga) ~ -ngina(ngga)	-inangga	-w-ina ~ -b-ina	-ina[46] ~ -ngina
KICK/ STEP	tr	-(i)nam ~ -nginam	-inama-ny ~ -nginama-ny	-inama ~ -nginama	-w-inama	-inama ~ -nginama
POKE (J.)	tr	-ijja-m ~ -gijja-m	-ijja-ny ~ -gijja-ny	-ijja-na ~ -gijja-na	-w-ijja ~ -b-ijja	-ijja ~ -gijja
(Ng.)	tr	-yaluga-m ~ -jaluga-m	-yaluga-ny ~ -jaluga-ny	-yaluga-na ~ -jaluga-na	-wi-yaluga ~ -bi-yaluga	-yaluga ~ -jaluga
BITE	tr	-wirri-m ~ -birri-m	-wa ~ -ba	-wa-na ~ -ba-na	-bu-wa ~ -jibu-wa	-wa ~ -ba
THROW	tr	-(w)ardgiya-m ~ -bardgiya-m	-(w)ardgiya-ny ~ -bardgiya-ny	-(w)ardgiya-na ~ -bardgiya-na	-bardgiya	-(w)ardgiya ~ -bardgiya

Verbs of burning/cooking

BURN	itr	-irna-ya	-irna	-irna-nyi	-w-irna	-irna
COOK	tr	-irriga-m ~ -girriga-m	-irriga ~ -girriga	-arriga-na ~ -garriga-na	-b-irriga	-irriga ~ -girriga

The polyfunctional SAY/DO verb

SAY/DO	tr	-(y)unggu-m ~ -Junggu-m	-yu ~ -Ju	-ina	-wu-yu ~ -bu-yu	-yu ~ -Ju

[45] The stem *-mili* is only used in the imperative; in the irrealis, only *-angu* is used.

[46] The imperative 2sg:3sg form is *ba-nanggu ~ ba-nangga*.

Verbs of caused change of possession

Gloss		Present	Past Perfective	Past Imperfective	Potential/ Future	Irrealis/ Imperative
GIVE	tr	-ngarna-m	-ngarna-ny	-(nga)ngama-nyi	-wu-ngarna ~-bu-ngarna	-ngarna[47]
REMOVE	tr	-yungga-ya ~ -jungga-ya	-yungga-ny ~ -jungga-ny	-yungga-na ~ -jungga-na	-wu-yungga ~-bi-yungga	-yungga ~ -jungga

Other major verbs

SEE	itr	-ngayi-m ~ -ngami	-ngawu	-ngayi-na	-wu-ngawu ~-bu-ngawu	-ngawu
EAT	tr	-mindi-ya	-minda-ny	-iya ~ -ngiya	-bida ~ -jibida	-minda
MAKE (J.)	tr	-ilinyma-ya	-iliny-ma-ny	-liny-ma-na	-b-ilinyma	-irlinyma
(Ng.)	tr	-malinyma-ya	-malinyma-ny	-malinyma-na	-balinyma	-malinyma

Marginal verbs

excrete (Ng.)	tr	-garra-m	-garra-ny	??	??	??
fear	tr	-yangma-ya ~ -jangma-ya	-yangma-ny ~ -jangma-ny	??	??	??
hear (Ng.)	tr	-malangayi-m	-malangawu	-malangayi-na	??	??
swear at	tr	-garrwa-ya	-garrwa-ny	-garrwa-na	-barrwa ~ -jibarrwa	-garrwa
tell a lie	tr	-yima-ya ~ -jima-ya	-yima-ny ~ -jima-ny	-yima-na ~ -jima-na	-biyima ~ -jibiyima	??
do by magic	tr	-inijba-ya	-inijba-ny	-inijba-na	??	??
be sick	itr	-ngardgani-m	??	??	??	??
be angry	??	-manka-ya	-manka-ny	??	??	??
BE†	itr	-yaṇgi-m	-yangi-ny	??	??	??

Conjugation of reflexive verb forms (V = transitive verb root)

V-REFL	itr	V-ji	V-ja	V-ji-na	V-ji	V-ji

47 A short 2sg:1sg imperative form *ba-na* exists alongside the regular *ba-n-ngarna*.

2.5 Particles, clitics, and interjections

Only a brief overview is given here of the minor word classes of particles, clitics, and interjections. The meaning and function of the most common forms is characterised, and references are provided to examples in the texts in the Appendix, or in other sections in this study. For reasons of space, no further examples are given in this section.

2.5.1 Particles

Particles can be distinguished from the major lexical categories of nominals, verbs, and coverbs, in that they not only do not inflect, but also always form part of a tone unit with some other element, and do not receive phrasal stress. They are distinguished from clitics in that they are free forms, i.e. can occur clause-initially, although the boundary is not clearcut, since (except for the negative particle gurrany) particles may also be cliticised to a preceding word. The most common particles are listed in Table 2-13 below with their glosses and an informal characterisation of their function.

Table 2-13. *Particle forms and functions*

Particle	Gloss	Function	Examples
gurrany	'NEG'	general negator, used in both constituent and sentence negation	II/10, V/31, (2-113)
majani	'maybe'	expresses uncertainty / lack of commitment to an assertion	IV/23
bugu	'JUST'	has a range of uses similar to English *just*, related in function to the clitic *=biji* 'ONLY'	III/21
birri (Jam.) *ngarla* (Ng.)	'TRY'	used in a similar function to English *try* in *try and look over there*	(2-10)
yiga	'BUT'	expresses a contrast between an assertion and a previous assertion or a presupposition; precise range of functions not clear	(2-44)
yatha(ng)	'all right'	conveys a contrast as in English 'I was going to come all right, but...'; also used as a (stressed) interjection	(2-101)
jama(ng)	'ready'	marks an event as following a previously completed event; 'after that', 'then'	(3-38)
barraj	'further'	translates as 'further' (as in 'further downstream'), or propositional 'also', 'then'	(2-108)

2.5.2 Clitics

Clitics always follow another constituent (in the notation, they are distinguished from suffixes by '=' rather than '-' as a boundary symbol). Clitics can be divided into subgroups according to the nature of the constituent they attach to; there are unrestricted clitics, clitics restricted to nominals, and clitics that have to follow the finite verb (apparently, no clitic is restricted to a position after a coverb). These will be considered in turn.

Table 2-14. *Unrestricted clitics: forms and functions*

Clitic	Gloss	Function	Examples
=ma	'SUBORD'	general subordinator, always follows the first constituent of the subordinate clause	III/6, see also §2.6.4.
=(C)ung	'COTEMP'	when following the verb, indicates cotemporality of asserted event with the speech situation ('still'); when following adverbs or secondary predicates, indicates that these fall into the time frame asserted by the main predicate	II/5, III/20; see also §3.3.3
=biyang	'NOW'	marks information focus by indicating temporal succession, or simply contrast; often replaced with its Kriol equivalent *na*	II/8, II/9, III/12, III/14
=gun	'CONTR'	marks contrastive or 'verum' focus	III/29, IV/21, IV/24, IV/46
=ga	'YOU KNOW'	seems to indicate that the addressee should already know what is being asserted (very rare; precise function unclear)	III/4
=warra	'DOUBT'	often follows interrogatives, conveys ignorance about the intended referent ('I don't know wh-')	(5-69)
=ja	'QU'	polar interrogative marker (rare; not obligatory)	
=biji ~ =binji	'ONLY'	very similar in use to English 'only'	III/21, V/13
=guji	'FIRST'	marks a referent as first in a series of referents ('first X then Y') or an event as first in a series of events ('already X')	I/22, V/16
=jirram ~ =yirram	'two'	related in form to the numeral *jirrama* 'two'; indicates dualilty of the referent of a noun phrase, or of one of the central participants in a clause (when following the verbal predicate).	III/14
=mulu	'COLL'	collective or 'plural' clitic; indicates multiplicity of referents (on noun phrase) or of a participant in the clause (on verbal predicate)	II/10, III/14, III/25

Table 2-15. *Clitics restricted to post-nominal position: forms and functions*

Clitic	Gloss	Function	Examples
=gayi	'ALSO'	similar in range of uses to English 'too'	IV/44
=marraj	'SEMBL'	characterises something as similar to the denotation of the noun phrase to which it attaches ('like X')	(3-29)
=marlang	'GIVEN'	Presents a referent as 'given', often used contrastively ('as for X')	IV/25, IV/46, V/10, V/15

Table 2-16. *Clitics restricted to post-verbal position: forms and functions*

Clitic	Gloss	Function	Examples
=(r)n(d)i	'SFOC1'	sentence Focus, marks a clause as presenting 'all-new' information (thetic statement)	III/39-47
=ngarndi	'SFOC2'	emphatic sentence Focus, marks a clause as presenting 'all-new' information of particular relevance to the hearer	V/34
=gurra	'EMPH'	marks emphasis	III/39
=wunthu	'COND'	marks a finite clause as conditional	II/7, III/3

2.5.3 Interjections

Interjections, unlike particles and clitics, are always stressed. Still, they can be distinguished from the major word classes in that they do not have the same syntactic properties as those . In particular, they differ from coverbs in that they cannot form part of a complex verb. Most frequently, an interjection constitutes an intonation unit by itself (therefore, examples in the data used for the purposes of this study are rare). The most frequent interjections are listed in Table 2-17.

Table 2-17. *Some frequent interjections*

Interjection	Gloss	Examples
yawayi	'yes'	III/2
ngaa *(ng)awu*	'no'	I/11, II/9
ma!	'go on! here you are!'	
marndaj	'all right' (often used to mark the end of a text)	V/41
yathang	'all right, enough' (also used to mark the end of a text)	
yakkayi ~ yakkarrayi	'ouch!', 'oh dear!', 'alas!'	V/22
ngi'	'TAG' (tag question, also often substituted with the Kriol equivalent *yintit* (< Engl. *isn't it*)).	(5-140)

2.6 The clause

Information on the properties of Jaminjung and Ngaliwurru clauses is scattered throughout this work; only those aspects not dealt with in other chapters are discussed here.

Difficulties with the application of the notion of 'clause' to Jaminjung are discussed in §2.6.1. Taking only the clear instances of clauses, main clauses can be subdivided into clauses with verbal (§2.6.2) and non-verbal predicates (§2.6.3). Jaminjung makes very little use of subordinate constructions. The general finite subordinate clause (with a verbal predicate) is discussed in §2.6.4. All nonfinite subordinate clauses are embedded in the main clause through case marking, and either have an adverbial or secondary predicate interpretation (§2.6.5). Usually, they consist of just a coverb with the appropriate case suffix.

Jaminjung does not have non-finite complements with obligatory control which would resemble those of English complement-taking verbs like *tell, want* or *try*. Comparable notions are either expressed by a juxtaposed, finite clause, by morphological means (the future form of the verb can have a desiderative reading) or by clause-level particles (like *birri* 'TRY'). Perception verbs also do not take non-finite complements. A propositional stimulus is either encoded as a juxtaposed main clause or as a secondary predicate (see §5.8.1 for examples).

2.6.1 The nature of the 'clause'

A refinement of the notion 'clause' is in order first. It is well known that it is problematic to identify clauses in spontaneous spoken discourse; for a discussion of this point with respect to Australian languages see e.g. Heath (1984: 514ff., 1985: 100ff.), McGregor (1990: 362) and Merlan (1994: 225f.). As indicated in §1.3.4, I assume with Halliday (1985), Chafe (1987) and others that intonation units correspond to the basic units of information in spoken discourse and should therefore be taken as the basis of description. However, where an intonation unit contains a (verbal or nonverbal) predicate, and no more than one predicate, it can be said to correspond to what is traditionally called a 'clause'; I will employ the term 'clause' in this sense.

Minimally, a clause consists of a predicate constituting an intonation unit on its own (see e.g. I/31, II/20 and V/29 in the Appendix). Rarely, one intonation unit corresponds to more than a clause; an example is given in (2-108).

(2-108) warung ga-rdba-ny barraj bul gani-ma yina-ngunyi \
disappear 3sg-FALL-PST further emerge 3sg:3sg-HIT.PST DIST-ABL
'he disappeared and then came out over there' (Enter/Exit Animation video) (IP, E17178)

The status of intonation units that correspond to constituents below clause level mostly has to be left out of consideration here. Often, but not always, these units are noun phrases that can be regarded as topics or afterthoughts in relation to a following or preceding intonation unit. In some cases, they can be regarded as secondary predicates on one of the arguments in the preceding intonation unit; coverbs as secondary predicates of this type are described in §3.4.3. Examples of intonation units corresponding to grammatical units below the clause level include I/13, II/12-15, II/24-25, III/8-9, III/41-42, IV/1, IV/9-14, IV/17-20, IV/26-31, IV/35-39 and V/1 in the Appendix; some of these present a real problem for establishing clause boundaries.

2.6.2 Verbal clauses

Verbal clauses always contain a finite verb, either as a simple verb (see also §3.1), or as constituent of a complex verb (see also §3.2). Coverbs can be used as 'semi-independent predicates' in a distinct, stylistically marked type of clause (see §3.4). The argument structure of verbal clauses is the topic of Ch. 4.

Examples of simple verbal clauses can be found throughout this study. The examples given in (2-109) to (2-112) illustrate free word order, one of the

features which have been associated with 'non-configurationality'.[48] Jaminjung, like many other Australian languages, also lacks evidence for a category 'verb phrase', and freely allows omission of lexical arguments. As recent research (summarised in Austin & Bresnan 1996 and Nordlinger 1998a) has shown, these features may occur independently of one another, and are also not dependent on the presence of bound pronominals in a language, as claimed by, e.g., Jelinek (1984). However, all these features do cluster in Jaminjung.

(2-109) [jungulug-di[49]]$_{NP}$=biya [kroba]$_{NP}$ [dud gan-angga-m]$_{V}$
one-ERG=NOW crowbar hold.one 3sg:3sg-GET/HANDLE-PRS

'one then picks up a crowbar' (IP, A97-01-568)

(2-110) [dud gan-angu]$_{V}$=rndi=biya [treila]$_{NP}$ +
hold.one 3sg:3sg-GET/HANDLE-PST=SFOC1=NOW trailer

+ [gujarding-guluwa-ni ngarrgina Nawurla]$_{NP}$
mother-KIN2-ERG 1sg:POSS <subsection>

'she picked up the trailer, your mother did, my Nawurla,' (IP, A97-03-832)

(2-111) ngiyi=biya [gujarding-guluwa-ni]$_{NP}$ +
PROX=NOW mother-KIN2-ERG

+ [dud gan-angga-m]$_{V}$ [janyung marlayi]$_{NP}$
hold.one 3sg:3sg-GET/HANDLE-PRS other woman

'here is your mother holding another woman' (IP, A97-03-868)

(2-112) [jalyi]$_{NP}$ [burrb gan-angga-m]$_{V}$ [jajaman-ni]$_{NP}$
leaf finish 3sg:3sg-GET/HANDLE-PRS wind-ERG

'the wind is blowing off all the leaves' (MW, CHE014)

There is no evidence that any of the possible orderings of arguments with respect to the verb is more 'basic', more neutral or more frequent than the others. Word order is likely to be conditioned by information structure on a discourse pragmatic level, although this has not been investigated in sufficient detail. Like variation in word order within the complex verb (see §3.2.2), a

[48] See e.g. Hale (1981, 1983, 1992); Nash (1986); Jelinek (1984), Heath (1986), Laughren (1989), Simpson (1991).

[49] For the sake of readability noun phrases (NP) and complex verbs (V) have been enclosed in square brackets.

change in word order within the clause is often observed under repetition[50] (see e.g. V/18, V/19 and V/23 in the Appendix).

2.6.3 Verbless clauses

The brief characterisation of verbless clauses given here – subdivided into equative clauses, ascriptive clauses and existential clauses – certainly does not exhaust all subtypes and possibilities.

Equative clauses assert or negate the identity of referents of predication base and the noun phrase functioning as predicate.

(2-113) ngayug gurrany gujarding ngunggina,
1sg NEG mother 2sg:POSS

'I am not your mother' (DR, BAR018)

Ascriptive clauses serve to characterise the referent of the predication base. The nominal predicate in an ascriptive verbless clause can be an unmarked nominal from the adjective subclass (see §2.2.2.6), or a nominal marked with the proprietive or privative suffix (see §2.2.3.4) or the 'HABITAT' suffix (see §2.2.3.2.3). It can also be a case-marked noun phrase. An example is given in (2-114); here the speaker is indicating the kin relation traditionally associated with certain body parts. This example shows that in verbless clauses, like in verbal clauses, word order can vary, and that repetition is one of the conditioning factors.

(2-114) miri... mama-wu \
thigh MoBr-DAT

'the thigh is for the uncle' (DB, D14117)

babiny-gu gurdbu, gujarding-gu miri
older.sister-DAT lower.leg mother-DAT upper.leg

'the calf is for the sister, for the mother the thigh' (DB, D14120)

Ascriptive nominal clauses have a further interesting property. If the predication base is a first or second person, it is cross-referenced with an oblique pronominal, as in (2-115) (see also §2.2.4.3.2 for another example).

[50] This has been reported for other Australian languages as well; see e.g. Heath (1984: 514) for Nunggubuyu.

(2-115) bib ba-ngu, birrila **ngunggu**
move.up IMP-GET/HANDLE strong 2sg.OBL

'pick it up, you are strong' (Orig. Transl.: 'yu strongwan, yu liftimap') (DBit, JAM324)

Verbless existential clauses are used to draw attention to the existence of an entity, usually in a particular location (cf. McGregor 1990: 304ff.); an example is (2-116).

(2-116) thanthiya julag \
DEM bird

'there is a bird' (while looking at a picture book) (IP, F03012)

2.6.4 Finite subordinate clauses

There is only one type of finite subordinate clause in Jaminjung, which subsumes the functions of a relative clause (cf. Comrie 1981: 137, Lehmann 1984: 136ff.). It is marked with a clitic *=ma ~ =mang,* following the first constituent of the subordinate clause. Like a headless relative clause, expressions of this type can take up the position of the head noun in a noun phrase, as in (2-117).

(2-117) ba-mili janju [mugurn=ma ga-yu]
IMP-GET/HANDLE DEM sleep=SUBORD 3sg-BE.PRS

'wake up the one who is sleeping' (VP, NUN157)

Alternatively, a general subordinate clause can be 'adjoined' to the main clause (cf. Hale 1976), and function like an non-specific adverbial clause. This use is illustrated in (2-118).

(2-118) nami=biyang yirrgbi ba-iyaj \
2sg=NOW talking IMP-BE

**[ngalanymuwa=ma ngantha-mila] **
echidna=SUBORD 2sg:3sg-GET/HANDLE.IMPF

'you now, you talk, (about) when you used to catch porcupine' (handing over the microphone to another speaker) (CP, E09706-7)

2.6.5 Non-finite subordinate clauses

The main predicate in a non-finite subordinate clause is always a coverb (note that the term 'non-finite' here does not imply that the coverb can appear in finite form; rather, it indicates absence of finite categories which would require a verb). Subordinate clauses of this type always take a case marker in

'complementising' function (see also §2.2.3.3). The subordinate clause is fully embedded in the main clause, that is, it is not restricted to a marginal position (see e.g. (2-120) below). They may function as adverbials or as secondary predicates.[51]

More often than not, the case-marked coverb is the only constituent of the subordinate clause. If an argument of the coverb is present, it is either unmarked, or (more rarely) has the same case marking as the coverb; both patterns of case marking are also found in noun phrases (see §2.2.1).

The case markers employed as relators of these nominalised clauses include the dative (§2.6.5.1) and the allative case (§2.6.5.2) in purposive adverbial function. The allative can also be used in secondary predicate function (§2.6.5.3). The 'origin' case marks secondary predicates or causal adverbials (§2.6.5.4), and, on rare occasions, the ablative case also occurs on subordinate clauses (§2.6.5.5). The 'TIME' suffix *-mindij* was grouped with the case markers partly because it also has 'complementising function (§2.6.5.6).

2.6.5.1 Dative-marked purposive clause

The most frequent type of nominalised subordinate clause is marked with the dative case, and has a purposive reading. An example of a non-finite subordinate clause with the coverb as its only constituent is given in (2-119). Much less frequently, the subordinate clause contains both a coverb and an argument, as in (2-120).

(2-119) burr-irriga **jawaya-wu**
3pl:3sg-COOK.PST eating-DAT

'they cooked it to eat it / they cooked it for eating' (DR, NGA008)

(2-120) buru yirr-anjama-ny skul-bina
return 1pl.excl:3sg-BRING-PST school-ALL

[jalig-gu birrgab-birrgab-gu]$_{Cl\text{-}nonfin}$
child-DAT RDP-make-DAT

'we took them back to the school for the kids to make (baskets)' (pandanus leaves) (VP, TIM020)

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[51] Similar uses of case-marked (but otherwise underived) coverbs have been reported for other Northern Australian languages, including Wardaman (Merlan 1994: 276ff.), Wagiman (Wilson 1999), the Jarragan languages Miriwoong and Gija (Kofod 1976: 652, 1996b), Gooniyandi (McGregor 1990: 392ff., 1992), Nyulnyul (McGregor 1996a: 60-61), and the Ngumbin languages including Jaru (Tsunoda 1981a: 180f.), Gurindji (McConvell in prep.) and Ngarinyman (Jones 1994, and my own fieldwork).

This example also shows that no coreference constraints hold between arguments of the main clause and the subordinate clause (cf. also McGregor 1990: 402). For example, in (2-119) above, the agent of the 'cooking' is interpreted as the agent of the eating. In (2-120), on the other hand, the agent of the subordinate clause is not coreferent with either the agent or the patient of the main clause. Finally, in (2-121), it is the patient of the 'cooking/burning' that is the single argument of the 'going down'.

(2-121) guyug-di burru-rriga=nu, **[jag-gu]**$_{\text{Cl-nonfin}}$ \
fire-ERG/INSTR 3pl:3sg-COOK.PST=3sg.OBL go.down-DAT

'they burnt it with fire for her so it would go down' (a leech) (IP, F03441)

2.6.5.2 Allative-marked purposive clause

Allative-marked purposive clauses only occur with motion verbs (although the dative may also occur with motion verbs, as example (2-120) above shows). Wilson (1999: 87) describes the same phenomenon for Wagiman, and concludes that "the allative encodes purpose, but with a further entailment of movement towards the site of the action". This analysis works equally well for the Jaminjung data, as illustrated in (2-122) and (2-123) (see also (2-127) below).

(2-122) nga-w-ijga **[mugurn-bina]**$_{\text{Cl-nonfin}}$
1sg-FUT-GO lie/sleep-ALL

'I'm going off to sleep'

(2-123) mangarra **[luny-bina]**$_{\text{Cl-nonfin}}$ nga-w-uga jalig-gu
plant.food put.down&leave-ALL 1sg:3sg-FUT-TAKE child-DAT

'I will take some food to leave for the kids' (JM, CHE075)

2.6.5.3 Allative-marked secondary predicates

Allative-marked non-finite subordinate clauses are not restricted to the purposive function with motion verbs, but can be employed more generally, with a reading of depictive secondary predicate on a non-agentive argument.

Subordinate clauses in secondary predicate function are illustrated in (2-124) to (2-126). Frequently, they function as secondary predicate on the Undergoer of a perception verb (see also §5.8.1.1). For example, the person opening his trousers can only be interpreted as the 'perceived', not the 'perceiver' in the 'seeing' event in (2-124).

(2-124) mangurn-ni ganyi-ngayi-m **[openimbat-bina traujaj]**$_{\text{Cl-nonfin}}$
whitefellow-ERG 3sg:2sg-SEE-PRS opening-ALL trousers

'the whitefellow looks at you opening your trousers' (to child) (ER, SPO012)

The controller of the secondary predicate may also be the Undergoer of a verb of contact/force, as in (2-125), or of other transitive verbs.

(2-125) gani-ma janyungbari mayi **[mugurn-bina]**$_{\text{Cl-nonfin}}$
3sg:3sg-HIT.PST another man lie-ALL

'he hit another man who was lying down' (LR, NGA156)

This use of an allative case marker has parallels in a number of other Australian languages, e.g. in Wardaman (Merlan 1994), Wagiman (Wilson 1999) and Warlpiri. In Warlpiri, a comparable construction has been used as a test for object status (Simpson & Bresnan 1983, Simpson 1988, 1991: 314ff.). This analysis would work for examples (2-124) and (2-125) above. However, for Jaminjung it is very doubtful in which sense the controller of the secondary predicate in (2-126), an oblique pronominal representing the 'person on whose behalf it is knocked', would be an object; there is no other morphosyntactic evidence that it is.

(2-126) du-du gani-ma ngarrgu **[mugurn-bina]**$_{\text{Cl-nonfin}}$
RDP-knock 3sg:3sg-HIT.PST 1sg.OBL sleep-ALL

'she knocked for me while I was sleeping' (RB/DB, MIX114)

Therefore it seems more fruitful to give a semantic description for the co-reference constraints that hold for this construction: any argument representing a participant towards whom an action is directed may control an allative-marked secondary predicate.

2.6.5.4 Origin-marked resultative clauses

The origin case *-nyunga* (see also §2.2.3.3.6) marks subordinate clauses with a resultative interpretation.

(2-127) **[burrb-nyunga warrg]**$_{\text{Cl-nonfin}}$ ga-ram=biyang waga-bina
finish-ORIG work 3sg-COME.PRS=NOW sit-ALL

'having finished work, she comes now to sit down' (JM, CHE152)

Notably, marking with the origin case is the only way of forming resultative stative expressions (that is, translation equivalents of English past participles like *broken)* with coverbs of change of state like *bag* 'break' or *digirrij* 'die', (see also §6.6).

(2-128) buliki=biya ngiya bulumab ga-yinji, **[digirrij-nyunga]**$_{Cl\text{-}nonfin}$
cow=NOW PROX float 3sg-GO.IMPF die-ORIG
'the cows were floating here, having died / dead' (EH, EV03123)

Often, embedded subordinate clauses marked with *-nyunga* have a causal reading. However, this should be regarded as an inference, not an entailment; what is entailed is only temporal precedence. Thus, the translation of (2-129) brings out the intended causal reading, but an alternative translation would run 'I have sore legs, having walked'.

(2-129) miri janga nga-gba **[walnginy-nyunga]**$_{Cl\text{-}nonfin}$
upper.leg sore 1sg-BE.PST walking-ORIG
'I had sore legs from walking' (IP, F03979)

2.6.5.5 Ablative-marked clauses

Ablative-marked nonfinite subordinate clauses are only found very rarely. They seem to be restricted to encoding an event which serves as both the spatial and temporal starting point for another event. For example, (2-130) describes a change of spatial configuration away from an original configuration, which is encoded by the positional coverb *warrngalab* 'belly up', marked with ablative case.

(2-130) **[warrngalab-giyag]**$_{Cl\text{-}nonfin}$ wirriny nga-w-irdbaj
belly.up-ABL turn 1sg-FUT-FALL
mun nga-w-iyaj mugurn
belly.down 1sg-FUT-BE lie/sleep
'from (lying) on my back I will turn over, I will be lying on my belly' (LR, NGA133)

In (2-131), the ablative follows a derived coverb of continuous activity. Again, ablative-marking indicates that the place of the activity is the starting point of motion away from it, with a strong implication of temporal precedence.

(2-131) buru yirru-ruma-ny yagbali-bina **[dij-mayan-ngunyi]**$_{Cl\text{-}nonfin}$
return 1pl.excl-COME-PST camp-ALL stay.overnight-CONT-ABL
'we came back to the camp from/after camping out' (VP, TIM153)

2.6.5.5 Temporal-marked clauses

The 'TIME' suffix *-mindij*, like other case markers, may follow a coverb which functions as the predicate of a subordinate clause; an example is (2-132).

(2-132) **[gulban burrb-mindij]**$_{Cl\text{-}nonfin}$ nga-w-ijga buru Kununurra
ground finish-TIME 1sg-FUT-GO return <place.name>
'after the funeral I'm going back to Kununurra' (MW, CHE227)

However, unlike the other case markers, *-mindij* 'TIME' may also follow an inflecting verb, thus relating a finite main clause to another main clause.

(2-133) **[Nangari buru ga-w-ijga-mindij]**$_{Cl\text{-}fin}$ +
<subsection> return 3sg-FUT-GO-TIME
marndaj ngabulg nga-w-irdbaj
later/allright dive 3sg-FUT-FALL
'when Nangari goes back, all right, I'm going to have a shower,' (IP, E09073)

2.7 Summary

In this chapter, the basic grammatical features of Jaminjung and Ngaliwurru were presented. In particular, the main lexical categories and subcategories were defined by their morpho-syntactic characteristics. It was shown that coverbs – uninflecting lexemes that are inherently predicative – constitute a major part of speech distinct from nominals and verbs, and from the minor classes of particles, clitics and interjections. Verbs can be identified by a rich set of obligatory verbal inflections, comprising bound pronominals and tense/aspect/mood marking. The verbs identified in this way form a closed class. Coverbs take a subset of the nominal derivational morphology (which derives nominals from coverb roots). When functioning as the head of a non-finite subordinate clause, they can be followed by a subset of nominal case markers. Still, they can be distinguished from nominals: first, most subclasses of nominals, but not coverbs, can function as a constituent of a noun phrase. Second, coverbs, but not nominals, can form complex verbs together with a generic verb. However, boundaries were shown to be somewhat fuzzy between stative coverbs and the classes of locational nominals and adjectival nominals (§2.3.1.2). It is also difficult to distinguish coverbs from adverbs (e.g. manner adverbs). For the purposes of this study, it will be assumed that the adverbs mentioned in §2.3.1.2 consitute a subclass of coverbs.

Some construction types have also been discussed briefly in this chapter: the noun phrase (§2.2.1), verbal (§2.6.2) and verbless (§2.6.3) main clauses, and finite (§2.6.4) and nonfinite (§2.6.5) subordinate clauses. The next chapter is devoted to those constructions that constitute the focus of this study; these are constructions in predicate function that involve verbs, coverbs, or combinations of verbs and coverbs.

SIMPLE AND COMPLEX PREDICATES

CHAPTER 3

Verbs and coverbs were shown in Ch. 2 to belong to clearly distinct word classes: verbs (also referred to as 'generic verbs') form a closed class whose members obligatorily carry verbal inflections, and cannot appear in a non-finite form. 'Coverb' is the term chosen here for a major lexical category (i.e. an open class) of predicative but uninflected elements.

In this chapter, the constructions which involve verbs and/or coverbs in predicative function are discussed. Verbs alone may function as simple predicates (§3.1). The combination of a verb and one or two unmarked coverbs in a single intonation unit will be referred to as 'canonical complex verb' (§3.2). It is these complex verbs that will form the basis for the discussion of argument structure (Ch. 4), generic verb semantics (Ch. 5) and coverb classes (Ch. 6) in the remainder of this thesis.

A special type of complex verb construction, with a verb in auxiliary function, is the progressive construction (§3.3). Coverbs may also be combined with a simple or complex verb in the function of secondary predicate (§3.4); in this function, they are either separated from the main predicate by an intonation unit boundary, or they are morphologically marked. Coverbs which occur in an intonation unit on their own, but cannot be analysed as secondary predicates, also occur in texts, although this use of coverbs as 'semi-independent predicates' is stylistically marked (§3.4). Section 3.5 describes the integration of Kriol loans into complex verbs. An overview of simple and complex verb constructions and their relative frequency is provided in §3.6.

3.1 Simple verbs as main predicates

Generic verbs, which are always inflected for person and tense/aspect/mood (see §2.4), may constitute the main predicate of a clause by themselves, i.e. as simple verbs. In this respect, they look like the one-word verbal predicates familiar from Indo-European languages. However, one has to bear in mind that in Jaminjung, verbs form a closed class of around 30 members. The use of three of these verbs (*-ijga* 'GO', *-minda* 'EAT' and *-yu(nggu)* 'SAY/DO') as simple verbs is illustrated in (3-1) and (3-2) (the verb roots are in boldface).

(3-1) gagawurli-wu yirr-**ijga:::**-ny, manamba \
long.yam-DAT 1pl.excl-GO-PST upstream
'we went for long yam, upstream'

(3-2) "ngayug=gayi gurrany medicine nga-**minda**-ny \
1sg=ALSO NEG medicine 1sg:3sg-EAT-PST
nga-**yu**=bunyag \
1sg:3sg-SAY/DO.PST=3du.OBL
'"me too, I didn't take my medicine!" I said to the two'

Considering the small number of verbs, the use of simple verbs is quite frequent in actual discourse: simple verbs make up around 40% of verbal predicates in texts (see also §3.6). This correlates with the semantically generic nature of these verbs: in many cases a simple verb will have a number of different interpretations depending on the (linguistic or extra-linguistic) context. For example, the verb *-ijja* 'POKE' can be read as 'spear' in a kangaroo hunting context, as 'dig with digging stick' in a yam digging context and as 'stab' in a knife fight context (see §5.4.5). The semantics of the generic verbs both as simple verbs and in combination with coverbs, and the role of pragmatics in their interpretation, will be examined in more detail in Ch. 5.

3.2 Canonical complex verbs

Despite some differences in terminology as well as in analysis, combinations of an uninflecting element (the Jaminjung coverb) and an inflecting verb are treated as complex predicates, functionally equivalent to simple predicates, in virtually all descriptions of Northern Australian languages.[52] This is also supported by historical and comparative evidence. The types of complex predicates attested in the area constitute a continuum, ranging from the phrasal complex verbs of Jaminjung and some of the neighbouring languages, to languages where the two components are so tightly fused that they have lost any structural and semantic independence. Historical connections between these stages can be traced (see §7.1). In §7.2.1 it will be argued that the complex verbs of Jaminjung and other Northern Australian languages should be recognised as a distinct type of complex predicate, although they exhibit many formal and functional similarities to other complex predicates discussed in the literature.

This section summarises the arguments (from a synchronic perspective) for regarding one type of coverb-verb combination as complex predicates, as defined

[52] This point is made explicit by Blake (1987: 120), Cook (1988: 79), Nash (1986), Simpson (1991: 115ff.), and Wilson (1999: 61ff.), among others.

in the recent literature (e.g. Alsina et al. 1997). This construction, termed 'canonical complex verb', will be contrasted with other types of constructions involving coverbs and verbs.

Canonical complex verbs consist of a verb and an unmarked coverb (or sometimes two coverbs). These two elements constitute a close-knit unit both formally and semantically, even though their components are clearly distinct phonological words. In addition to their cohesion in prosodic terms (§3.2.1), arguments for their status as complex predicates come from word order (§3.2.2), morphological marking and negation (§3.2.3), and argument structure (§3.2.4), as well as from speakers' own translations and intuitions (see §1.4.3).

3.2.1 Prosody

Prosodic unity, i.e. occurrence in a single intonation unit as defined in §1.3.4, is regarded as criterial for complex verb status. A coverb which is separated from a verb by an intonation unit boundary – even if otherwise unmarked – is not analysed as part of a (canonical) complex verb, but as a semi-independent predicate (§3.4). This is true even if a combination of the same lexical items is also attested as a canonical complex verb.

By definition, therefore, canonical complex verbs in Jaminjung form a tightly-knit unit prosodically. This is taken to iconically reflect their status as linguistic expressions used to represent single events (as defined in §1.4.3) for the purpose of information packaging in discourse. This correlation is also assumed by Givón (1991), Foley & Olson (1985) and Durie (1997: 291), among others.

Within the complex verb, the coverb bears phrasal stress, indicated by pitch accent, and the verb secondary stress (at least if it immediately follows the coverb). In (3-3), the acute accent represents primary stress, the grave accent, secondary stress. In this and the following examples in this section, the coverb and the verb root are in boldface.

(3-3) **díbird** bà-**mili**-ji wírra
be.wound.around IMP-GET/HANDLE-REFL hair
'tie up your hair' (DP, KNX181)

Coverbs may also be pronounced with expressive prosody, such as interruption of rhythmic flow by pausing immediately before or after the coverb, lengthening, higher intensity, and stronger pitch modulation. The latter two properties are – somewhat inadequately – represented by an exclamation mark in (3-4).

(3-4) gan-ijja-m=biya julag \ **!barr:** gana-m \
3sg:3sg-POKE-PRS=NOW bird smash 3sg:3sg:CHOP-PRS
'he shoots birds then, he hits them' (with a sling shot) (IP, F01014)

In this usage, coverbs are reminiscent of ideophones in other languages (Schultze-Berndt, to appear). Still, in these examples, they form part of the same intonation unit as the inflecting verb, and can therefore be regarded as constituents of a canonical complex verb construction (but see also §3.4.2).

3.2.2 Word order

Jaminjung generally has free phrase order; in particular, the ordering of noun phrases with respect to the verb is not fixed (see §2.6.2). In contrast, there is a much stronger restriction on the ordering of the constituents of complex verbs.

A coverb and a generic verb in a canonical complex verb construction are usually contiguous; the only constituents that can freely intervene between the two constituents are clitics. This contiguity also iconically reflects the conceptual unity of the complex verb (according to Behaghel's first law), but it is not criterial for complex predicate status, either in Jaminjung or from a cross-linguistic perspective.

The preferred word order in the complex verb is that of the coverb preceding the generic verb, although the reverse order is also possible. The first type is amply illustrated throughout the thesis and in the texts in the Appendix; two further examples are given in (3-5) and (3-6). In (3-6), the two constituents are separated by a clitic on the coverb.

(3-5)

yalumbarra	**marrug**	ga-**jga**-ny,	yarrajgu,	warnda-bina
King.Brown	hidden	3sg-GO.PST	afraid	grass-ALL

'the King Brown snake went into hiding – (being) afraid – into the grass' (VP, NUN109)

(3-6)

jid=biyang	ba-**rum**	miyarra=wung,	yanth-irdbaj
go.down-NOW	IMP-COME	slow=COTEMP	IRR:2sg-FALL

'come down slowly now, you might fall' (DB, D14018)

Much less frequently, the coverb follows the generic verb (again, clitics may intervene between the generic verb and the coverb). In the five texts reproduced in the Appendix, only 6 (amounting to 10%) of the complex verbs consisting of a verb and a contiguous single coverb are of this type.[53] This means that roughly 90% of complex verbs have the order coverb – verb. Other text counts are also consistent with these figures.

A change in word order can often be observed when a clause is repeated, or constructed as parallel to the preceding one (the same is true for word order on

[53] These are in II/5, II/14, III/12, IV/9, IV/17 and IV/42.

the clause level; see §2.6.2). Repetition is very common where several speakers are present and spontaneously 'co-constructing' a text, as in (3-7).

(3-7)

JM:	gurrany	**buru**	yanj-**ijga!**
	NEG	return	IRR:2sg-GO
MW:	gurrany	yanj-**ijga**	**buru**!
	NEG	IRR:2sg-GO	return

'don't go back!' (E16498-9)

This change of word order in parallelisms suggests that we are dealing with an information structure phenomenon.[54] I have not investigated the information structure correlates of word order in Jaminjung in much detail and will leave this issue open for further research.

A similar preference for an ordering where the non-inflecting element precedes the inflecting verb has been reported for most of the languages of the area with complex verbs (the reverse preferred order is attested in some of the Daly River languages, see Tryon 1974 for an overview). For some of these languages, it has been claimed that the word order within the complex verb is subject to semantic restrictions and can serve to distinguish semantically transparent from non-transparent complex verbs.[55] In Jaminjung, though, the dispreferred word order is not restricted to particular classes of coverbs and/or verbs. There certainly is a tendency for the complex verb to occur in the preferred word order if it contains a verb that is used in a secondary sense, restricted to combination with certain coverbs. Examples with verb-coverb order like (3-8) to (3-10) are therefore extremely rare. In (3-8), *-ma* 'HIT' is used in a secondary sense of 'totally affect' (see §5.4.2.2); in (3-9) and (3-10), *-arra* 'PUT' is also used in secondary senses (see §5.2.4.3 and §5.2.4.5). However, this is a tendency rather than a hard-and-fast restriction, in contrast to the restriction on the use of coverbs separated from the verb by an intonation boundary (see §3.4).

(3-8)

yawayi,	nganji-**mangu**	**malang** \
yes	2sg:3sg-HIT.PST	across

'yes, you crossed it' (commenting on ESB walking across a blanket) (JM, E16372)

(3-9)

Namirra	gan-k**arra**-ny	**yurrg**	nuwina	yagbali
<subsection>	3sg:1sg-PUT-PST	show	3sg:POSS	place

'Namirra showed me her country' (DMc, CHE378)

[54] See Merlan (1994: 253) for an alternative explanation.

[55] See e.g. Tsunoda (1981a: 185f.) for Jaru, Nash (1986: 51) and Simpson (1991: 115f.) for Warlpiri, and Wilson (1999: 69ff.) for Wagiman.

(3-10) ba-wurru-mili guyug, ba-wurr-**arra** **dalb**
IMP-3pl:3sg-GET/HANDLE fire IMP-3pl:3sg-PUT light.fire
'(you all) get firewood and light it' (VP, NUN168)

More than one coverb may combine with a single generic verb, although this is not very frequent (in the texts in the Appendix, only a single example, II/25, can be found). In this case, usually one of the coverbs precedes, and the other follows, the verb, as in (3-11) and (3-12). No more than two coverbs have been found with a single verb in the same intonation unit.

(3-11) **waga**=biya bunthu-**yu** **thawu**
sit=NOW 3du-BE.PRS immersed
'the two are now sitting in the water' (Frog Story) (DBit, E07234)

(3-12) yawayi, **marraj** ga-**jga**-ny **warrng-warrng**
yes go.past 3sg-GO-PST RDP-walk
'yes, she walked past' (IP, E08385)

This 'sharing' of a generic verb by more than one coverb is determined purely by semantic compatibility. It is most frequent for coverbs that belong to the same class (see Ch. 6), e.g. coverbs of spatial configuration in combination with the verb *-yu* 'BE', as in (3-12) above. But more generally, coverbs may combine as long as they are both compatible with the same verb (in the same reading), as is the case for the coverb of manner and the coverb of path with a verb of locomotion in (3-12) above. The coverbs do not even have to be of the same valency, i.e. share the same arguments (see also §4.3.2.4).

In some cases, however, one could argue that the complex verb formed with one of the coverbs serves as the semantic unit which then determines semantic compatibility with the other coverb. For example, the coverb *gabarl* 'go close' in (3-13) is not usually found with the verb *-ma* 'HIT', but only with verbs of locomotion and with *-mili/ -angu* 'GET/HANDLE'. However, *gabarl* can be combined with the complex verb consisting of the coverb *yurl* 'chase' and the verb *-ma* 'HIT', which presumably is interpreted as a locomotion verb. The semantic structure is represented by bracketing in (3-13).

(3-13) munuwi-ni [**gabarl** [**yurl** gani-**mangu**]] \ wirib \
bee-ERG go.close chase 3sg:3sg-HIT.PST dog
'the bees came up close chasing him, the dog' (Frog Story) (DR, E02145)

Cases where a constituent (other than a clitic) intervenes between a coverb and a generic verb in the same intonation unit are relatively rare. For example, in all texts in the Appendix, only two examples can be found (IV/26 and V/19); some further examples are given in (3-14) to (3-16). They show that the constituent intervening between coverb and verb may exhibit various relations to the

predicate; for example, it could be an absolutive (3-14), ergative-marked (3-15) or locational argument (3-16).

(3-14) yeah, **dalb** guyug yirr-**arra**-m=ngarndi \
yes light.fire fire 1pl.excl:3sg-PUT-PRS=SFOC2
'yes, we set fire to the firewood' (IP, F01419)

(3-15) burra-**ngayi**-rna=yirrag wirib-di **jarl**, malajagu \
3pl:3sg-SEE-IMPF=1pl.excl.OBL dog-ERG track goanna
'the dogs used to track them for us, the goannas' (NG, E09808)

(3-16) ga-**jga**-ny=ni wagurra-bina **burduj** \
3sg-GO-PST=SFOC1 rock-ALL go.up
'he went up on a rock' (Frog Story) (DR, E01281)

Examples like (3-14) above suggest that, again, there are no clear semantic restrictions on the separability of verbs and coverbs by intervening constituents. Since these expressions meet the prosodic requirement of occurring in the same intonation unit, they have also been regarded as canonical complex verbs for the purposes of this study. Again, the marked word order often alternates with the unmarked word order under repetition, with no difference in interpretation (compare e.g. V/19 and V/18 in the Appendix).

To summarise: a canonical complex verb is constituted by a single generic verb and usually one, but sometimes two coverbs, in a single intonation unit. Coverbs and verbs in a canonical complex verb are usually, but not necessarily, contiguous, and occur in either order, although the order coverb – verb is clearly preferred.

This last observation has an interesting correlate. For complex verbs that semantically express a cause-effect relation – which is a very common type – the preferred order of coverb preceding the verb often results in an anti-iconic ordering, as in (3-17).

(3-17) **burrurrug** gan-**ijja**-ny \ langginy-ni \
scatter 3sg:3sg-POKE-PST wood-ERG/INSTR
'he hit it with a pointed end such that it scattered, with a stick' (lit.: 'he scatter-poked it with a stick') (Lego wall, in Change of State videos) (DP, F02085)

This is in striking contrast with the iconicity restrictions reported for serial verbs in the literature (e.g. Lane & Pawley 1992: 3, Lord 1993: 237, Durie 1997), but quite comparable to the possibilities for Germanic (though not English) separable particle verbs (e.g. German *totschlagen* 'hit dead'). This lack of iconicity suggests that Jaminjung complex verbs are lexicalised to a degree similar to that of

particle verbs: the subevents are presented, and stored in the lexicon, as a single integrated event. (It should also be noted that there are no compound verbs, distinct from canonical complex verbs, in Jaminjung). On the other hand, where a coverb is separated from a simple or complex verb by an intonation unit boundary and is interpreted as a resultative predicate, iconic ordering holds (see §3.4.3).

3.2.3 Morphological marking and negation

In addition to prosodic unity, one of the main criteria adduced in the literature for complex predicate status is that all of the predicate's constituents share their values for person, tense, aspect and mood, and polarity. For example, in serial verb constructions, regularly either only one verb inflects, or all verbs take the same morphology under agreement, even though all verbs have the potential of taking their own inflections when used outside the serial construction.

In Jaminjung, this property – which in complex predicates of other languages is a property of the construction – is already determined by the characteristics of the lexical categories involved. Since coverbs cannot be specified for verbal categories (see §2.3), their interpretation with respect to person/number and tense/aspect/mood depends on the marking on the verb, which is obligatory (see §2.4). For example, in (3-18) below, the clause as a whole has a present tense interpretation, and the coverb *mud* 'make a hole' cannot be interpreted as bearing a different tense value.

(3-18) **mud-mud** burru-**wirri**-ji wirib thanthu
RDP-make.hole 3pl-BITE-REFL.PRS dog DEM
'they are biting holes in each other, those dogs' (IP, F03645)

Similarly, if the verb, as in (3-18), is marked as reflexive, the complex verb as a whole may only take a single core argument (see §4.2.2.2).

The dependence of coverbs on verbs in terms of morphological marking is a necessary criterion, but not in itself sufficient to distinguish canonical complex verbs from other types of coverb-verb combinations, discussed in §3.3 and §3.4. It therefore has to be combined with the prosodic criterion described in §3.2.1.

Further evidence for regarding the coverb-verb complex as a single complex predicate comes from negation. The constituents of a complex verb cannot be negated individually (cf. Foley & Olson 1985: 27ff.). In Jaminjung, both sentence and constituent negation are achieved with the negation particle *gurrany*. In the case of sentence negation, *gurrany* usually precedes the (verbal or nonverbal) predicate. This is in line with the cross-linguistic tendency for a marker of sentence negation to precede the verb (Dryer 1988: 102).

With complex verbs, the negation particle has scope over the whole complex verb, regardless of which of its components comes first. For example, both (3-19a) and (3-19b) are comments on similar videotaped scenes, where someone hits a Lego wall with various instruments but without any effect. In these examples, the result of 'scattering' is not negated independently of the 'falling', regardless of word order (which is particularly clear in this case because no 'falling' took place in either of the scenes described). What is negated in both cases is the complex verb consisting of the coverb *burrurrug* 'scatter' and the verb *-irdba* 'FALL'. In order to negate only the resultant subevent but not the causal subevent, a secondary predicate construction has to be used (see §3.3.3 for an example).

(3-19a) gurrany **burrurrug** ga-w-**irdba** / damarlung \
NEG scatter 3sg-FUT-FALL.IMPF nothing
'it wouldn't fall down, nothing' (Lego wall in Change of State videos) (DP, F02082)

b) gana, damarlung, gurrany ga-w-**irdba** **burrurrug** \
3sg:3sg:CHOP.PST nothing NEG 3sg-FUT-FALL.IMPF scatter
'he hit it, nothing, it wouldn't fall down' (Lego wall in Change of State videos) (DP, F02092)

3.2.4 Argument structure

Complex predicates have been defined in the recent literature (e.g. Butt 1997: 108) mainly by their argument structure properties. Each of the constituents of a complex predicate may contribute semantic participants and play a role in determining the argument structure of the complex predicate. Syntactically, on the other hand, the complex predicate functions like a simple predicate, in that it allows only one set of morpho-syntactic arguments. This difference in semantic and syntactic properties gives rise to the concept of argument fusion or argument sharing (see e.g. Foley & Olsen 1985, Mohanan 1994, 1997, Shibatani 1996, Butt 1997, Durie 1997). One syntactic argument slot may be 'shared' by the semantic arguments of more than one predicative element.

The argument structure of Jaminjung complex verbs is discussed in some detail in the following chapter (Ch. 4), but the relevant results of the discussion will be briefly summarised here. The first question that might be raised is whether the coverbs can themselves be regarded as arguments of the verb. It was shown in Ch. 2 that coverbs constitute a lexical category distinct from nominals. They never take adjectival modifiers, or form part of a noun phrase with a determiner. Furthermore, several of the neighbouring languages, for example the Jarragan languages (Kofod 1996b, 1997) have gender or noun class systems, with verbs agreeing with core arguments in gender. Their complex verbs are similar to the

Jaminjung ones in all relevant respects. Coverbs in these languages do not show any signs of having a gender feature, and verbs only agree with core arguments in gender, but never with coverbs. However, it will be shown in §4.2.3.3 that coverbs may fulfil the valency requirements for a few verbs with propositional participants, including *-yu(nggu)* 'SAY/DO'.

A second question concerns whether coverbs contribute at all to the argument structure of complex predicates. In many instances, the coverb could be interpreted as a kind of adverbial modifier in an endocentric construction (as suggested by Cook 1988 for Wagiman). However, there are some cases which clearly show that the coverbs have a semantic valency of their own.

For example, when occurring in the progressive construction (see §3.3.1) with a formally intransitive verb in auxiliary function, bivalent coverbs, like *burlug* 'drink' in (3-20), nevertheless allow for the expression of two core arguments in the absolutive.

(3-20) **[janyungbari** **buliki]**$_{NP(ABS)}$ burlug-mayan ga-yu **[gugu]**$_{NP(ABS)}$
another cow drink-CONT 3sg-BE.PRS water
'the other cow is drinking water' (Farm Animals 14) (DMc, E13035)

Except in the progressive construction, bivalent coverbs do not combine with monovalent verbs. A number of other restrictions on the combination of coverbs and verbs can be argued to be based on valency (see Ch. 4 for details).

These observations suggest that coverbs have semantic participants, and determine the syntactic behaviour of complex verbs jointly with the verb. They therefore cannot simply be regarded as adverbial modifiers of the generic verb. Rather, in terms of argument structure, they resemble verbs in a serial verb construction. Complex predicates where all constituents contribute to the argument structure of the complex expression are sometimes regarded as possessing multiple heads (see e.g. Butt 1997: 108, Andrews & Manning 1999). They are also clearly instances of exocentric constructions. However, in some descriptions of Northern Australian languages (e.g. Merlan 1982: 125 for Mangarrayi), an exocentric and an endocentric type of complex verb are ex-plicitly distinguished. In those types regarded as endocentric, the verb semantically functions as a hyperonym of the complex verb, and may substitute for it; in other words, the coverb is treated as optional (an example would be a verb of motion with a coverb of manner of motion, as in (3-12) above). The semantically less transparent complex verbs, like e.g. (3-8) to (3-10) above, are treated as exocentric.

This analysis does capture the differences in semantic interpretation between these types of complex verbs. However, these do not correlate with structural differences; in other words, the construction in itself is neutral as to these semantic differences. 'Obligatoriness' of the coverb is a problematic criterion of

endocentricity, since, although all verbs may function as simple verbs, omission of a coverb from a complex verb is rarely meaning-preserving (see also §2.3.1.1 for further discussion and examples). Moreover, often the substitution of a simple verb for a complex verb may be semantically possible but is never or rarely observed in texts, because the more specific complex verb is chosen for pragmatic reasons. One example, discussed in more detail in §5.4.1.1, concerns the translation equivalent of 'scratch'. The combination of the coverb *warrany* 'scratch' and the verb *-mili/-angu* 'GET/HANDLE' would, on a superficial analysis, be treated as non-transparent and consequently exocentric, since *-mili* without a coverb usually receives the interpretation of 'get'. However, one speaker on one occasion used *-mili* as a simple verb when she was clearly referring to scratching.

Since at least some coverb-verb combinations are clearly exocentric in nature, the canonical complex verb construction is treated here as a single construction type which is principally exocentric, and which is neutral as to differences in the semantic relationship between coverb and verb. Its constructional meaning is extremely general: canonical complex verbs are used to describe a unitary macro-event, as defined in §1.4.3. Whether coverb and verb describe clearly separate subevents or not, and whether those subevents are interpreted as simultaneous or sequential, is not structurally reflected in the expression itself.

3.2.5 Summary

In this section, Jaminjung complex verbs were shown to function syntactically as a single predicate. They form a close-knit unit prosodically, and usually also in terms of word order. The constituents of the complex predicate share their values for tense/aspect/mood and polarity, and take a single set of morpho-syntactic arguments, the argument structure being jointly determined by coverb and verb. This means that Jaminjung complex verbs have to be regarded as exocentric complex predicates, on a par with, for example, serial verbs or particle verbs (see §7.2.3 for further discussion of the similarities and differences with respect to other types of complex verb constructions). In the terminology of Role and Reference Grammar, they can be regarded as nuclear junctures (see e.g. Foley & Van Valin 1984, Foley & Olson 1985, and Van Valin & LaPolla 1997: 448).

The canonical complex verb construction does not indicate anything about the semantic relationship between coverb and verb. For example, it is neutral as to whether the coverb encodes the manner or the result of the event type encoded by the verb. It was argued in the previous section that its constructional meaning is simply the representation of two (or more) subevents as a unitary macro-event. This construction is represented schematically in Fig. 3-1. Recall from the discussion in §3.2.2 that the order of the constituents is not fixed (although the preferred word order is coverb-verb), that other constituents may (if rarely)

intervene between coverb and verb, and that more than one coverb may combine with a single verb in the same intonation unit.

Fig. 3-1. *The canonial complex verb construction*

Form	Coverb	Verb	(Coverb)
Meaning	Unitary macro-event		

Of course, there are restrictions on what may be represented as a unitary macro-event. That is, not any coverb may combine with any verb, but the two have to be semantically compatible. The semantic relations that may hold between the constituents of canonical complex verbs will be investigated in more detail from the perspective of argument structure in Ch. 4, from the perspective of the generic verbs in Ch. 5, and from the perspective of the coverbs in Ch. 6. A summary of the lexicalisation patterns in canonical complex verbs can be found in §6.21.

Note that under the definition of 'lexicon' and 'grammar' adopted in §1.4.1.3, canonical complex verbs can be considered as expressions licensed by a grammatical construction which are at the same time lexicalised to a greater or lesser degree, i.e. which form part of the conventionalised set of expressions in a language.

3.3 Complex verb constructions with marked coverbs

In §3.2, canonical complex verbs were defined as consisting of one or more unmarked coverbs, combining with a verb under a single intonation contour. In this section, a number of constructions that combine coverbs and verbs will be discussed with the purpose of distinguishing them from canonical complex verbs. They all have in common that the coverb is marked. In the first two constructions, the marker is the 'continuous' derivational suffix *-mayan* (see also §2.3.2.2). In the first construction, discussed in §3.3.1, the derived coverb combines with one of two verbs in auxiliary function. This construction has the clear characteristics of a progressive construction and will be distinguished from a construction involving a coverb marked with *-mayan* in combination with any other verb (§3.3.2). In the third construction (§3.3.3), the coverb is marked with the 'cotemporal' clitic *=(C)ung*, which may also follow nominals and verbs (see §2.5.2), and functions as a secondary predicate.

3.3.1 The progressive construction

Jaminjung has a periphrastic progressive construction very similar to that found in English, and many other languages. In Jaminjung, however, this construction bears a close formal relationship to canonical complex verbs, which is reflected in the existence of lexicalised complex verbs originating in progressives.

The productive progressive construction combines a coverb derived with the continuous suffix *-mayan* with either *-yu* 'BE' or *-ijga* 'GO' in auxiliary function. As already indicated in §2.3.2.2, the suffix *-mayan* has a very similar function to the English suffix *-ing*.

(3-21) **bulug-mayan**=biya yurru-**yu**, ngiyina, minyga,
drink-CONT=NOW 1pl.incl-BE.PRS DIST what's.it.called

gugu ti: \
water tea

'let's be drinking now, that, what's it called, tea' (IP, F03731)

The verb in the progressive construction can be in both present and past tense, and more rarely, also in potential/future mood, but there are only a few examples of irrealis, and no examples of imperative marking, with progressives. These restrictions on tense/mood marking, as well as its general productivity, suggest that we are dealing with a construction that is different from, although formally related to, the canonical complex verb construction.

The progressive also allows for a specific argument structure which is not attested with other complex verbs. Even though the verb functioning as auxiliary is formally intransitive, the progressive construction still allows for two absolutive arguments to be expressed, provided the coverb is bivalent. This is illustrated in (3-20) and (3-21) above (see also §4.3.1.2). The fact that the valency of the verb does not result in a restriction on the argument structure of the complex predicate is another piece of evidence for the grammatical function of this construction. Indeed it functionally corresponds to the typical progressive as characterised by Bybee & Dahl (1989: 80f.): it signals that an activity is ongoing at reference time, and requires a steady input of energy. The use of *-ijga* 'GO', rather than *-yu* 'BE', adds a semantic component of habitual or prolonged activity; compare (3-22) below with (3-21) above (see also §5.2.1.1 and §5.3.2.3 for further discussion and examples).

(3-22) gurrany=biya nga-**ngga** **burlug-mayan** / marring \
NEG=NOW 1sg-GO.PRS drink-CONT bad

'I don't drink (alcohol), it's bad' (MW, E16522)

Still, the constituents of the progressive construction show the same ordering possibilities as those described for canonical complex verbs in §3.2.2: the

continuous-marked coverb and the verb are usually contiguous, and never separated by an intonation boundary. Although the order coverb-verb, as in (3-21) above, is clearly preferred, the reverse order is also attested, as in (3-22) above. Only very occasionally, other constituents can intervene between coverb and verb, as in (3-23).

(3-23) **wurrg-mayan** nganthanug mali **ga-yu**=ngarndi,
chuck-CONT what:DAT thing 3sg-BE.PRS=SFOC2
'why is she throwing around things?' (IP, F01521)

The schematic representation in Fig. 3-2 also shows the similarities to the canonical complex verb construction (see Fig. 3-1 in §3.2.5).

Fig. 3-2. *The progressive construction*

Form	Coverb-*mayan* [-*yu* 'BE' / -*ijga* 'GO']$_{Verb}$
Meaning	Progressive

Presumably because of this formal similarity between the progressive construction and canonical complex verbs, we find a curious type of 'lexicalised progressive' in Jaminjung. This is not formed with the productive suffix *-mayan*, but is otherwise similar to the productive progressive in that it is restricted to the two verbs that can take on an auxiliary function, *-yu* 'BE' and *-ijga* 'GO'. The 'lexicalised progressive' also shows the same argument structure properties as the productive progressive, i.e. it allows for two absolutive arguments if the coverb in question is bivalent (see §6.3 for examples). On the other hand, combinations of this type are also similar to canonical complex verbs: they do not alternate with simple (i.e. non-progressive) expressions. Rather, the coverbs occurring in these combinations simply may not combine with verbs other than the two auxiliary verbs. As (3-24) shows, the resulting complex verbs are not restricted in their tense and mood values, but freely occur in irrealis (and also imperative) mood.

(3-24) gurrany **garrwaja** **yanj-iyaj,** girrb ba-iyaj
NEG swear IRR:2sg-BE quiet IMP-BE
'don't swear, be quiet!' (JM, NUN020)

Crucially, the coverbs in these combinations bear one of a number of endings including *-ja* in *garrwaja*, the coverb in the example (3-24) above. These endings have to be regarded as non-productive or at most semi-productive, but presumably originated from a productive suffix with a similar function to *-mayan* 'CONTinuous'. This is corroborated by the fact that coverbs of this type do not take the productive suffix *-mayan*. These coverbs are listed as 'coverbs of continuous activity' in §6.3. In one sense, the coverbs derived with the productive

suffix *-mayan* also belong to this class (without being listed in §6.3). However, the coverbs bearing the non-productive endings often (though not always) have no underived counterpart and can therefore only form complex verbs with *-yu* 'BE' and *-ijga* 'GO'. Consequently, the resulting complex verbs are no longer restricted to expressing a progressive meaning, but become the unmarked type of complex predicate expressing a certain lexical meaning. These lexicalised progressives are therefore treated here as canonical complex verbs. However, it has to be recognised that the boundary between these and the productive progressive construction is somewhat fuzzy.

3.3.2 Other verbs combined with continuous-marked coverbs

In addition to occurring in the progressive construction, coverbs derived with the continuous suffix *-mayan* may also combine with other verbs. Combinations of this type pose a problem for the analysis (which is why they are treated as a distinct construction type here). On the one hand, they exhibit similarities to canonical complex verbs: they may be part of the same intonation unit, and in this case show the same ordering preferences as canonical complex verbs. Examples are (2-80) in §2.3.2.2, IV/6 in the Appendix, and (3-25) and (3-26) below.

(3-25) larrwa **gana-ma-ya** **bu'-mayan**
pipe 3sg:3sg-HAVE-PRS blow-CONT
'he has got a cigarette (and is) smoking' (Topological Relations Picture book) (DP, SPA048)

(3-26) **jarr-mayan**=biya **gan-arra-m**=ngarndi ba-ngawu!
put.down.one-CONT=NOW 3sg:3sg-PUT-PRS=SFOC2 IMP-SEE
'she keeps putting them down, look!' (books in TEMPEST videos) (IP, E08185)

The puzzling fact about this construction type is that the atelic coverb may combine with presumably telic verbs (as in (3-26) and IV/6) as well as with atelic verbs. With telic verbs, the reading contributed by the continuous-marked coverb is a repetitive one: in IV/6, the white man repeats the shooting, and (3-26) describes a video-taped scene where a woman is stacking books, putting them down one after the other. Furthermore, unlike in canonical complex verbs, collocational restrictions between coverb and verb do not seem to hold in these cases. For example, the coverb *ngabuj* 'smell' in (2-80), in its underived form, only combines with the verb *-mili*/*-angu* 'GET/HANDLE', but not with *-ruma* 'COME'. Similarly, unmarked *bu* 'blow' only combines with *-arra* 'PUT', but not with *-muwa* 'HAVE', as it does in (3-25).

Alternatively, therefore, expressions like (3-25) and (3-26) could be analysed as combinations of an adverbial subordinate clause (or, alternatively, a secondary predicate[56]) in combination with a main predicate, where the continuous-marked coverb has a function similar to converbs with a simultaneous reading in other languages. This analysis is even more plausible where the continuous-marked coverb (possibly with its arguments) is separated from the verb (the main predicate) by an intonation boundary, as in (3-27) and (3-28).

(3-27) wagurra=biyang dibird gani-ma-m, **mung-mayan **
rock=NOW be.wound.around 3sg:3sg-HIT-PRS look.at-CONT

'it winds around a rock, looking (at you)' (snake on hat in Men & Tree 1.7) (DR, D22033-4)

(3-28) Depot warrg nga-gba \
<place.name> work 1sg-BE.PST

**nindu, dimana[57], ngama-ngamang-mayan **
horse horse RDP-ride-CONT

'I worked at the Depot \ riding horses \' (DM, E19450-3, recorded by Mark Harvey)

A satisfactory analysis of continuous marked-coverbs in combination with verbs other than the 'auxiliary' verbs *-yu* 'BE' and *-ijga* 'GO' demands further investigation. Therefore, combinations of this type will be left out of consideration in the remaining chapters.

In the interest of clarity, the similarities and differences between the four construction types discussed in the preceding sections are summarised in Table 3-1 below. These are the canonical complex verb construction (CCV, §3.2), the subtype of canonical complex verbs that resemble a lexicalised progressive (§3.3.1), the productive progressive construction (§3.3.1), and the combination of coverbs marked with the continuous-suffix with verbs other than the 'auxiliary' verbs *-yu* 'BE' and *-ijga* 'GO.

56 See König & van der Auwera (1990), Müller-Bardey (1990), and Haspelmath (1995) for a discussion of the use of present participle forms as secondary predicates.

57 *Nindu* and *dimana* are dialectal variants for 'horse'.

Table 3-1. *Comparison of different complex verb constructions*

Construction type / Property	Canonical Complex V	Lexicalised Progressive	Productive Progressive	Coverb-*mayan* + Verb
Continuous-marking of coverb	—	(non-productive endings)	√	√
Restriction to auxiliary verbs	—	√	√	—
Restrictions w.r.t. T/A/M-marking	—	—	√	??

All four construction types could be distinguished and treated as constructions in a 'family resemblance' relationships, following Goldberg (1995) (see also §1.41.1). For the purposes of the present study, the lack of a productive continuous-marking suffix will constitute the main criterion for the inclusion of combinations of the 'lexicalised progressive' type with the canonical complex verb construction, which will be considered further in Chs. 4, 5 and 6.

3.3.3 Cotemporal-marked coverbs as secondary predicates

For several Australian languages, clitics have been described which may attach to "nominal predicates which describe the state of a participant at the time when the action described by the main predicate is taking place" (Dench 1995: 181; see also Dench & Evans 1988: 14), or which facilitate a secondary predicate reading of nominals (Hale 1983: 32f., Simpson 1991: 200 for Warlpiri). These forms are usually glossed as 'then', 'now', or 'still'.

Depictive secondary predicates describe a condition that holds for one of the arguments during the assertion time of the main predicate (e.g. *raw* in *She ate the fish* ***raw***). Resultative secondary predicates describe a condition that holds for one of the arguments as a result of the event denoted by the main predicate (e.g. *open* in *She cut the fish* ***open***).

The clitic *=(C)ung* in Jaminjung has a similar function: it indicates cotemporality of an event or condition with the speech situation (when following the main predicate), or dependence of temporal interpretation on the main predicate (when following a predicative nominal or coverb) (see Schultze-Berndt 1999 for details). Coverbs marked with the cotemporal clitic *=(C)ung* can be analysed as secondary predicates: they may have either a depictive reading, as in (3-29), or a resultative reading, as in (3-30). However, this semantic criterion is not sufficient to warrant a secondary predicate analysis. Coverbs may well have a resultative or depictive interpretation when part of a canonical complex predicate. The clitic *=(C)ung*, in addition, has the effect that the event encoded by the coverb is

asserted independently of the main predicate, which is a further criterion for the secondary predicate status (cf. e.g. Nichols 1978, Winkler 1997).

(3-29) **nginy=nyung** na-**ruma**-ny wurrgurru=marraj
bare.teeth=COTEMP 2sg-COME-PST devil=SEMBL
'showing your teeth you came like a devil' (IP, F01251)

(3-30) majani janga yawurr-**inangga**-ji \
maybe sore IRR:3pl-CHOP-REFL
digirrij=jung \
die=COTEMP
'maybe they will hurt each other \ severely \ (lit. 'dead')' (IP, E09244)

As (3-29) and (3-30) also show, the cotemporal-marked coverb may be part of the same intonation unit as the main predicate, or be separated from it by an intonation boundary. When it is part of the same intonation unit, it may appear in anti-iconic order with respect to the verb, just like coverbs in canonical complex verbs.

Coverbs occurring in this type of construction may often form a canonical complex verb with the same verb. For example, in (3-31a), the coverb *jarndang* 'go down completely' is both marked with *=(C)ung*, and separated from the verb *-ma* 'HIT' by an intonation unit boundary. The event of (the dog's) falling down completely is thereby asserted independently of the 'pushing' or 'hitting' described by the verb. When the same scene is summarised again in the subsequent intonation unit (3-31b), *jarndang* is used as part of a complex verb, in anti-iconic ordering and with no intonation boundary intervening between coverb and verb.

(3-31a) jag=gung ganuny-**ma**!
go.down=COTEMP 3sg:3du-HIT.PST
jarndang=ung \
go.down.completely=COTEMP

b) wirib **jarndang** gani-**ma**,
dog go.down.completely 3sg:3sg-HIT.PST
mayi barraj=jung \
person further=COTEMP
'it pushed the two such that they went down! all the way down \ it pushed the dog right down, and the person too \' (Frog Story) (IP, F03227-30)

However, not all expressions with a cotemporal-marked coverb have semantically equivalent complex verb expressions. For example, most coverbs of

spatial configuration do not form unmarked complex predicates with verbs of contact/force like *-ma* 'HIT', but may combine with them in a resultative interpretation when marked with *=(C)ung*, as illustrated in (3-32).

(3-32) gani-**ma**-m **mugurn=ung**=biyang
3sg:3sg-HIT-PRS lie=COTEMP=NOW
'he hits someone such that he/she lies down'

Another difference between this type of secondary predicate construction and the canonical complex verb construction, which provides evidence for the claim that coverbs in this construction make an independent assertion, is that coverbs marked with *=(C)ung* can be negated independently (cf. §3.2.3 above). This is illustrated in (3-33). It is clear from the context that the 'falling' is not negated here, but only the (potential) result, the dying.

(3-33) maja=gung **gurrany** **digirrij=ung** ga-**rdba**-ny,
like.that=COTEMP NEG die=COTEMP 3sg-FALL-PST
jalag=ung ga-yu
good=COTEMP 3sg-BE.PRS
'(The young bird fell down from the nest to the ground). However, it didn't fall such that it died, it is still all right' (bird in children's book) (DR, BAR012/13)

Combinations of a verb with a coverb marked with the clitic *=(C)ung*, just like the combinations with a continuous-marked coverb discussed in §3.3.1 and §3.3.2, therefore have to be distinguished from coverb-verb combinations in a canonical complex verb construction with unmarked coverb, even when both constituents form a close-knit unit prosodically. Only canonical complex predicates as defined in §3.2 will be considered for the description of argument structure in Ch. 4 and for the establishment of coverb classes on the basis of the attested combination with verbs in Ch. 6.

3.4 Coverbs as semi-independent predicates

In §3.2, canonical complex verbs were defined as consisting of one or more unmarked coverbs, combining with a verb under a single intonation contour. We will now turn to the use of unmarked coverbs as predicates in an intonation unit on their own, without an accompanying verb. These have to be distinguished both from coverbs in canonical complex verbs and from case-marked coverbs in a non-finite subordinate clause, as discussed in §2.6.5. Coverbs as semi-independent predicates often form an intonation unit by themselves, but may alternatively occur with an argument (usually just one).

The interpretation of unmarked coverbs in a separate intonation unit is to a large extent dependent on the linguistic and extra-linguistic context; for this reason, they are termed 'semi-independent predicates' here. Not only are coverbs non-finite and cannot encode temporal and aspectual information, or cross-reference arguments, but also semantic information that would be encoded by a verb in a canonical complex verb construction is missing from these expressions.

Three main types of semi-independent predicates can be distinguished according to their interpretation. Possibly, prosodic correlates of these different types could also be found on closer investigation. Coverbs as semi-independent predicates can have imperative illocutionary force (§3.4.1), occur in narrative sequence (§3.4.2), or have a secondary predicate interpretation (§3.4.3). Tentatively a fourth type is distinguished, involving a restricted set of phase coverbs which indicate completion of an event (§3.4.4).

3.4.1 Coverbs with imperative illocutionary force

Coverbs on their own, i.e. without a verb, can be used in the function of imperatives. Recall that inflected imperative forms of verbs also exist, and these may form complex verbs with coverbs (see §2.4.1.3.1.3). The use of a bare coverb with imperative illocutionary force is more frequent for some coverbs – like the directional *buyi* 'keep going' – than for others, and is generally more frequent in speech directed to children. The textual example in (3-34) is from a video where a group of children were given orders to demonstrate their understanding of the language. It shows both imperative verb forms (3-34a, c) and coverbs as semi-independent predicates (3-34a, b, d)

(3-34a) DM: ya, langiny **ba-rrga**!
yes wood IMP-APPROACH
ya maja=na **buyi**! **warrng**!
yes thus=NOW keep.going walk
'go to the tree! yes like that now, keep going! walk!'

b) MM: **walig**!
round
'around!' (i.e. around the tree)

c) DM: **walig-walig** **ba-wurr-ijga!**
RDP-round IMP-2pl-GO
'go around, all of you'

d) MM: **walig** **buyi**!
round keep.going
'around (and) keep going!'

Verbless negative imperatives may be formed by adding the privative suffix *-marnany* (Ngaliwurru: *-miyardi)* to a coverb (see §2.3.2.4).

3.4.2 Coverbs in narrative sequence

Where coverbs are used as semi-independent predicates with declarative rather than imperative illocutionary force, they always have a stylistic effect of immediacy of description. Coverbs in this type of construction are quite frequent in Jaminjung texts (they are somewhat under-represented in the texts in the Appendix; see §3.6 below), with large differences in frequency depending on the individual speaker. They are most common in comments on an ongoing situation, in narratives, and particularly in procedural texts. (3-35) is a fragment from a longer procedural text, co-constructed by two speakers, on hunting and cooking echidna. In six subsequent intonation units, not a single inflecting verb is used. In the first three intonation units (3-35a-c), the coverb occurs with an absolutive noun phrase representing a patientive participant.

(3-35a) NG: jungguwurru **yirr**,
echidna move.out
'(we used to go up the hill for porcupine), pulled out the porcupine,'

b) guyug luba **dalb**,
fire big light.fire
'lit a big fire'

c) en jiyab **bulg**,
and liver take.out.guts
'and took out the liver,'

d) **gub-gub** biya:, **bulg** \
RDP-come.out NOW take.out.guts
'took (them) out then, took out the guts \'

e) VP: **bum** \
apply.smoke
'smoked it'

f) NG: **murl**, ... gunjalg \
roast ground
'roasted it, (in the) ground \' (E09789-95)

Frequently, coverbs used as semi-independent predicates are pronounced with expressive prosody (see §3.2.1 above), represented by an exclamation mark in the transcription of (3-36) below.

(3-36) jungulug-di=biya kroba dud gan-angga-m **!deb:!**
one-ERG/INSTR=NOW crowbar hold.one 3sg:3sg-GET/HANDLE-PRS knock!

.. thanthiya-gurna ngayiny, malajagu \
DEM-?? meat/animal goanna

'one then picks up a crowbar (and) !knock! .. that animal, the goanna' (IP, F01568-9)

A further stylistic effect that can be achieved with coverbs as semi-independent predicates is their iteration, iconically representing a repeated action. While reduplicated coverbs (see §2.3.2.1) only carry a single word stress, each repeated coverb receives its own word stress. The following utterance describes how sticks for obtaining tree honey are made from a piece of fibre by chewing them intensely. All instances of *jang* 'chew' in (3-37) carry emphatic stress.

(3-37) wardi gad yirra-nangga:,
tree.species cut 1pl.excl:3sg-CHOP.PST

^jang ^jang ^jang ^jang, yathang=ung \
chew all.right=COTEMP

'We cut (bark off?) the *wardi* tree, chew!, chew!, chew!, chew!, all right then' (EH, E18171-2)

Coverbs used as semi-independent predicates in narrative sequence have a clear stylistic effect of vividness of narration or description. This effect is not unlike that of stripped verb stems in some registers of spoken language in familiar European languages, e.g. Engl. *smash!* or German *keuch!* 'gasp' or *schwitz!* 'sweat (v)'. In this respect, Jaminjung coverbs are also reminiscent of ideophones as described for many other languages (see Schultze-Berndt, to appear).

The use of an unaccompanied coverb leaves the participants and the temporal interpretation unspecified and open to inference from the context. It is as if the hearer is invited to become more involved in the 'decoding' of the reported event by having to supply the information about the participants and temporal reference which would be contained in the generic verb in a canonical complex verb construction. In addition, the hearer may also have to reconstruct some semantic information that would be contributed by the generic verb. It is consistent with this characterisation that coverbs in this usage are often accompanied by iconic gestures.

Expressions of this type are only employed in highly contextualised genres, i.e. narratives and procedural texts, conversations, and comments on ongoing situations. When asked to repeat an intonation unit for clarification, or for

translation out of context, speakers will supply the appropriate generic verbs, i.e. produce canonical complex verbs. Coverbs as semi-independent predicates are also absent from isolated elicited sentences, and from other more decontextualised genres. For example, they are not found in descriptions of photos for a booklet decided upon – often with lengthy discussions – by a group of speakers and dictated to me (the genre closest to written texts that is attested for Jaminjung).

3.4.3 Coverbs in a secondary predicate reading

Frequently, a coverb functioning as a semi-independent predicate in a separate intonation unit clearly predicates on one of the arguments of the (simple or complex) predicate in the preceding intonation unit, and receives a resultative or a depictive reading with respect to this predicate. In this case, illustrated in (3-38) and in (3-40) below, the coverb could be analysed as a secondary predi-cate. Their interpretation is similar to that of the marked coverbs described in §3.3.3, even though they do not bear the cotemporal marking (compare e.g. (3-38) below with (3-30) in §3.3.3).

(3-38) jamang ngarrg burr-angga-m \
finally strangle 3pl:3sg-GET/HANDLE-PRS

digirrij \
die

'finally they strangle it, dead' (IP, F01033)

A coverb as semi-independent predicate in a depictive reading is illustrated in (3-39).

(3-39) ngiyi=biya wurlgba gan-antha \
PROX=NOW carry.on.shoulder 3sg:3sg-TAKE.PRS

burdurdubba \
gallop

'here it is carrying him away \ galloping \' (deer -> boy, in picture book) (IP, F03224-5)

Coverbs used in this way may always also form a canonical complex verb with the verb in the preceding intonation unit, since depictive and resultative relationships are among those lexicalised as complex predicates. This is illustrated in the – spontaneously produced – 'minimal pair' in (3-40). In (3-40a), the coverb *jarlwab* 'safe' appears as a secondary predicate, separated from the main predicate by two intonation boundaries. In (3-40b), the same coverb and the same verb constitute a complex predicate. This time, the coverb *wurlurlu* 'enter a

three-dimensional container through an opening', which is part of the main predicate in (3-40a), is used as a secondary predicate in (3-40b).

(3-40a) **wurlurlu** nga-w-**arra**, mhm \
enter.through.opening 3sg:3sg-FUT-PUT

ngarrgina-bina tin box \
1sg:POSS-ALL tin box

jarlwab \
safe

'I am going to put it in, mhm \ into my tin box \ (in a) safe (place) \ (food) (IP, E08042-44)

b) **jarlwab** gan-**arra**-m na,
safe 3sg:3sg-PUT-PRS NOW

wurlurlu \
enter.through.opening

beg-gi \
bag-LOC

'she saves it now, (putting it) inside \ in a bag \' (IP, E08029-30)

The reverse generalisation, however, does not hold: not all coverbs found in a complex predicate may also be used as secondary predicates in this way. Unlike word order in the canonical complex verb (see §3.2.2), therefore, the possibility to have coverb and verb separated by an intonation boundary is a test for the degree of semantic transparency of a coverb – verb combination. Specifically, where generic verbs have secondary senses which require the presence of a coverb (see Ch. 5), the coverb may not be separated from the verb in this way.

Although the occurrence of coverbs in a secondary predicate construction is subject to semantic restrictions, the difference between this construction and the canonical complex verb construction should not be regarded as a difference in semantic interpretation, but as a difference in information packaging. This is shown most clearly where complex verbs and secondary predicate constructions with the same verbs and coverbs are used to describe the same situation, as in (3-40) above. The difference is that the complex verb makes a single assertion, whereas, when separated by an intonation boundary, both predicates constitute independent assertions. The latter strategy of information packaging is often employed when the main predicate is already a complex predicate, as in (3-38), (3-39) and (3-40) above.

3.4.4 Phase coverbs as event delimiters

In some cases, coverbs used as semi-independent predicates stand in a clear semantic relationship to the preceding predicate, but cannot be interpreted as depictive or resultative secondary predicates. Rather, they function as delimiters of the event encoded in the preceding intonation unit(s), and serve the function of temporally structuring discourse. Usually the coverb is *burrb* 'finish', as in (3-41) and (3-42), but other potential temporal delimiters, such as *darrug* 'set, go down (of celestial body)' in (3-43), have also been found.

(3-41) warrg=biya yiny-agba::,
work=NOW 1du.excl-BE.PST

burrb \
finish

'the two of us worked, (then) finished' (DM, E19591)

(3-42) ga-rna-ya=biya guyug luba=biya::::,
3sg-BURN-PRS=NOW fire big=NOW

burrb \
finish

'bud gani-ma-m \
cook.on.coals 3sg:3sg-HIT-PRS

'it burns now, a big fire, (until) finished \ she (then) cooks it (meat) on the coals' (VP, E11265-6)

(3-43) m.=biyang gani-wardagarra-nyi waladbari-ni alibala \
ritual=NOW 3sg:3sg-FOLLOW-IMPF old.man-ERG/INSTR early

gani-wardagarra-nyi:, **darrug** \
3sg:3sg-FOLLOW-IMPF go.down(sun)

'in the morning then the old men followed the M. (initiation) ritual \ they went on (with the ritual), (until) sunset' (DM, E19150-1) (recorded by Mark Harvey)

Often, if not always, a special intonational pattern is used in expressions like those in (3-41) to (3-43): the last syllable of the first intonation unit is lengthened, the boundary is marked by rising intonation, and the coverb receives final, falling intonation.[58] This type of semi-independent predicate therefore appears to be more integrated with the preceding intonation unit than the types discussed in §3.4.1 to §3.4.3, i.e. coverbs used with imperative illocutionary

[58] See Wilson (1999: 76ff.) for a comparable construction in Wagiman, and the discussion of an example very similar to (3-43).

force, coverbs as semi-independent predicates in narrative sequence, and unmarked coverbs functioning as secondary predicates. Whether coverbs used as semi-independent predicates exhibit a semantic relationship to a verb in a preceding intonation unit or not, they have to be distinguished from coverbs in a canonical complex verb construction by the prosodic criterion.

3.5 The integration of Kriol loans in complex verbs

Present-day Jaminjung and Ngaliwurru speech exhibits a large number of loanwords from Northern Territory Kriol, and code-switching is very frequent (see also §1.2.5). In subsequent chapters, reference will repeatedly be made to the use of loanwords from Kriol in complex verbs as evidence for the productivity and the semantic basis of complex verb formation. Therefore, this section gives a brief overview of the attested patterns.

3.5.1 Kriol verbs borrowed as coverbs

Kriol verbs may function just like coverbs in canonical complex verbs. That is, they combine with Jaminjung verbs in the same position as Jaminjung coverbs do, within the same intonation unit. This usage of Kriol loans is also attested for other languages of the region (see e.g. McConvell 1985b).

The main difference between Jaminjung coverbs and Kriol loans in the same function is that many transitive verbs in Kriol have a 'transitive' suffix *-im*, which they retain when used as coverbs. On Jaminjung coverbs, there is no transitivity marking.

Evidence for the functional equivalence of a Kriol verb in coverb position and a Jaminjung coverb is that they are often spontaneously produced as translation equivalents of one another. For example, the speaker of (3-44b) corrects the speaker of (3-44a) by substituting Jaminjung equivalents for his Kriol loans.

(3-44a) **openim**=biyang **nga-bili** minyga bringgla
open:TR=NOW 1sg:3sg-FUT:GET/HANDLE what's.it.called sprinkler

gani-yu yurrag=mulu
3sg:3sg-SAY/DO.PST 1pl.incl.OBL=COLL

'I'm going to turn on the sprinkler, he told all of us' (quoting a man who turned on sprinklers on the lawn where a group of people were sitting and told them to move) (MM, D11024)

b) **bawu** **nga-bili** gugu imin tok
open 1sg:3sg-FUT:GET/HANDLE water he:PST talk

'I'm going to turn on the water, he said' (DP, D11025)

The examples in (3-45) and (3-46) show that the borderline between code-switching and borrowing is sometimes difficult to determine: in (3-46), for example, the inflected verb form is the only Jaminjung word in the intonation unit.

(3-45) jamana **gan-anja** **werim** ole taim
foot/shoe 3sg:3sg-TAKE.PRS wear:TR all.the time

'she is wearing shoes all the time' (DR, CHE177)

(3-46) rait, **shiftim** **yirr-ijga-ny** la natha pleis \
right shift:TR 1pl.excl-GO-PST LOC another place

'right, we moved over to a different place' (to look for yam) (NG, E01055)

Further examples for Kriol verbs used as coverbs can be found throughout Ch. 5, and in II/10, II/13, II/28, III/25-26, III/35, and III/38 in the Appendix.

3.5.2 Jaminjung coverbs with Kriol verbs

A pattern in which a Kriol verb functions like the inflecting verb in a complex predicate, in combination with a Jaminjung coverb is also attested. Most frequently, the Kriol verb is the past tense auxiliary *bin*, as in (3-47) (for a further example, see II/7 in the Appendix).

(3-47) thei **bin** **bag-bag** <x the: x> mangarra \
3pl PST RDP-break 3pl? plant.food

'these broke off their plants' (yam roots, instead of digging them up whole) (DR, E09396)

Lexical Kriol verbs may also be used in combination with a Jaminjung coverb, as in (3-48) and (3-49). (3-49) is typical of speech addressed to children.Sometimes even a Kriol and Jaminjung translation equivalent are juxtaposed to one another, as in (3-50).

(3-48) wi bin.. **go** **buru** then, motika-bina \
we PST go return then car-ALL

'we went back then, to the car' (NG, E01071)

(3-49) tharrei:: yu **getim** **durd**!
there you get:TR hold.one

'the::re you pick it up!' (DR)

(3-50) ey, yu ka:n **sten** **gurdij** brabli?
INTERJ you can't stand stand properly
'hey, can't you stand up properly?' (to horse in Farm Animal Game that kept falling over) (MMc, E13194)

Thus, Jaminjung coverbs and Kriol verbs are rather flexible in their combinations. (Note, however, that Kriol verbs never take Jaminjung verbal inflections.) Examples in subsequent chapters will be mainly of the type illustrated in §3.5.1, that is, of Kriol verbs functioning as coverbs, but this should not be taken to represent the only possibility of integrating loans.

3.6 Summary

In this section, several simple and complex predicate constructions were distinguished. The simplest type of predicate consists of an inflected verb alone (§3.1). Canonical complex verbs, as defined in §3.2, combine an inflected verb and one or more unmarked coverbs in a single intonation unit. Both simple verbs and canonical complex verbs represent unitary events.

The periphrastic progressive construction was discussed in §3.3.1. It bears a close formal relationship to the canonical complex verb construction in terms of prosodic integration and word order, but the coverb in this case is marked with the continuous suffix *-mayan*, and the verb is either *-yu* 'BE' or *-ijga* 'GO' in auxiliary function. Continuous-marked coverbs may also combine with other verbs than *-yu* 'BE' and *-ijga* 'GO, but it is unclear whether the resulting combinations should be analysed as complex predicates, or whether the coverb here has an adverbial function (§3.3.2). Coverbs marked with the cotemporal clitic *=(C)ung* (§3.3.3) were also distinguished from unmarked coverbs in canonical complex verbs, in that they were analysed as secondary predicates.

Unmarked coverbs constituting the only predicate in an intonation unit were also identified as a distinct construction type, termed 'semi-independent' predicates here. Depending on their illocutionary force, and the presence or absence of specific semantic relationships to the preceding predicate, several subtypes of semi-independent predicates can be distinguished. In the absence of a clear semantic relationship to a preceding predicate, coverbs may be used with imperative illocutionary force (§3.4.1) or in narrative sequence (§3.4.2). Both types of expression are stylistically marked and restricted to highly contextualised discourse. Unmarked coverbs in a separate intonation unit may also function as secondary predicates if they are in a depictive or resultative relationship with respect to a preceding (verbal) predicate (§3.4.3), or as phase predicates if they delimit the event encoded in the preceding intonation unit (§3.4.5).

Recall also that coverbs may function as the sole predicate in a non-finite subordinate clause, of the type discussed in §2.6.5. Coverbs in this function always carry one of a number of case markers indicating the semantic relationship of the subordinate clause to the main clause, e.g. purposive or anterior.

Table 3-2 presents an overview of the relative frequencies of these constructions in the five texts reproduced in the Appendix (other construction types, e.g. nominal predicates, were left out of consideration in the text count). Note that none of the texts contains a progressive form or a coverb marked with the cotemporal clitic; this is clearly an artefact of the sample (see §3.3.1 for an overview of text types with frequent occurrences of the progressive). Combinations of a Kriol loan used as coverb and a Jaminjung verb (§3.5.1) were counted as canonical complex verbs. Predicates consisting only of Kriol words or of the Kriol auxiliary *bin* and a Jaminjung coverb (§3.5.2) were not counted.

The results show that despite the small number of verbs (around 30), simple verbs as main predicates have a very high text frequency of almost 40%. Canonical complex verbs (including those with Kriol loans used as coverbs) have a frequency of around 50%, while constructions involving continuous-marked coverbs, unmarked coverbs as semi-independent predicates, and case-marked coverbs as predicates in a subordinate clause are much less frequent. These results are consistent with other text counts (see §5.10.3).

Table 3-2. *Relative frequency of simple and complex predicates in five texts*

Text / Construction	I	II	III	IV	V	Total N	Total %
Simple verb	3	15	15	9	17	59	**38**
Canonical complex verb	12	10	27	19	7	75	**49**
Progessive	0	0	0	0	0	0	**0**
Continuous-marked coverb (not progressive)	0	0	1	2	0	3	**2**
Cotemporal-marked secondary predicate	0	0	0	0	0	0	**0**
Semi-independent pred.	4	0	6	3	2	15	**10**
Coverb as predicate in case-marked subordinate clause	0	0	2	0	0	2	**1**

In the remainder of this study, simple verbs and canonical complex verbs will constitute the focus of investigation. They will be discussed from the angles of argument structure (Ch. 4), generic verb semantics (Ch. 5) and coverb semantics (Ch. 6).

ARGUMENT STRUCTURE OF SIMPLE AND COMPLEX VERBS

CHAPTER 4

Complex predicates of the type found in Jaminjung pose a challenge for the mainstream approach to valency or argument structure. The standard approach is characterised by the view that the syntactic behaviour of relational lexemes – of which simple verbs are seen to be the prototype – is determined by a lexical property of syntactic relationality. This is couched in terms like 'verbs govern their complements', 'verbs assign case' or 'verbs project their argument structure'.

Complex predicates are problematic for this approach because they consist of more than one (potentially) relational lexeme which may influence the syntactic behaviour of the predicate. In Jaminjung, canonical complex predicates, as defined in §3.2, consist of an inflecting verb from a closed class and a non-inflecting element, a coverb, in a single intonation unit. Within the lexicalist approach to argument structure, three analyses are logically possible.

The first possibility is that the coverb is not relational, i.e. it does not have syntactic valency or the potential to govern complements. This means that argument structure is determined by the verb alone. The non-inflecting element, the coverb, only functions as an adverbial modifier of the verb. This analysis has been proposed, e.g., by Cook (1988) for Wagiman, a language which is geographically close, and structurally similar, to Jaminjung.

The second possibility is the converse of the first. The verb is considered to be semantically 'empty' to the degree that it has no or only a 'skeletal' argument structure. Instead, argument structure is determined by the semantically specific, non-finite element alone, which in this case, of course, has to be relational. This analysis has been suggested for the light verb constructions e.g. of Japanese (Grimshaw & Mester 1988). Neither analysis is tenable for Jaminjung complex verbs (for reasons which were briefly summarised in §3.2.4, and which will become clearer in this chapter). Both types of analysis also have been shown to be untenable for complex predicates in other languages.[59]

A third possibility is to treat the complex predicate as an unanalysable lexical unit which determines argument structure as a whole, just like a simple predicate.

[59] See Durie (1997) for serial verbs in various languages, Mohanan (1994) for light verb constructions in Hindi, and Matsumoto (1996) for light verb constructions in Japanese, among others.

This is the analysis often given to the lexicalised particle verbs in European languages (but see Lehmann 1983, and the references cited on this topic in §1.4.1.3). This is not a convincing alternative for Jaminjung, because it misses a number of generalisations about the possible combinations of verbs and coverbs, and about the morphosyntactic behaviour of the resulting complex verbs, that can be stated most clearly if one considers each as a relational lexeme in its own right. Moreover, the 'lexical complex verb' analysis also cannot explain why Jaminjung coverbs may function as the predicate in non-finite subordinate clauses without a verb (§2.6.5), or as a semi-independent predicate, again without a verb (§3.4), or as what is in many respects the main predicate in productive progressive constructions with a verb in auxiliary function (§3.3.1).

Note, however, that under the definition of 'lexicon' and 'grammar' provided in §1.4.1.3, recognition of the independent status of coverbs and verbs as relational lexemes does not preclude recognition of complex verbs as expressions that are lexicalised – that is, conventionalised – to varying degrees.

An alternative, fourth possibility has been explored for complex predicates in a number of languages. According to this analysis, both constituents of a complex predicate are relational, and jointly determine its syntactic possibilities. This approach necessarily leads to the adoption of a concept of 'argument fusion' or 'argument sharing': the relational properties of two (or more) lexemes join forces, as it were, to determine the relationality of the complex predicate. Analyses of this type have been suggested for Latin particle verbs by Lehmann (1983), for light verb constructions in Hindi, Urdu, and Japanese by Mohanan (1994, 1997), Butt (1997), and Shibatani (1996), respectively; for serial verb constructions in a number of languages by Foley & Olson (1985), Durie (1997), and Andrews & Manning (1999), and for the complex verbs of the Northern Australian language Wagiman by Wilson (1999), among many others.

Argument sharing can be implemented in any framework that allows for unification. In this study, I adopt a Construction Grammar approach to argument structure, as outlined in Goldberg (1995). According to this approach, grammatical constructions – including those representing arguments – are seen as signs in their own right, i.e. their existence does not depend on the valency of lexical items. Predicates are not assigned a syntactic, but only a semantic valency. Central participants can be identified by language-specific criteria; for example, they may have to be expressed obligatorily, and/or as unmarked arguments. Participants (semantic arguments) can be mapped directly onto the argument roles of grammatical constructions. Lexical items and constructions may unify on the basis of semantic compatibility. This does not preclude restrictions in productivity by degrees of conventionalisation; see §1.4.1.2.

This constructional approach is more flexible than the traditional approach based on syntactic valency. First, it avoids the notorious problems posed by the

complement-adjunct distinction. For Jaminjung, the difficulties of identifying complements as opposed to adjuncts will be discussed in §4.1.1 and throughout §4.2 below.

Second, a single participant may also be represented in more than one constructional argument slot. Therefore, a constructional analysis is well suited to dealing with a language of the 'double marking' type, that is, a language where argument roles are indicated both by bound pronominals and by case marking. A representation of the interaction of case-marked noun phrases and bound pronominal marking is introduced in §4.1.2.

Third, the constructional approach lends itself easily to a representation of argument sharing. The same argument slot of a construction may represent – by unification – participants of more than one relational lexeme. A way of representing argument sharing (or rather, participant sharing) is introduced in §4.1.3 below.

In §4.1.3, I will also provide operational criteria for identifying central participants of Jaminjung coverbs and verbs, in terms of expression as core arguments. Since core arguments in Jaminjung cannot be identified by recourse to fundamental grammatical relations, or by relying on cross-reference marking alone, or case marking alone, I will argue for a 'mixed' definition of core arguments which takes into account both cross-reference marking and case marking. Central participants will be defined as those expressed as core arguments across all constructions where a given predicate occurs.

Section 4.2 provides additional justification for the constructional approach just outlined, by providing constructional meanings for the main case-marking constructions and the bound pronominal construction, and by accounting for their integration with participant roles. It will be shown that cross-reference marking (following a basically nominative-accusative pattern) and case-marking (following an ergative-absolutive pattern) do not converge but rather diverge in their functions, and are therefore better treated as constructions in their own right, rather than as exponents of grammatical relations. Some additional constructions of relevance for the description of argument structure in Jaminjung are also discussed in this section.

Section 4.3 provides a systematic overview of patterns of argument sharing in Jaminjung complex verbs, that is, the possibilities of combining verbs and coverbs with different valencies.

4.1 A construction-based approach to Jaminjung argument structure

4.1.1 Problems of identifying core arguments

In the typological-functionalist literature,[60] there is a consensus that grammatical relations like 'subject' and 'object' are not universal primitives, but multi-factorial categories which arise from the grammaticalisation of semantic and pragmatic constraints on certain syntactic constructions. This means that languages can have categories with degrees of 'subjectlike' or 'objectlike' properties. The identification of grammatical relations in any particular language has to depend on clear morpho-syntactic evidence. This could manifest itself either in syntactic behaviour, or in morpho-syntactic coding strategies, or, preferably, in both.

In Jaminjung, there is no clear syntactic evidence for the existence of grammatical relations of the 'subject' and 'object' type, which could form the basis for a description of argument structure. As shown in §2.6.2, Jaminjung has free word order of predicates and arguments, lexical arguments can be freely omitted, and there is no evidence for the existence of a phrasal category 'verb phrase'. Grammatical relations can therefore not be identified by the obligatory presence of arguments, or by phrase structure configurations.

There are also no constructions that would provide conclusive evidence for the existence of syntactic pivots, defined in the terminology of Role and Reference Grammar as noun phrases 'around which a construction is built' (Foley & Van Valin 1984: 110). Jaminjung does not have voice alternations like passive or antipassive, or a switch-reference system. Furthermore, there are no 'control' verbs which would require non-finite complements (see §2.6), and there are no coreference constraints between arguments in a main clause and a non-finite adverbial clause like the purposive clause (see §§2.6.5.1-2). For non-finite subordinate clauses functioning as secondary predicates, e.g. the constructions with allative-marked coverb described in §2.6.5.3, coreference constraints are best expressed in semantic, not in syntactic terms.

Accessibility to relativisation (Keenan & Comrie 1977, Comrie 1981: 131ff., Lehmann 1984: 211ff.), and the use of resumptive pronouns in relativisation (cf. Lehmann 1984: 227ff., Wilkins 1989: 157ff.) also do not constitute possible tests for a hierarchy of grammatical relations in Jaminjung. This is because the function of 'relativisation' is fulfilled by a general type of subordinate clause (cf.

[60] See e.g. Li & Thompson (1976), Foley & Van Valin (1984), Sasse (1982), Comrie (1989: 66), Van Valin & LaPolla (1997: 242ff).

Hale 1976), which may be adjoined to noun phrases in virtually any function in the clause, or function as adverbial clause (see §2.6.4).

In the absence of clear syntactic criteria, only the morphological correlates of argument structure – bound pronominals and case marking – are possible candidates for indicating core argument status.

Since Jaminjung is a morphologically ergative language, case marking identifies 'subjects' of intransitive verbs with 'objects' of transitive verbs, and singles out 'subjects' of transitive verbs (although various marking possibilities exist for the latter, see §4.2.1).

In addition to case marking, Jaminjung has one intransitive and one transitive paradigm of bound pronominal prefixes[61] (see §2.4.1.2). Three categories are formally distinguished, which will be abbreviated as S ('single argument with intransitive verbs'), A ('Actor') and U ('Undergoer'), respectively. Since marking of A and S are formally related (see §2.4.1.2.2), bound pronominal marking corresponds more closely to a nominative-accusative pattern.

Morphological marking as such, therefore, does not identify 'subjects' or 'objects'. This is the situation encountered in many Australian languages (Blake 1979: 293, cf. also Dixon 1994: 94ff.). One possibility for dealing with the lack of a one-to-one relationship between bound pronominal marking and case marking is to assume fundamental grammatical relations which are independent of morphological marking. In this view, case marking and cross-reference marking may jointly mark grammatical functions, but are neither necessary nor sufficient to identify them (see e.g. Dixon 1994: 45, Blake 1987: 23f., 1994: 51ff.). It was argued above that such grammatical relations can only be assumed in the presence of clear morpho-syntactic evidence.

An analysis whereby only bound pronominal marking on the verb is considered to be indicative of core argument status has also become widely accepted. According to the 'pronominal argument hypothesis',[62] bound pronominals represent the 'real' arguments, while the corresponding noun phrases constitute 'adjuncts' that are licensed by these arguments but do not have argument status themselves. This analysis has also been claimed by Jelinek (1984) to account for

[61] These traditional terms are used here in preference to 'head-marking' and 'dependent-marking' (Nichols 1986) since they do not presuppose any syntactic function of the carriers of these elements. The term 'cross-reference marking' will be used interchangeably with 'bound pronominal marking' and should not be taken to suggest a dependency analysis.

[62] This analysis was suggested in passing already by Boas (1963 [1911]: 30). It has been widely adopted in the functionalist and descriptive literature, in particular in dealing with North American languages (see e.g. Nichols 1986, Mithun 1991). It was developed into a formal, GB-based framework by Jelinek (1984), with explicit reference to double-marking languages like Warlpiri.

split case marking, the possibility of so-called 'null anaphora' (i.e. the absence of lexically represented arguments), and other 'non-configurational' properties of languages like Warlpiri which exhibit a similar kind of 'double marking' to Jaminjung.

In a recent paper, Austin and Bresnan (1996) adduce evidence from a number of Australian languages to show that there is no strict correlation between nonconfigurational properties and the possibility of omitting lexical arguments, on the one hand, and the presence of bound pronominals on the other hand. Both Austin and Bresnan (1996) and Nordlinger (1998a) also argue that case-marked noun phrases can in fact be arguments in these languages. Some of the problems for the 'pronominal argument' hypothesis that these authors identify are also found in Jaminjung.

First, there are maximally two positions marked on the verb; therefore the 'pronominal argument' analysis excludes the possibility of three core arguments in a clause. However, Jaminjung has a number of trivalent simple and complex verbs, among them the verb *-ngarna* 'GIVE'. These verbs are formally transitive, that is, only two participants may be represented as bound pronominals on the verb (in the case of *-ngarna* 'GIVE', these are the 'giver' and (usually) the 'recipient'; see §5.7.1). The third participant is represented by an additional absolutive noun phrase which is not cross-referenced, as shown in (4-1). Such an additional absolutive noun phrase is not possible with bivalent predicates; for the trivalent predicates, one therefore has to allow for 'primary objects' and 'secondary objects' in the sense of Dryer (1986).

(4-1) **walayarra nganyi**-wu-ngarna
tobacco 1sg:2sg-FUT-GIVE
'I'm going to give you tobacco'

Second, in the progressive construction (§3.3.1), only one argument is cross-referenced on the verb, but a second argument may be represented by a second absolutive noun phrase, as shown in (4-2).

(4-2) **gugu** burlug-mayan **yirri**-yu
water drink-CONT 1pl.excl-BE.PRS
'we are drinking water'

It is therefore unsatisfactory to use cross-reference marking as the sole determinant of argument status in Jaminjung. On the other hand, there are obvious problems with using case-marking on its own, too. The main problem, of course, is that case-marked noun phrases are not obligatory. Another problem resides in the frequent 'mismatches' of case marking and cross-reference marking, to be discussed in more detail below. For example, the same case form marks agents of transitive clauses ('ergative') and instruments ('instrumental'),

and it is therefore problematic to regard all ergative-marked noun phrases as core arguments.

Nevertheless, for practical purposes it is desirable to make a distinction, to be established on purely formal grounds, between core arguments and peripheral arguments. Under the definition of these terms adopted here (see §1.4.1.2), this distinction does not strictly correspond to the distinction between complements and adjuncts. All core arguments can be regarded as complements (corresponding to participants that are central to the meaning of a predicate); thus, core arguments can be used to establish the 'basic' valency of a predicate. However, as we will see below, central participants may sometimes be expressed as peripheral arguments as well.

As already indicated, in Jaminjung both case marking and bound pronominal marking have to be taken into account in determining core argument status. The criteria adopted here are summarised in (4-3) and will be justified in the course of this section.

(4-3) Criteria for core argument status

(i) All pronominal prefixes constitute core arguments.

(ii) Any absolutive noun phrase constitutes a core argument, with the exception of nominal predicates (see §2.6.3), of unmarked locational nominals (see §2.2.2.4 and §2.2.3.3.1), and of body parts in a part-whole construction (see §4.2.3.2).

By these criteria, any absolutive (i.e. unmarked) noun phrase (with the restrictions outlined in (4-3ii)) counts as a core argument, whether or not it is also cross-referenced on the verb in addition. On the other hand, a noun phrase that is not in the absolutive does not count as a core argument in its own right, although it may be coreferent with a bound pronominal which does constitute a core argument. In particular, the ergative/instrumental case is not, by itself, taken as indicative of core argument status. The arguments against considering oblique pronominal clitics as core arguments (except when they enter into the bound pronominal paradigm; see §2.2.4.3.3) were already presented in §2.2.4.3.1.

This 'mixed' definition of core arguments relies on one of the central assumptions of a constructional approach to grammar: constructions can overlap. That is, an occurring linguistic expression (e.g. a clause) can "be seen as simultaneously instantiating more than one grammatical construction at the same level" (Fillmore 1988: 35). Therefore, case-marked noun phrases and bound pronominals can be viewed as instances of different constructions which are superimposed on one another in a given clause. A representation of this overlap is proposed in the next section.

4.1.2 Representing double-marking

Treating morphological markers like the pronominal prefixes as constructions perhaps requires some justification. After all, they are part of the obligatory morphology of the verb, which means that, at one level, there is no choice of construction involved. Considering morphological markers as constructions, though, is completely consistent with the basic assumptions of Construction Grammar outlined in §1.4.1. Also, we will see in §4.1.3 and §4.3 that the interpretation of the prefixes is not necessarily determined by the verb alone, but also by the presence of certain coverbs which contribute to the valency of the complex verb. Moreover, as will be shown in §4.2.2, the bound pronominals can be given a function (or 'constructional meaning') different from that of the main case-marking constructions.

The overlap of case marking and cross-reference marking constructions manifests itself in the representation of the same participant filling argument slots of both constructions. In this approach, there is no need to posit a level of underlying grammatical relations to mediate between predicate semantics and surface form. Rather, the language-specific function of the constructions should be sufficient to account for the representation of participants, i.e. for the range of predicates that may enter a given construction (with the caveats mentioned in §1.4.1.2). The possibility of integrating a verb and its participant(s) is evaluated for each of these constructions separately. Consequently, the relation between a given bound pronominal and a noun phrase (case marked or not) is not one of dependency (by way of agreement), but rather an indirect one: both may represent the same semantic participant, but apart from that belong to argument structure constructions which are in principle independent from one another.

By way of illustration, consider the simple example in (4-4).

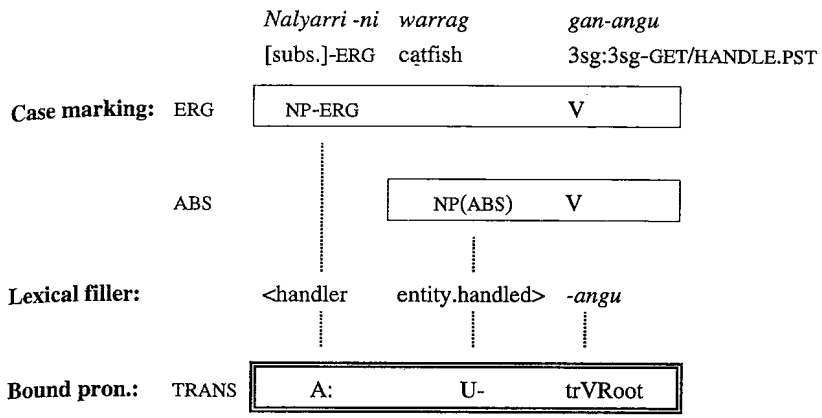
(4-4)

Nalyarri-ni	gan-angu	warrag
<subsection>-ERG	3sg:3sg-GET/HANDLE.PST	catfish

'Nalyarri caught a catfish'

Here, the two participants of the verb *-angu* 'GET/HANDLE' are represented by the transitive bound pronominals on the verb itself, and at the same time have the lexical instantiations of a subsection term (*Nalyarri*) and a common noun (*warrag* 'catfish'), which are in ergative case and absolutive case (unmarked), respectively. Each case-marked noun phrase in combination with a predicate is considered a sub-construction in its own right, since each may appear independently of the other. As indicated above, bound pronominal prefixes are also considered constructions in their own right. The simultaneous integration of the verb and its participants into both case-marking and cross-reference constructions can then be schematically represented as in Fig. 4-1.

Fig. 4-1. *The overlap of case-marking and bound pronominal marking (ex. 4-4)*



Each of the 'boxes' in Fig. 4-1 represents an argument structure construction.[63] The two upper boxes represent the case marking constructions, consisting of a verb and a noun phrase. They are labelled by the cases on the noun phrase, i.e. ABS(olutive) and ERG(ative), respectively. The bound pronominal construction, consisting of a verb root and its A and U prefix, is labelled 'TRANS(itive)' and framed by a box with double lines. It should be thought of as embedded in the V-slot of the case-marking constructions (something that is not adequately captured by the notation).

The representation of a predicate with its participant roles, which constitute the fillers of both argument structure constructions, is placed in between the 'boxes' representing the two constructions. The verb root is a lexical filler which may instantiate the verb slot of the construction(s). The participant roles are represented by noun phrase constructions which are in turn instantiated by lexical fillers (as illustrated by the example given above the figure). For the purposes at hand, no distinction is made in the notation between 'representation' and 'instantiation'; both relationships are indicated by a dotted line.

As already outlined in §1.4.1.2, no particular theoretical relevance is assigned to participant roles. The labels used here should be seen as abbreviations for participant roles that are specific to a given predicate (e.g. <handler, entity handled>), and or to a predicate class (e.g. <figure, location>). These participant roles, rather than constituting primitives of the analysis, fall out from the semantics of the predicate. Since the meaning of verbs and coverbs has not been investigated in detail so far (see Chs. 5 and 6), impressionistic labels are used in this chapter.

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[63] Much of this notation is adopted from Mohanan (1994, 1997) and from Goldberg (1995).

The ordering of the boxes representing constructions in this and the other figures should not be taken to represent any hierarchical ordering, since both constructions are simultaneously present. Free word order is such a pervasive feature of Jaminjung that it is not represented here. The ordering in the figure is 'argument(s) – predicate' only to allow a clearer mapping to the bound pronominal construction, where the order 'pronominal prefixes – verb root' is, of course, fixed.

The approach just outlined has a number of advantages. It integrates the insights of typologists and functionally oriented linguists like Lehmann (1982b, 1988), Croft (1988), and Himmelmann (1996), who have emphasised that bound pronominal marking and case marking are structurally and semantically distinct. This is reflected in the distinct grammaticalisation paths that give rise to the two systems. However, the two systems converge in their function of signalling argument relations (see e.g. Lehmann 1988: 64ff). Therefore, languages may predominantly rely on cross-reference marking and not mark the function of noun phrases ('head-marking'), or vice versa ('dependent-marking'), but there are also languages (like Jaminjung) that use both devices.

Moreover, this analysis can easily accommodate one of the problems that the 'pronominal argument hypothesis' was originally developed to solve. Treating cross-reference marking and case marking as different constructions can be used to account for mismatches between case marking and bound pronominal marking such as split case marking. Jaminjung has no split ergative system, but nevertheless there is no one-to-one correspondence between case-marking and cross-reference marking, as will become clear in §4.2.

This approach also allows us to represent argument sharing, in a way to be outlined in the next section. The discussion of argument sharing, however, is tied to the identification of those participants of both predicates which potentially fill the same argument slot. First, therefore, criteria for identifying central participants are proposed.

4.1.3 Central participants of verbs and coverbs

It is not always easy to identify the semantic participants of a given predicate, and semantic intuition is not necessarily reliable here. To quote an example given by Mosel (1991: 244), does *eat* have two participants (as is commonly assumed), or also a third participant, an 'instrument' (e.g. a spoon or the fingers)? Formal criteria for the semantic valency of predicates will have to be, to some degree, language-specific, since criteria like obligatoriness do not work equally well for all languages. The criteria for the semantic valency of Jaminjung verbs and coverbs, proposed in (4-5) below, are based on the definition of core arguments in §4.1.1. Rather than allowing for a clear distinction between participants and

non-participants, these criteria identify the 'central', 'most involved' (Lehmann 1991) or 'profiled' (Goldberg 1995) participants of a predicate. This is not to deny that verbs and coverbs may have other participants, not expressed as core arguments, which are clearly central to their meaning. Some verbs and coverbs, for example, have a location participant as part of their meaning. This is not expressed as a core argument (in fact it is hardly ever expressed), but clearly determines the possibilities of these predicates to form complex verbs (see §5.2). Similarly, verbs of contact/force could well be argued to have an instrument participant (see §5.4). For the purpose of a more fine-grained division into predicate classes, as outlined, for example, in Lehmann (1991), valency classes beyond 'monovalent', 'bivalent', and 'trivalent' would have to be recognised for both verbs and for coverbs. To some extent this goal will be achieved in Chs. 5 and 6, which deal with the semantics of generic verbs and the semantics of coverb classes, respectively. However, for the practical purpose of describing argument structure and argument sharing in complex predicates in the remainder of this chapter, semantic valency will be described only with reference to central participants. Thus, 'monovalent', for example, should read 'the predicate in question has one central participant by the criteria given in (4-5)'.

(4-5) Criteria for the identification of central participants

(i) The central participants of a predicate are represented as core arguments across all expressions that the predicate occurs in (if they are represented at all), and/or they are obligatorily represented.

(ii) It is possible for central participants to be lexically represented (in addition to being represented by a bound pronominal).

Criterion (i) covers all participants that are represented as bound pronominals on the verb (including those represented, in addition, by a noun phrase). Bound pronominals are, of course, obligatory. The same criterion accounts for all participants that may be represented by an absolutive noun phrase (although this is not obligatory), since absolutive noun phrases also count as core arguments by the definition given in §4.1.1. The criterion of obligatoriness, furthermore, allows us to include participants of verbs of speech and performance, which are not expressed as core arguments; this case is discussed in §4.2.3.1-2. Criterion (ii) is necessary to exclude the 'Dummy-Undergoers' of some formally transitive verbs with monovalent readings, which do not represent participants (see §4.2.2.1.3).

These criteria are quite straightfowardly applied to verbs. All five intransitive[64] verbs are monovalent, since they only allow for one participant to be represented

[64] Recall that the terms 'intransitive' and 'transitive' are used here exclusively in reference to the formal verb classes established by bound pronominal marking.

by a pronominal prefix. They do not – as simple verbs – allow for a second absolutive noun phrase which is not cross-referenced. For example, the ergative-marked 'heat source' of the intransitive verb *-irna* 'BURN' (see §4.2.1.1 below) does not count as a central participant by the criteria just given, since ergative-marked noun phrases are not considered to be core arguments.

All transitive verb roots (and all intransitive reflexive verb stems) are, as simple verbs, either bivalent or trivalent. Bivalent verbs can be identified on the basis of cross-referencing alone. It is of no concern, for example, whether a participant represented by the U prefix is also represented as an absolutive noun phrase (which counts as a core argument), or a noun phrase marked with allative, comitative or any other case (see §4.2.2.1.2 below). Bivalent verbs form the largest class in Jaminjung. Only the transitive verb *-ma* 'HIT' has both bivalent and monovalent senses, but the latter only occur in combination with coverbs (see §4.2.2.1.3, 5.4.2.3). Trivalent verbs can be distinguished from bivalent verbs in that they allow for an additional absolutive noun phrase, which is not cross-referenced on the verb. By the criteria given above, this represents a central participant of the verb. There are only two trivalent verbs, *-ngarna* 'GIVE' (see (4-1) in §4.1.1 above) and *-yungga* 'TAKE AWAY'.

The identification of central participants is much less straightforward for coverbs. Coverbs, by definition, do not take pronominal prefixes. Moreover, coverbs do not occur as the only predicate, except in stylistically marked utterances (see §3.4.1-2), and in non-finite clauses (§2.6.5), but even then they are rarely accompanied by argument expressions. Usually, coverbs only enter syntactic argument constructions in combination with a verb. Therefore, dis-tinguishing the participant roles of the coverbs from those of the verb is not a trivial task.

As an example of the difficulties involved, and the application of the criteria, consider the two coverbs *jarr* and *jurrb* in (4-6). Both combine with the verb *-arra* 'PUT' in complex verbs translating as 'put s.th. down'. The two coverbs are in semantic opposition: *jarr* can only be predicated of singular entities (4-6a), *jurrb* only of nonsingular entities (4-6b). However, it is not immediately obvious whether *jarr* and *jurrb* should be regarded as stative predicates (e.g. 'be down'), as monovalent motion predicates (e.g. 'move down'), or as bivalent predicates (e.g. 'put down'). This uncertainty reflected in the glossing in (4-6).

(4-6a) jungulug **jarr** gan-**arra**-m
one ??(single.entity) 3sg:3sg-PUT-PRS

'he puts down one' (piece of firewood) (DP/MJ, JAM064)

b) jirrama.. **jurrb** gan-**arra**-m jirrama..
two ??(multiple.entities) 3sg:3sg-PUT-PRS two

en lubayi=ma **jurrb** gan-**arra**-m
and many=SUBORD ??(multiple.entities) 3sg:3sg-PUT-PRS

'he puts down two, and it is many that he puts down' (firewood) (DP/MJ, JAM065)

Both coverbs may also combine with other transitive verbs (see e.g. §6.13). In addition, *jurrb* was also found with the stative intransitive verb *-yu* 'BE'. The following example is from a Frog Story narrative, from the description of a scene where a boy and a dog who have been looking for their pet frog finally find it sitting together with its mate and their baby frogs. From the context it is quite clear that there was no agent that 'transferred' the group of frogs.

(4-7) malara=ma **jurrb** ga-**yu** \
frog=SUBORD be.multiply 3sg-BE.PRS

'... where the frogs are (together)' (Frog Story) (IP, F03296)

According to the criteria proposed in (4-5) above, central participants of coverbs will be identified as those that are expressed as core arguments **across all constructions** that a coverb can enter into. For those coverbs that combine with both transitive and intransitive verbs, only one participant is expressed as a core argument across all constructions. In the combinations with intransitive verbs, only one core argument is present, representing the only participant of both verb and coverb. In the combinations with transitive verbs, the verb contributes an additional participant, represented as a second core argument, while the first core argument represents a participant of both the verb and the coverb.

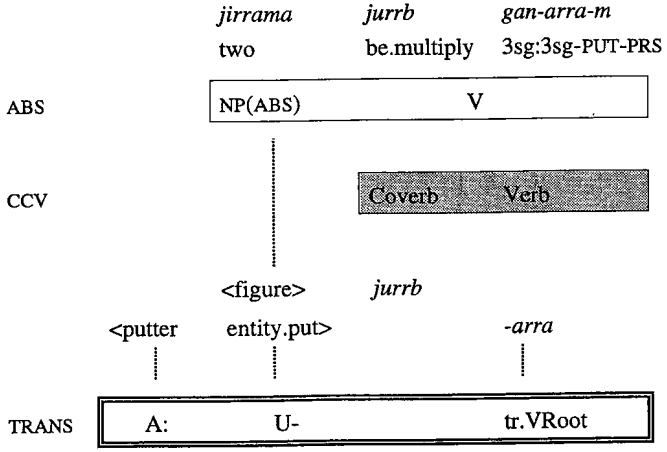
According to this reasoning, *jurrb* has to be regarded as a stative monovalent coverb, translating as something like 'be together (of multiple entities)', rather than as 'put down (of multiple entities)'. It functions as a coverb of spatial configuration, a class which in Jaminjung also contains other predicates expressing a complex configuration, e.g. *murruny* 'be heaped up' (see §6.1.1).

This conclusion, of course, is only valid under the assumption that polysemy should not be postulated unless there is construction-independent evidence to the contrary. Theoretically, one could postulate two senses for a coverb like *jurrb*, e.g. 'be together' and 'put down (of multiple entities)'. It is one of the fundamental advantages of the constructional approach that stipulation of regular polysemy of this kind can be avoided (see §1.4.2.2).

This point can be made clearer by introducing a representation for argument sharing. As pointed out at the beginning of this chapter, the notion of argument sharing is a necessary correlate of the assumption that both coverbs and verbs are relational predicates. In complex verbs, their semantic participants are fused such that the predicates share at least one participant. Argument sharing in a complex verb consisting of the bivalent verb *-arra* 'PUT' and the monovalent coverb *jurrb*

'be together (of multiple entities)' is represented in Fig. 4-2. The (canonical) complex verb construction (CCV), consisting of coverb and verb (see §3.2), is represented on a separate level, below the box representing the case marking construction, and is marked by shading. It should be thought of as occupying the 'V' slot in the case marking construction (here: absolutive construction). In the example under consideration, the coverb contributes a single participant, which, together with the second participant of the verb, is encoded simultaneously as an absolutive noun phrase, and as Undergoer. The Actor prefix only represents the verb's 'putter' participant, which does not correspond to any participant of the coverb.

Fig. 4-2. *Argument sharing of a monovalent coverb with a bivalent verb (ex. 4-6a)*



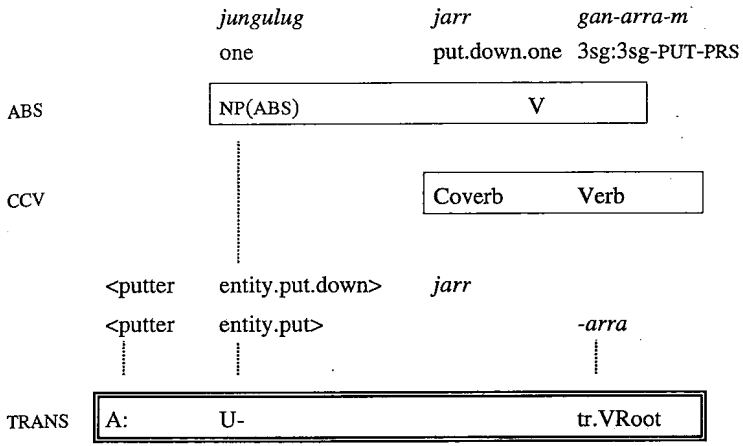
By analogy, we expect *jarr* to have the same valency as *jurrb*, the only difference being the singular number of the 'thing(s) put'. However, all my attempts to combine *jarr* 'put down one' with the intransitive verb *-yu* 'BE', or with other intransitive verbs, were rejected by speakers.[65] From this we can conclude that *jarr* is a bivalent coverb of transfer. It has two central participants, a 'putter' and a 'single thing put', which have to be expressed as core arguments, and possibly a third, marginal 'location' participant.

The integration of the bivalent coverb *jarr* 'put down (single entity)' into a two-argument construction with the verb *-arra* 'PUT' is illustrated in Fig. 4-3. Here we find a total overlap, both semantically and in morphosyntactic expression, between the two central participants of the verb, and those of the coverb: the first

65 For the evaluation of acceptability judgments of this kind, see §1.3.4.

participant of both coverb and verb is expressed by the A prefix, and the second participant of both coverb and verb is expressed by the U prefix. In addition, the shared participants may be represented by a noun phrase; in this example, the second participant of the coverb and the verb are lexically expressed as an absolutive noun phrase.

Fig. 4-3. *Argument sharing of a bivalent coverb with a bivalent verb (ex. 4-6b)*



Thus, by taking into consideration the valency of the verbs that a given coverb may or may not combine with, it is possible to obtain indirect evidence for the semantic valency of this coverb.

Note that the occurrence of arguments with coverbs used as semi-independent predicates, i.e. without a verb, is not a good indicator of the coverbs' valency. This is because this type of construction is stylistically marked and restricted to highly contextualised genres (see §3.4 for details). In particular, it only seems to be used under conditions of 'topic chaining', i.e. where an agent is understood from context, and therefore ergative-marked noun phrases representing an agent do not occur with coverbs as semi-independent predicates in the data examined. More often than not, no argument expression at all is present. Where an absolutive noun phrase occurs, it is usually interpreted as the patient participant, as in (4-8b) below and in (3-35a-c) in §3.4.2. This interpretation does not allow the conclusion that the coverb is bivalent, since it may result from the 'reconstruction' of the applicable verb (which in (4-8) is even present in the verbal context). Thus, while *dalb* 'light a fire' and *bulg* 'take out guts' are truly bivalent coverbs by the criteria outlined in (4-5), *bag* 'break' in (4-8b) and *yirr* 'move out' in (3-35a) may combine with monovalent verbs and are therefore identified as monovalent coverbs of change of state (see §6.7) and direction of motion (see §6.5.3), respectively.

(4-8a) thanthiya=biya janyung **dud** yirr-angga-m \
DEM=NOW other hold.one 1pl.excl:3sg-GET/HANDLE-PRS

b) **!bag..** jungulug juwal \
break one long

'then we pick up another one, break! one long one' (IP, F01401-2)

Coverbs in case-marked subordinate clauses (see §2.6.5) occur with argument expressions so rarely that it is also not possible to draw conclusions about their valency from these constructions.

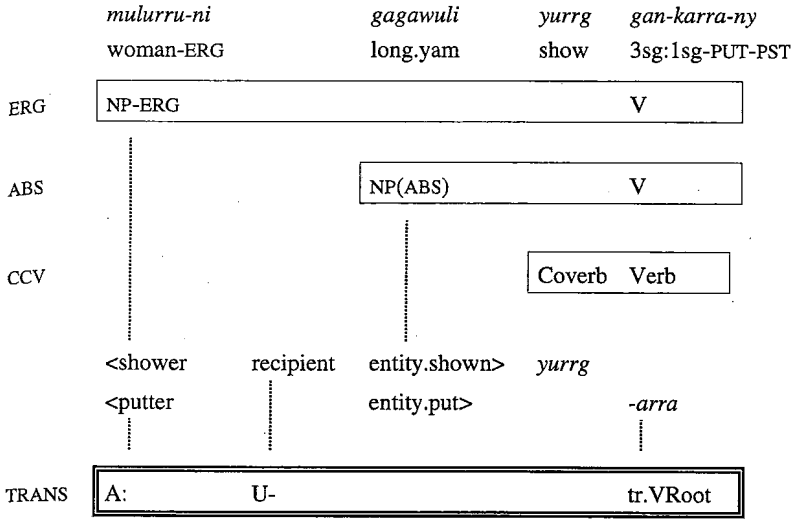
However, there are a few cases where direct evidence for the valency of coverbs can be found. This is when complex verbs formed with these coverbs allow for a certain number of core arguments which does not correspond to the valency of the verb. The first case concerns bivalent coverbs in the progressive construction, and in 'lexicalised progressives' (see §3.3.1 and §6.3). These allow for a second absolutive argument, even though they combine with an intransitive verb (see also §4.2.1.3). The reverse case is found where transitive verbs have a secondary sense which allows them to form monovalent complex predicates with monovalent coverbs. This is the case, for example, for *-ma* 'HIT' with coverbs of emerging (see §4.4.2.2.1.3 below, §5.4.2.3 and §6.5.4). Finally, some coverbs can be identified as trivalent because they always allow for three core arguments, regardless of whether they combine with bivalent or trivalent verbs. There are only a few trivalent coverbs, classified as 'coverbs of transfer' in §6.15. One of its members is *yurrg* 'show, teach'. This coverb exclusively combines with the bivalent verb *-arra* 'PUT', familiar from previous examples. The resulting complex verb, just like *-ngarna* 'GIVE' as a simple verb, allows for three core arguments. The 'shower' is encoded as Actor, the 'recipient' as Undergoer, while the 'entity shown' is optionally represented by an absolutive noun phrase, as illustrated in (4-9).

(4-9) mulurru-ni **gagawuli** yurrg **gan**-karra-ny Gilwi-ni
old.woman-ERG long.yam show 3sg:1sg-PUT-PST <place.name>-LOC

'the woman showed me yam in Gilwi' (DMc, CHE380)

Here we can see very clearly that the coverb *yurrg* has an influence on the overall argument structure of the complex verb; it introduces a third central participant (the recipient) to the complex predicate, which then (if lexically present) has to be expressed as a core argument. This is schematically repre-sented in Fig. 4-4.

Fig. 4-4. *Argument sharing of a trivalent coverb with a bivalent verb (ex. 4-9)*



Coverbs, then, just like verbs, may be monovalent, bivalent, or trivalent. It is interesting to note that avalent predicates do not seem to exist in Jaminjung. Weather conditions – frequently expressed by avalent predicates cross-linguistically – are invariably expressed with a nominal argument specifying the weather condition and a corresponding verb of, e.g., motion or sound, as in (4-10).

(4-10) wilarung mimim-mayan ga-ram
lightning flash-CONT 3sg-COME.PRS

'the lightning comes flashing' = 'there is lightning' (MW, CHE023)

We have now established criteria for the identification of core arguments on the morpho-syntactic level, and for the identification of central semantic participants. Only bound pronominal markers and absolutive noun phrases were considered as core arguments; additional justification for the exclusion of all other case-marked noun phrases is provided in §4.2. Central participants were defined as those participants expressed as core argu-ments across all constructions where a given predicate occurs. For the practical purpose of describing argument structure and argument sharing in the remaining sections; only these central participants will be considered.

By introducing a representation of the integration of one or more predicates and their participants into morpho-syntactic argument structure constructions, we have also laid the foundations for the systematic description of argument structure constructions (§4.2), and of the patterns of argument sharing between verbs and coverbs (§4.3).

4.2 Main argument structure constructions

In this section, further evidence will be provided for regarding case-marking constructions and bound pronominals as independent constructions, with somewhat different functions. In §4.2.1, the case marking on noun phrases that could be considered candidates for core argument or 'complement' status are discussed in some detail. The function of bound pronominals is contrasted with the function of case-marked noun phrases in §4.2.2. In §4.3.3, other constructions are discussed which do not represent arguments, but are of some relevance for the description of argument structure; these are the quotation construction, the part-whole construction, and the complex verb construction where the coverb fills a propositional participant slot of the verb.

4.2.1 Some case-marking constructions

In this section, some case-marking constructions (i.e. constructions consisting of a case-marked noun phrase and a predicate) will be discussed. The cases to be considered[66] are the ergative (§4.2.1.1), the ablative in its function of marking contrastive agents (§4.2.1.2), the absolutive (§4.2.1.3), and the dative (§4.2.1.4). With the exception of the ablative, it will be argued that the case-marking constructions have unitary constructional meanings and may represent participants of the predicate(s) on the basis of semantic compatibility of the argument role with the participant role. In this way, we can account for the variability of case marking: there is no one-to-one correspondence between the participants of a predicate and noun-phrases marked with a given case. This section also provides some additional justification of why absolutive noun phrases, but not case-marked noun phrases, have been considered as core arguments of relevance for the identification of central participants.

4.2.1.1 Ergative-marked noun phrases

The surface identity of the 'ergative' and 'instrumental' case in many Australian languages is a notorious topic in Australianist linguistics (see the references below). Since Jaminjung also exhibits this phenomenon, it will serve here to further illustrate the constructional approach to double marking. In §4.2.1.2 and §4.2.2.1.2, some other 'mismatches' of case and cross-reference marking which are specific to Jaminjung (or at least less widely reported) will be discussed.

In Jaminjung, 'ergative' (i.e. the case that marks the agent of transitive verbs, as in 4-11a) and 'instrumental' (the case that marks an instrument, as in 4-11b) have the same form, *-ni* ~ *-di* (see also §2.2.3.3.2).

66 Summary information on the function of other case markers can be found in §2.2.3.3.

(4-11a) dibird=biji=wung yaniny-mangu **garridan-ni**
be.wound.around=ONLY=COTEMP IRR:3sg:2sg-HIT tree.snake-ERG/INSTR
'it will only wind itself around you, the yellow tree snake (it won't bite you)' (not: 'it will tie you up with a snake')

b) **galijba-ni** dibird burru-ma
kapok.tree-ERG/INSTR be.wound.around 3pl:3sg-HIT.PST
'they tied it up with (strings from) the kapok tree' (not: 'the kapok trees tied it up') (traditional way of cooking a snake species)

Noun phrases in both functions can occur in a single clause, as in (4-12) (see III/25 for another example).

(4-12) **jalig-di** digirrij gani-mangu julag **wagurra-ni**
child-ERG/INSTR die 3sg:3sg-HIT.PST bird stone-ERG/INSTR
'the child killed a bird with a stone' (DR, TIM143)

According to one possible analysis of this phenomenon, the traditional Australianist analysis (e.g. Blake 1987: 41ff., 1994: 49ff.), 'ergative' and 'instrumental' correspond to distinct grammatical relations. In addition to the semantic criterion for the distinction, one formal criterion that has been adduced is that the argument marked as 'ergative' is also cross-referenced on the verb, while the argument marked as 'instrumental' is not, as the examples in (4-11) and (4-12) also show.

According to the second possible analysis, which I will adopt here, the 'ergative/instrumental' case form is taken to mark the same case role in all its uses (e.g. McGregor 1990: 177f.). The differential treatment with respect to cross-reference marking follows from the function of the A bound pronominal, which differs from that of the ergative case (see §4.2.2.1.1 below), and not from the existence of a different underlying grammatical function.

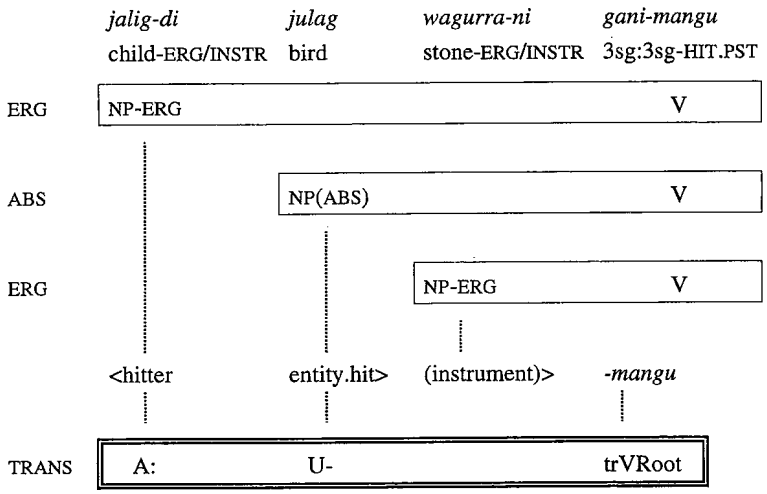
For the function of the ergative/instrumental case I adopt the label 'Effector'[67] from Role and Reference Grammar (Foley & Van Valin 1984, Van Valin & Wilkins 1996). In other words, the constructional meaning of the argument structure construction consisting of an ergative-marked noun phrase and a

67 Constructional argument roles, i.e. those roles represented in a construction by a case marker or bound pronominal affix, will be distinguished in the notation from the verb-specific participant roles by the use of uppercase and lowercase initials, respectively, e.g. 'Effector' vs. 'putter'. As the gloss for the case form, I have kept the more traditional label ERG(/INSTR) to facilitate reading of the examples.

(simple or complex) verb is that the participant represented by the noun phrase has the role of Effector in the event, in a sense to be made more precise below.[68]

For example, in (4-12) above, both the 'hitter' participant and the 'instrument' participant of the verb *-ma* 'HIT' are instances of an Effector, and this is why both participants are represented by an ergative-marked noun phrase. Only the 'hitter' is also represented by the A pronominal prefix. The affected entity (the 'entity hit') is represented by the U pronominal prefix, and in addition by an absolutive noun phrase. This is schematically represented in Fig. 4-5 (to simplify matters, the complex predicate in (4-12) has been reduced to a simple predicate in Fig. 4-5).

Fig. 4-5. *Two effector noun phrases marking 'agent' and 'instrument' (ex. 4-12)*



It is well known that cross-linguistically, the core cases (e.g. nominative-accusative or ergative-absolutive) tend to neutralise semantic distinctions, and can therefore only be given multi-factorial 'meanings'.[69] As stated by Van Valin & Wilkins (1996), the 'Effector' role subsumes the more specific roles conventionally called 'Agent', 'Force' and 'Instrument'. However, one could not predict, on the basis of these characterisations, that the 'perceiver' participants of the transitive verbs *-ngawu* 'SEE' and *-yangma* 'FEAR', the 'mover' of a

[68] For reasons of space, only the 'signifier' side, not the 'signified' side, of the constructions will be represented in all figures in this chapter.

[69] See e.g. Drossard (1991), Foley & Van Valin's (1984) discussion of the Actor-Undergoer macro-roles, and the multi-factorial definition of proto-Agents and proto-Patients in Dowty (1991).

transitive motion verb like *-unga* 'LEAVE', or the possessor of the verb *-muwa* 'HAVE', can also be encoded as Effector. In other words, ergative case marking is possible (but not necessary, as we will see in §4.2.1.2-3 below) with virtually all transitive verbs. On the face of it, this looks like evidence for a purely morpho-syntactic account of ergative marking, according to which verbs with transitive prefixes automatically 'select' for ergative case.

Still, it is possible to describe some restrictions on the encoding of participants as Effectors, and establish a difference in function between the ergative-absolutive case frame, and the transitive prefix construction (see also §4.2.2). Crucially, one of the five intransitive verbs does allow an Effector argument to be expressed. Like in many other Australian languages (cf. e.g. Wilkins 1989: 224, Laughren 1988: 215), this is a verb that can be glossed as 'burn', *-irna* (a better semantic characterisation is 'be affected by heat'; see §5.5.1). The participant represented by the ergative-marked noun phrase, as illustrated in (4-13), can be characterised as 'heat source'.

(4-13)

jalig	wuju	ga-rna	**guyug-di**
child	small	3sg-BURN.PST	fire-ERG/INSTR

'the little child got burnt by the fire' (JM, NUN039)

The 'heat source' in (4-13) can be described as an Effector playing a causal role in an event which affects a second participant. In terms of a model of event construal based on the flow of energy in the causal chain (e.g. Talmy 1988, Langacker 1990, DeLancey 1990, 1991a), the Effector argument (in Jaminjung) corresponds to any participant that is construed as playing a causal role leading to an event at any stage of the energy flow preceding the event itself. This includes instruments as the "intermediate entity in a flow of energy from 'agent' to 'patient'" (Van Valin & Wilkins 1996: 301).

This account is somewhat problematic for predicates of perception, experience and possession, since in these cases the direction of the causal chain may as well be construed the other way round (from stimulus to experiencer or possessum to possessor), as it indeed is in many languages. But the pattern observed in Jaminjung, where these predicates are subsumed under the same type of marking as the predicates encoding more prototypically 'effective' events, is also widely attested cross-linguistically (cf. e.g. Foley & Van Valin 1984: 53ff., and Tsunoda 1981b). Here the feature determining the coding of an experiencer as Effector rather than as affected argument is most likely animacy/sentiency, one of the proto-agent properties suggested by Dowty (1991: 572). This is entailed by the perception and experience predicates, and also seems criterial for the coding of possessors as Effectors (see §4.2.1.3). Importantly, though, the functions of the ergative case in Jaminjung differs from that of languages where ergative marking is conditioned by conscious choice or volitionality of the agent, e.g. Hindi (Mohanan 1994: 72ff.), Urdu (Butt 1997: 122), or Tibetan (DeLancey 1990).

These language-specific differences in the functions of case marking constructions are another good justification for the approach taken here, which takes the meaning of grammatical constructions seriously.

4.2.1.2 Ablative-marking of agents

A rather marked alternative to ergative-marking is ablative-marking of agents; this seems to be restricted to the Jaminjung dialect, since only the Jaminjung ablative marker *-ngunyi* but not the Ngaliwurru equivalent *-giyag* is attested in this use.[70] The case-marking construction used here is formally identical to the one used to represent the spatial source in a motion event (see §2.2.3.3.7). The ablative, unlike the other cases discussed in this section, will not be argued to have a unitary function. Rather, the ablative construction is employed with a secondary, metaphorical meaning, consistent with a metaphorical relationship of the semantic roles 'agent', 'cause' and 'source' as postulated in localist approaches (see e.g. Lyons 1977: 721, Clark 1993: 57f.).

Ablative-marking of agents is relatively infrequent, and always has a contrastive function. The contrast could be one between the agent and one or more other protagonists in the discourse world which are potentially competing for the actor role. For example, in (4-14), the potential adulterers are contrasted with the 'legal' husband.

(4-14) bat majani **janyung-ngunyi** ngurlu burru-wu-ngawu
but maybe other-ABL desire 3pl:3sg-FUT-SEE

birrg bunyu-wu-yungga \
take.away 3pl:2sg-FUT-TAKE.AWAY

'but maybe others will set eye on her (your wife) and rob you of her' (IP, F03545)

The ablative case can also mark an unexpected agent, like the rather unexpected speaker in (4-15). This example is from a story about two kangaroos who start behaving in human-like fashion, to the surprise of the men hunting them.

(4-15) "nanggayan guny-bi-yarluga?" gani-yu=bunyag \
who 2du:3sg-FUT-POKE 3sg:3sg-SAY/DO.PST=3du.OBL

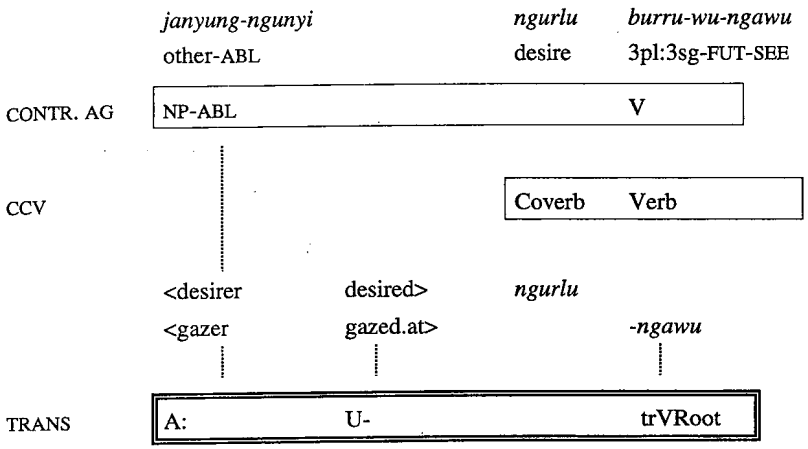
yangarra-ngunyi=marlang \
kangaroo-ABL=GIVEN

'"Who do you want to spear?" it said to the two, the kangaroo did'

70 In Australia ablative-marking of agents, in the same contrastive function, is also reported for Nunggubuyu (Heath 1984: 204f.; see also Schultze-Berndt 1993), a language where agents are normally unmarked, not ergative-marked.

Ablative-marking of agents is not restricted to a particular class of verbs (in fact, in a few instances in the corpus, it also occurs with an intransitive verb of motion; see (4-25) for an example), but it is never found to mark semantic instruments. The construction with the ablative marker in a secondary sense can therefore be described as 'Contrastive Agent' construction, and is clearly different in range of functions from the 'Effector' construction, although it is available as an alternative in certain contexts. The interaction of the Contrastive Agent construction with the other argument structure constructions instantiated in (4-14) is represented in Fig. 4-6.

Fig. 4-6. *Contrastive ablative-marking of agents (ex. 4-14)*



4.2.1.3 Absolutive noun phrases

Absolutive noun phrases are unmarked, that is, they lack a case suffix signalling a specific relation like 'Effector' or 'Source'. It will be argued that the absolutive, in fact, has no definable set of functions, but signals something like 'core argument in unspecified relation to the predicate'.

The relation can be left unspecified if there is no other core argument to compete with, that is, with ascriptive nominal predicates, or intransitive verbal predicates. To employ the terms used by Lehmann (1991: 206f.), the only participant of a monovalent predicate does not contrast with any other participant in degree of involvement vs. distantiation, and therefore the most neutral construction can be chosen.

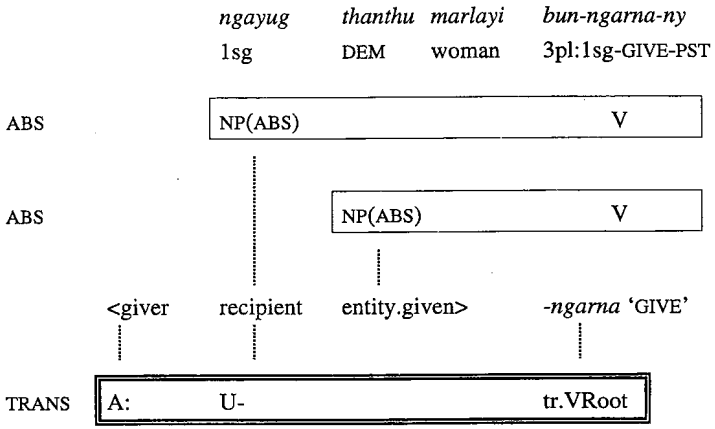
With bivalent or trivalent predicates, absolutive noun phrases receive their interpretation both through the semantics of the verb, and through the (potential)

opposition with other case markers. By default, they encode core arguments in roles which can be subsumed under the Undergoer macro-role. With bivalent predicates, these correspond to the second, non-agentive participant. With trivalent predicates, both non-agentive participants can be encoded as absolutives (see §4.1.1 and §4.1.3). These are rarely both realised in the same clause, but (4-16) is an example with two absolutive noun phrases with the verb *-ngarna* 'GIVE'.

(4-16) **ngayug** bun-ngarna-ny **thanthu** **marlayi,**
1sg 3pl:1sg-GIVE-PST DEM woman

'me, they gave that woman' (i.e. 'they gave me that woman') (DP, F02275)

Fig. 4-7. *Two absolutive noun phrases with trivalent predicates (ex. 4-16)*



Interestingly, in Jaminjung, absolutive noun phrases can also encode agents, in other words, marking of agents as 'Effector' (with ergative case; §4.2.1.1) or as 'contrastive agent' (with ablative case, §4.2.1.2) is not 'obligatory'. This is illustrated in (4-17) to (4-19) below, and schematically represented in Fig. 4-8.

(4-17) yawayi, **yalumburrma** burrarra-wa-na buligi \
yes saltwater.crocodile 3pl:3pl-BITE-IMPF cow

'yes, the crocodiles were eating cattle' (IP, EV03153)

(4-18) **malara**=biya dibard ganuny-ngunga-m, ba-ngawu /
frog=NOW jump 3sg:3du-LEAVE-PRS IMP-SEE

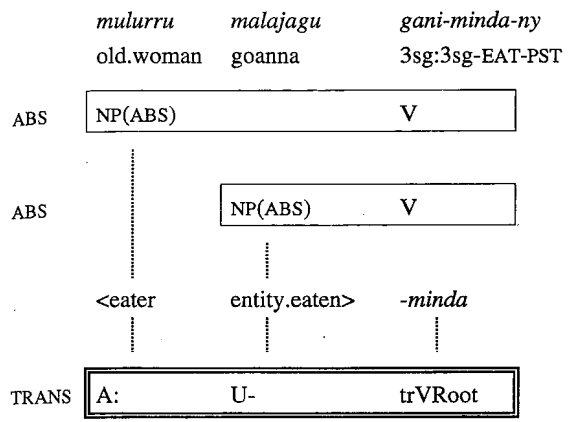
'the frog now is leaving the two, jumping away, look' (IP, F03035)

(4-19) **mulurru** gani-minda-ny malajagu
old.woman 3sg:3sg-EAT-PST goanna

digirrij gani-wa malajagu-ni garrmalan-ni
die 3sg:3sg-BITE.PST goanna-ERG/INSTR fat-ERG/INSTR

'the woman ate goanna, and the goanna fat knocked her out' (lit: 'the goanna fat bit her "dead"') (ER, TIM129-130)

Fig. 4-8. *Absolutive noun phrase representing an 'agent' (ex. 4-19)*



Ergative-marking of 'agents' has been described as 'optional' for a number of other non-Pama-Nyungan languages (see McGregor 1992: 276, and the references cited there). In Jaminjung, 'agents' in the ergative are much more frequent than 'agents' in the absolutive, that is, examples like (4-17) to (4-19) above are relatively rare. This corresponds to the relative frequencies found for Gooniyandi by McGregor (1992: 280f.), and for Bunuba by Rumsey (1994: 142).

Preliminary observations suggest that the variation in marking of 'agents' is systematic rather than random, and that the conditioning factors correspond to those identified by McGregor (1992, 1998a) on the basis of an investigation of the distribution of ergative-marking in Gooniyandi texts. The first of these conditioning factors concerns the degree of inherent 'semantic effectiveness' of an event. For example, atelic events, and events over which the agent has no control, are less 'effective', in terms of Tsunoda (1981b). The second factor concerns predictability of the status of the agent as agent; for example, inanimates, and animates that are not protagonists of an episode, are less likely agents and therefore marked. In sum,

> ... use of the ergative postposition foregrounds, or accords prominence to, the agentivity of the agent, thereby singling it out for special attention.

> Absence of the ergative postposition backgrounds the status of the agent as agent, according it no particular prominence (McGregor 1992: 277).

This appears to be a plausible explanation also for the variation in case-marking in Jaminjung. In (4-17) above, the agent is unmarked because the depicted event is atelic. Motion events, like that described in (4-18), have only a low effect on the 'patient'. In (4-19) the woman is pictured as the 'suffering' participant in the global event, so it makes sense to downplay her agentivity in the 'eating'.

Most frequently, absolutive agents are found representing the 'speaker' with the verb *-yu(nggu)* 'SAY/DO' in its use as speech framing verb ('say'), and as 'possessor' with the verb *-muwa* 'HAVE'. For *-yu(nggu)* 'SAY/DO', this is in line with the low (semantic) transitivity attributed cross-linguistically to verbs of speech (e.g. Munro 1982, Rumsey 1994, Kofod 1995; see also §5.6), although it is not clear in every single instance what triggers the presence or absence of ergative marking (for an illustration of both possibilities in a nearly identical context, see V/10-12 and V/16-17 in the Appendix).

The variation of absolutive and ergative-marked 'agents' is more systematic for the verb *-muwa* 'HAVE'. Here the conditioning factor seems to be the degree of control over the possessive relationship that is ascribed to the possessor. Inanimate possessors, of which it is predicated that the 'possessed' is an inherent part, always appear as absolutive arguments, as in (4-20) (see also §5.2.2).

(4-20)

gardawarlng	gana-ma-ya	wuju-wuju	mali	jalig-gina
egg	3sg:3sg-HAVE-PRS	RDP-small	thing	child-POSS

'the egg has little things inside for kids' ('Kinder-Surprise' chocolate egg) (JM, CHE102)

On the other hand, if the possessor actively maintains control over the 'possessed' – which is usually the case with animate possessors – the corresponding noun phrase takes ergative case, as in (4-21) (see also §5.2.2).

(4-21)

Nawurla-ni	gana-ma-ya	juyug	guwalambala
<subsection>-ERG	3sg:3sg-HAVE-PRS	cooked	short.neck.turtle

'Nawurla has a cooked turtle' (N. was holding the turtle in her hand in a photograph) (SR, TIM027)

This rather systematic distribution of absolutive 'agents' has been emphasised because it provides further evidence for the analysis, proposed in §4.2.1.1 above, of ergative case as conveying Effector semantics, rather than having the disjoint functions of mechanically marking 'transitive subjects' and 'instruments'.

Absolutive 'agents' are found in yet another environment; this is in a progressive or a 'lexicalised progressive' construction with bivalent coverbs (see §3.3.1 and §4.3.1.2 below for examples). Here ergative-marking is not possible, that is, there

is no variation in the marking of the 'agent'. However, the explanation pro-vided above can be extended to cover this case as well. An expression in the progressive is, by definition, atelic, and therefore only has a very low degree of effectiveness (in the sense of the term introduced above). This is signalled both by the choice of an intransitive verb, and by the absence of marking for the agentive participant.

4.2.1.4 Dative-marked noun phrases

In many descriptions and theoretical discussions of dative marking in Australian languages, some of its functions have been analysed as 'grammatical case functions', marking complements, and others as 'semantic case functions', marking adjuncts. It will be argued here that this distinction cannot be maintained for Jaminjung; this excludes dative noun phrases from core argument status as defined in §4.1.1.

Examples from Jaminjung that correspond to some uses that have been described in the literature[71] as dative complements are given in (4-22) and (4-23) below. The dative in these examples could be taken to mark complements of coverbs with meanings like 'look around for s.th./s.o.' *(wurdbaj* in (4-22)*)*, 'be afraid of s.th.' (*yarrajgu*; see ex. (2-23) in §2.2.3.3.3), or 'know s.th./be knowledgeable of s.th.' (*jurriya* in (4-23)).

(4-22)

burr-**angga**=mulu	**gugu-wu**	**wurdbaj** \
3pl-GO.PRS=COLL	water-DAT	look.around

'they all go looking for water' (DP, E13210)

(4-23)

jurriya	gun-**ngangga**-m	**baaj-gu**
know	2pl:1sg-GET/HANDLE-PRS	speech-DAT

'you all teach me language / you all make me knowledgeable about language' (VP, NUN139)

Dative-marked noun phrases are indeed found very frequently with coverbs of the type just illustrated. Like other lexical arguments, however, they are not obligatory. This is illustrated for *wurdbaj* 'look for' in (4-24); similar examples can be found for the other coverbs.

(4-24)

yinjuwurla	ga-ruma-ny=ni	garna-wurru,
PROX:DIR	3sg-COME-PST=SFOC1	spear-PROPR

[71] See e.g. Cook (1987: 133f.) and Wilson (1999: 13f.) for Wagiman, Merlan (1994: 70ff.) for Wardaman, Nash (1986: 49) and Simpson (1991: 358ff.) for Warlpiri, Nordlinger (1998: 186) for Wambaya.

milarrang-burru	ga-ruma-ny	olewei \	**wurdbaj**[72] \
spear-PROPR	3sg-COME-PST	all.the.way	look.around

'here he came with a spear; with a spear he came all the way - looking around' (DM, EV06055-7)

Identifying dative complements as opposed to adjuncts on purely semantic grounds is equally problematic. It is argued here that the dative case in Jaminjung can be given a unified meaning along the lines of that proposed by Wilkins (1989: 183) for one cluster of uses of the dative in Arrernte:

> [a sentient being is] cognizant of the entity marked by the dative, and ... the entity marked by the dative is in some way the cause (or) reason for [the sentient being's] present action or state

For Jaminjung, this characterisation has to be refined to 'the entity marked by the dative is the **anticipated** reason for a sentient being's present action or state', because it contrasts in this respect with the 'motivative' case *-garni ~ -warni* (see §2.2.3.3.5). This characterisation subsumes all the supposed 'complement' functions of the dative illustrated above, i.e. it can account for the use of the dative to mark an 'entity looked for' (4-22), a 'stimulus of fear', or a 'topic of instruction' (4-23). (In (2-23) in §2.2.3.3.3, in fact, two dative-marked noun phrases are related to the same predicate with different readings, which however can both be subsumed under the function 'anticipated reason'.) The characterisation also accounts for the fact that the dative may represent 'addressee' participants, as well as supposed 'adjuncts' like 'purpose' or 'beneficiary'. The 'purposive' interpretation of the dative in Jaminjung is illustrated in (4-25). Often, as in this example, the 'reason' is only metonymically indicated by the dative-marked noun phrase.

(4-25)

janyungbari-ngunyi=biyang	buliki	**warrng**	ga-**ram**		**gugu-wu** \
other-ABL=NOW	cow	walk	3sg-COME.PRS		water-DAT

'another cow comes walking for (drinking) water' (Farm Animals p. 9) (EH, E13517)

A comparison of (4-25) with (4-22) above illustrates again that, for Jaminjung, the borderline between complements and adjuncts is difficult to draw on semantic grounds, and impossible to draw on formal grounds: in both examples, the predicate consists of a motion verb accompanied by a coverb, with a dative noun phrase expressing the purpose of the motion event. In fact, *wurdbaj* 'search, look around' could be argued to be a manner of motion coverb just like *warrng* 'walk' (see §6.5.2). In contrast to some other Australian languages, e.g. Warlpiri

[72] The subsequent intonation unit also does not contain a dative-marked noun phrase representing the 'person looked around for'. From context, it is understood to be the father-in-law of the mythical protagonist, whom he is going to spear.

or Arrernte, there is no morpho-syntactic evidence for postulating more than one dative construction, and it is difficult to determine in each individual case whether the dative-marked noun phrase represents a participant which is part of the semantic valency of a predicate, or not. Therefore, dative-marked noun phrases were excluded from the criteria for the identification of central participants in §4.1.3 above.

4.2.2 Bound pronominal constructions

According to the criteria proposed in §4.1.1, all bound pronominals constitute core arguments. The transitive bound pronominals (§4.2.2.1) will be argued to encode Actor and Undergoer macro-roles, while the intransitive bound pronominals (§4.2.2.2) encode a single core argument which is neutral with respect to the semantic roles of the participants it represents.

4.2.2.1 Transitive bound pronominals

4.2.2.1.1 Functions of Actor marking

In §4.2.1.1 above, it was argued that the ergative case in all its readings – including 'agents' and 'instruments' – could be subsumed under a general function of 'Effector'-marking. The question to be addressed in this section is why 'agents' are cross-referenced on the verb by bound pronominals, while 'instruments' are not. This can be accounted for by recognising that the A prefix in the transitive bound pronominal construction has a different constructional meaning from the ergative construction.

Transitive prefixes are obligatory with transitive verbs (unless these appear in reflexive form). As we have seen, all transitive verbs can also take Effector arguments. However, we have also seen that there is no one-to-one correspondence between Actors and Effectors. Actors (as encoded by the first or A prefix on transitive verbs) may also correspond to noun phrases marked as contrastive agents with the ablative (§4.2.1.2), or to unmarked (absolutive) noun phrases, representing agents that are not Effectors, i.e. whose status as agent has been backgrounded (§4.2.1.3).

Cross-linguistically, bound pronominals are known to represent more salient arguments, which "tend to be the most animate ones, the most definite ones, and the ones most central to the events being reported" (Croft 1988: 175), while being less specific about the semantic role of the participants which they represent; this is typically the domain of case marking (see e.g. Lehmann 1988).

The transitive bound pronominal forms in Jaminjung could be said to represent participants which have characteristics of what Foley & Van Valin (1984) have termed the macro-roles Actor and Undergoer, or Dowty's (1991) Proto-Agent

and Proto-Patient. The transitive prefix construction as a whole could be characterised as 'Actor acting on Undergoer'.

However, these criteria are not sufficient to distinguish Actors from Effectors in Jaminjung. Rather, the crucial property of an Actor is that it not only has to play a causal role in an event, but it has to be the 'ultimate cause' or 'first cause' of this event (cf. e.g. DeLancey 1991a, Van Valin & LaPolla 1997: 146). Actors in Jaminjung are not always agents, at least under those definitions of the 'agent' role which include animacy and/or volitionality. Rather, inanimate participants may also be encoded as Actors (as well as Effectors). Examples include the entity which is the cause of someone getting tangled up in (4-26), or the sun as the cause of burning in (4-27), as well as other natural forces.

(4-26) wardba **gan**-ngangu thanthiya walig ba-jga!
entangle 3sg:1sg-GET/HANDLE.PST DEM round IMP-GO
'I got caught there, go around!' (i.e. by an obstacle) (DP, E04019)

(4-27) wurlngan-ni digirrij **gan**-kirriga-m,
sun-ERG/INSTR dead 3sg:1sg-COOK-PRS
'the sun is burning me "dead" (i.e. I'm suffering)' (Orig. Transl.: 'sun burning me') (DR, D27032)

Instruments which are manipulated by an agent, on the other hand, count only as Effectors, but not as Actors. This restriction is not adequately explained by an analysis whereby the more animate Effector is represented by the bound pronominal in the case where two Effectors (an 'agent' and an 'instrument') are competing for the Actor slot. This might explain why the agent, and not the instrument, is marked on the verb e.g. in a clause with both an 'agent' and an 'instrument', like (4-12) above. However, it does not explain the contrast between the two verbs for cooking/burning, intransitive *-irna* 'BURN' and transitive *-irriga* 'COOK'. As shown in §4.2.1.1 above, a fire as a 'heat source' can be coded as Effector with the intransitive verb *-irna* 'BURN' (which, being intransitive, does not provide an Actor slot). However, it may not figure as an Actor with the transitive verb *-irriga* 'COOK/BURN', since only human agents ('cooks'), and also the sun, but not a fire (which is a tool used by an agent), can be construed as an autonomous, ultimate cause of a 'heating' state of affairs.[73]

On the other hand, participants in self-propelled locomotion, possessors and perceivers can be construed as ultimate causes since without them the event

[73] This observation, for the moment, has to be restricted to fire as used by humans for the purpose of cooking, warming etc.; this is inherent in the semantics of the noun *guyug* 'fire, firewood'. It is unclear whether a bushfire (where it was not set by human agents), like the sun, could be the Actor of the transitive verb *-irriga* 'COOK'.

would not be possible, and, unlike canonical instruments, they require no further element in the causal chain leading to the the event in question.

4.2.2.1.2 Functions of Undergoer marking

The difference in function between case-marking and bound pronominal marking can also be demonstrated with reference to Undergoer marking on transitive verbs. Consider the transitive verb of motion glossed as 'APPROACH'.[74] This verb occurs in two case frames: the expected ergative-absolutive frame, and an absolutive-allative case frame (an ergative-allative case frame might be possible but I have no data to support this). In (4-27), the 'entity approached' is represented by an absolutive noun phrase, which is of course what one would expect (see also §5.3.7, and V/21 in the Appendix).

(4-27) ba-rrga ngarla **mangarra**, majani jalag
IMP-APPROACH TRY plant.food maybe good
'try go to (look at) the fruit, maybe it is all right (to eat)' (DR, CHE052)

In (4-28), on the other hand, the 'entity approached' is xxxxxxxrepresented by an allative-marked noun phrase, while at the same time also being represented as Undergoer by the U prefix on the verb.

(4-28a) walilig na-ruma-ny maja \
around 2sg-COME-PST thus
ngarrgina-bina **nganjan-karrga** \
1sg:POSS-ALL 2sg:1sg-APPROACH.PST
'you came round like this, you came up to me'

b) **ganurr-arrgantha-ya** **lubayi-bina,**
3sg:3pl-APPROACH-PRS many-ALL
gurrany wurrng ga-ngga
NEG shame 3sg-GO.PRS
'he walks up to a group of people, he is not shy'

It is not all that surprising that allative case marking should occur with the verb *-arrga* 'APPROACH'. The allative case has the general function of expressing direction (usually of motion, but also of gaze, see §2.2.3.3.8), and is therefore found with all verbs of motion (see also §5.3.1.2). There is independent evidence that *-arrga* 'APPROACH' is a verb of motion: it can combine with the same

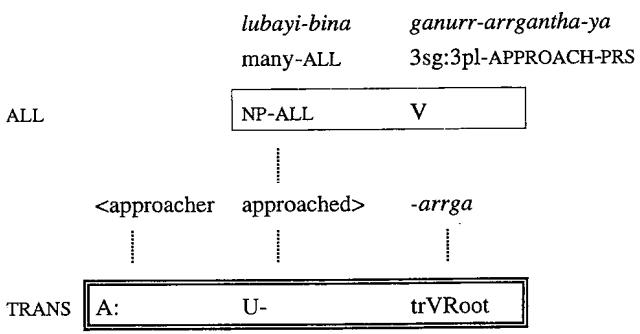
[74] The semantic characterisation proposed in §5.3.7 is 'x purposefully moves along a path which is oriented towards y'.

coverbs of manner, path, and change of location as the intransitive motion verb *-ijga* 'GO' and the other five motion verbs (see §5.3.1.3).

If one compares the use of the two case frames, there seems to be a semantic difference across the examples (although admittedly these are few in number), in that the 'approached' participant is construed as more affected when encoded as absolutive. For example, the fruit in (4-27) is likely to be eaten in the course of the event, and the brolga in V/21 is being threatened by the emu. The allative-marked 'approached' participants in (4-28) and (4-29), on the other hand, are not particularly affected in any way and are, therefore, just treated as spatial goals.

Thus, it is possible to say that the 'approached' participant of the verb *-arrga* can be construed as either an affected argument or a (spatial) goal, and that these properties are highlighted by the choice of the absolutive vs. allative case. In either case, though, an 'approached' participant counts as an Undergoer, represented by the U-prefix on the verb. This does not present a problem for a Construction Grammar treatment: a single participant may be represented by a noun phrase marked with 'peripheral' case which marks its role as a Goal, and at the same time as an instance of the Undergoer macro-role, if the participant role is semantically compatible with the argument roles of both constructions. This is schematically represented in Fig. 4-9.

Fig. 4-9. *Representation of 'approached' participant by U prefix and allative-marked noun phrase (ex. 4-29)*



Another type of 'mismatch' between bound pronominal marking and case marking is found with the verb *-uga* 'TAKE' (both as a simple verb and with coverbs). Just like *-arrga* 'APPROACH' (but unlike English *take*), *-uga* 'TAKE' is a true verb of locomotion,[75] which in addition to a moving entity has an 'entity taken' as one of its central participants. The 'entity taken' is obligatorily

75 For a more precise semantic characterisation of *-uga* 'TAKE' see §5.3.4.

represented by the U prefix on the verb. When it is lexically represented, this can be either as an absolutive noun phrase, as in (4-29a), or (more rarely) as a noun phrase marked with comitative case, as in (4-29b).

(4-29a) **jalig** yugung gan-**uga** <x yarrajgu x>
child run 3sg:3sg-TAKE.PST afraid
'she ran away with the child, (being) afraid' (PW, D31154)

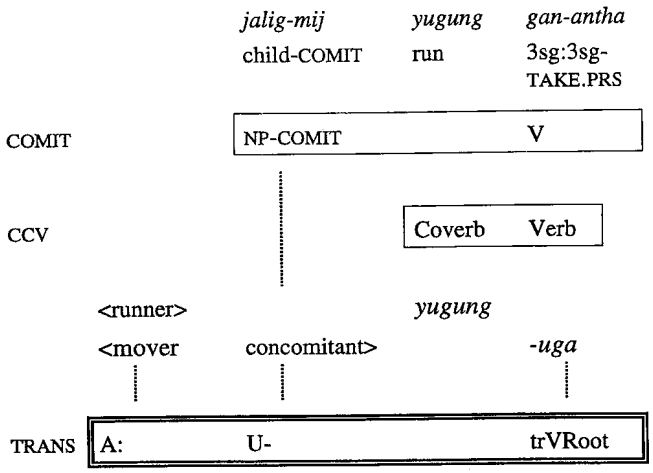
b) yugung=biya gan-**antha** **jalig-mij**=jung,
run=NOW 3sg:3sg-TAKE.PRS child-COMIT=COTEMP
'it runs away with the child' (deer in Frog Story) (IP, F03215)

It is also possible for the same verb to take a comitative-marked noun phrase with the interpretation that it is the means of transport for the 'entity taken', as in (4-30). (In all attested instances in the data, the 'entity taken' is represented as an absolutive noun phrase rather than as a second comitative noun phrase).

(4-30) nga-uga burrag **pleit-mij** **ngayin** \
1sg:3sg-TAKE.PST 3pl.OBL plate-COMIT meat/animal
'I took the meat to them with a plate' (NG, E11106)

This interpretation, however, is not possible for (4-29b): the child is not the means of transport, but the 'entity taken'. It is as if this clause is a blend of both possible English translations, *run away with the child* and *take the child away, running*. In other words, the fact that the child fills both an Undergoer and a Concomitant role can be explicitly marked in the same clause in Jaminjung because both bound pronominals and case marking are available for this purpose. (It may however be significant that this type of overlap is only attested for *-uga* 'TAKE' in combination with a coverb expressing manner.) This overlap is schematically represented in Fig. 4-10.

Fig. 4-10. *Representation of 'concomitant' participant by U prefix and comitative-marked noun phrase (ex. 4-30b)*



We now turn to the function of the U prefix with trivalent predicates. Here, there are two potential candidates for Undergoer status. Usually, the participant whose referent is higher in animacy will be encoded as Undergoer, for example the recipient with the verb *-ngarna* 'GIVE', the person from whom something has been taken with the verb *-yungga* 'TAKE.AWAY', or the 'student' with the complex verb consisting of *yurrg* 'show, teach' and *-arra* 'PUT'.

Only in the rare cases where the 'entity given' ranks higher than, or equally high as, the recipient in animacy may the argument roles be reversed (as for example in the case of 'giving' women in marriage). In (4-31), both possibilities are realised in the same context by the same speaker for *-ngarna* 'GIVE': first the 'recipient' and then the 'entity given' is cross-referenced on the verb.

(4-31) ba-**wurru-ngarna**=na juwi,
IMP-2pl:3sg-GIVE=NOW hand.over

ba-**wurruny-ngarna** thanthiya-gurna marlayi,
IMP-2pl:3du-GIVE DEM-?? woman

'hand (them) over to him, give the two (to him) those women' (IP, F03531)

4.2.2.1.3 'Dummy' Undergoer prefix with monovalent complex verbs

There are a few cases where the Undergoer prefix on the verb does not correspond to any participant, and therefore has to be regarded as a 'dummy' prefix. This concerns complex verbs formed with the two polyfunctional verbs

-yu(nggu) 'SAY/DO' and *-ma* 'HIT'. With certain monovalent coverbs, these form complex verbs which only have a single semantic participant, and only allow a single, absolutive, noun phrase. That is, only one argument (e.g. *jalig* 'child' in (4-32), and *ngayin* 'animal, meat' in (4-33)) can be expressed lexically. At the same time, the participant – which fits the Actor role semantically because it is the instigator of the event – is represented by the Actor prefix. The Undergoer prefix, on the other hand, is always in third person singular form.[76]

The formally transitive verb *-yu(nggu)* 'SAY/DO', the general performance verb, forms monovalent complex verbs e.g. with coverbs of internal motion, as in (4-32), or coverbs of bodily/emotional condition (see §4.2.3.3, §5.6.1 and §6.4.3 for details).

(4-32) jalig **jalug** gan-**unggu**-m \
child be.lively 3sg:3sg-SAY/DO-PRS

'the child is bouncing happily' (IP, F01549)

The verb *-ma* 'HIT' has a monovalent sense of 'emerging' with coverbs from a small class including *bul* 'emerge' in (4-33) (see §5.4.2.3 and §6.5.4 for details and further examples).

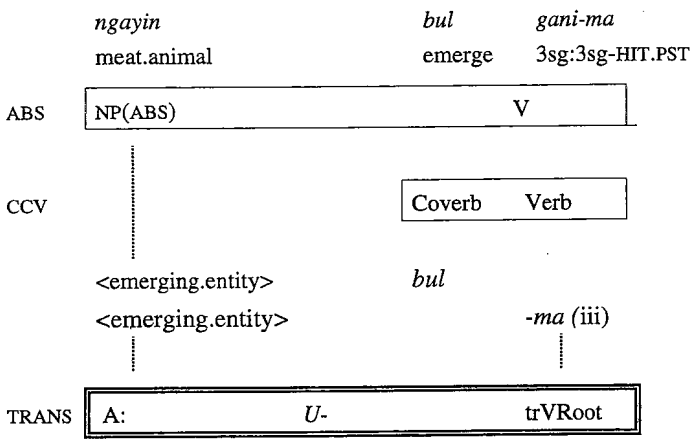
(4-33) ngayin=malang **bul** gani-**ma** bunyag
meat.animal=GIVEN emerge 3sg:3sg-HIT.PST 3du.OBL

'the animal came out to/for the two'

In other words, although the verbs in these cases take the transitive (Actor-Undergoer) prefixes, the Undergoer prefix does not correspond to any semantic participant of the complex verb, but has to be considered a 'dummy argument'. This is quite comparable to expletive subjects in languages like English or German, e.g. *it* in *it is raining*. In these languages, syntax requires a clausal subject which does not correspond to any participant of the verb. In Jaminjung the verbal morphology, which is lexically fixed, requires an Undergoer prefix which does not correspond to any participant of the complex predicate in some uses of the verb. This state of affairs is schematically represented in Fig. 4-11.

[76] In §4.2.3.3 we will allow for the possibility of coverbs representing a (propositional) participant of certain verbs, and present arguments why the third person singular U prefix does not represent this participant.

Fig. 4-11. *Argument structure of complex verbs with 'dummy' U prefix (ex. 4-33)*



The existence of 'dummy' Undergoer prefixes illustrates again that a (simple or complex) verb's valency can only be inferred on the basis of both lexical arguments and bound pronominals, not by relying on the bound pronominals alone as claimed by the 'pronominal argument hypothesis'. One of the criteria for central participant status, (4-5ii) in §4.1.3, was therefore that it has to be possible for the participant to be lexically represented.

It is worth noting that in Jaminjung, in contrast to some other Northern Australian languages (see e.g. Walsh 1987), the S or A prefixes never seem to have 'dummy' function. In other words, there are no impersonal constructions of the type 'it is raining' (see also the comment on (4-9) in §4.1.3) or of the type 'it cramps me' = 'I have a cramp'. That is, it is always possible to add a lexical argument corresponding to the A prefix, although in actual discourse this is often omitted. For example, with some predicates of bodily state and experience, the animate experiencer is encoded as an Undergoer, but the inanimate Actor can always be lexically specified, as shown in (4-34).

(4-34) garrij ... gurrany yang-iyaj=biyang ngabulgja,
cold NEG IRR:1sg-BE=NOW bathe

yana- yan-**mangu** **garrij-di** \
<false start> IRR:3sg:1sg-HIT cold-ERG/INSTR

'(it's) cold, I wouldn't be swimming now, the cold would affect me' (DB, E02061)

4.2.2.2 Intransitive bound pronominals

No constructional meaning has been provided for the S pronominal prefix. As in the discussion of the functions of absolutive noun phrases (§4.2.1.3), I would argue that the single pronominal prefix of intransitive verbs is neutral as to the role of the participant that it represents, because there is no need to express a contrast to a second participant role. For example, the participant encoded as S could be a controller of the event or not.

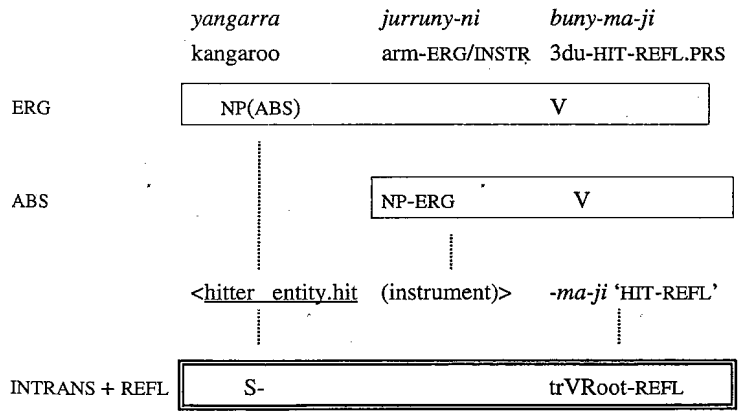
This also holds where the S prefix is the only argument of a reflexive/reciprocal verb stem. Reflexive/reciprocal stems consist of a bivalent verb root and a suffix *-ja* (past perfective) or *-ji* (see also §2.4.1.1). The resulting stems not only always take the intransitive paradigm of pronominal prefixes, but can also only take one lexical core argument, which is in absolutive, not in ergative case, as shown in (4-35). Thus, reflexive stems occur in the same constructions as root intransitive verbs.

(4-35) jurruny-ni buny-ma-ji yangarra \
lower.arm-ERG/INSTR 3du-HIT-REFL.PRS kangaroo

'the two fight with their paws, the kangaroos' (MJ, E04197)

Since the reflexive/reciprocal suffix signals referential identity (or reciprocity) between an 'Actor' and an 'Undergoer', the single argument slot in constructions with reflexive verbs still represents two semantic participants (this is represented in Fig. 4-12 by underlining of the two coreferential participants). However, the expression of their roles is neutralised. It follows that, with respect to complex verb formation and argument sharing, reflexive verb stems have the same possibilities as the transitive verb roots they are based on; therefore, they will not be considered separately in the description of argument sharing in §4.3.

Fig. 4-12. *Argument structure with reflexive-reciprocal verbs (ex. 4-35)*



4.2.3 Other constructions

In this section, a number of phenomena are discussed which do not correspond to argument structure constructions, but which are of some relevance for the description of argument structure. These are the part-whole construction (§4.2.3.1), the quotation construction (§4.2.3.2), and the possibility that a coverb in a complex verb construction fills a semantic participant slot of the verb (§4.2.3.3).

4.2.3.1 The part-whole construction

In this section, it will be argued that absolutive noun phrases in a part-whole construction should be distinguished from an argument structure construction (cf. the criteria given in §4.1.1 for core argument status). Absolutive noun phrases referring to inalienably possessed body parts often appear to constitute an extra argument in the clause. As in many other Australian languages,[77] the preferred way to express the idea that a body part is involved in an event is to treat its 'possessor' as a core argument. That is, the possessor is cross-referenced on the verb with the appropriate person marker, and optionally (and rarely) represented by a noun phrase as well, while the body part is represented as an additional noun phrase which agrees in case with the possessor expression. This is illustra-ted in (4-36a) and (4-36b), for an intransitive and a transitive verb, respectively.

(4-36a) lum nga-ngga wirlga
swell.up 1sg-GO.PRS foot
'my foot is swelling up' (MW, CHE113)

b) warrij-di gan-ba bunu ngayug
freshwater.crocodile-ERG 3sg:1sg-BITE.PST bone 1sg
'a crocodile bit my leg' (lit. 'a crocodile bit me leg') (fieldnotes J. Bolt)

Constructions like these are of course found in many languages and have received considerable attention in recent years (cf. e.g. the contributions in Chappell & McGregor 1996a and Payne & Barshi 1999); the phenomenon in question is commonly referred to as 'possessor raising', 'possessor ascension' or 'external possessor'. The term 'Part-Whole construction', rather than 'possessor raising', is used here because the verb's argument structure does not have to be changed (by an applicative derivation or a comparable device) to 'raise' the possessor; therefore a process-oriented term seems unsatisfactory (cf. Chappell & McGregor 1996b: 6f., Harvey 1996: 127).

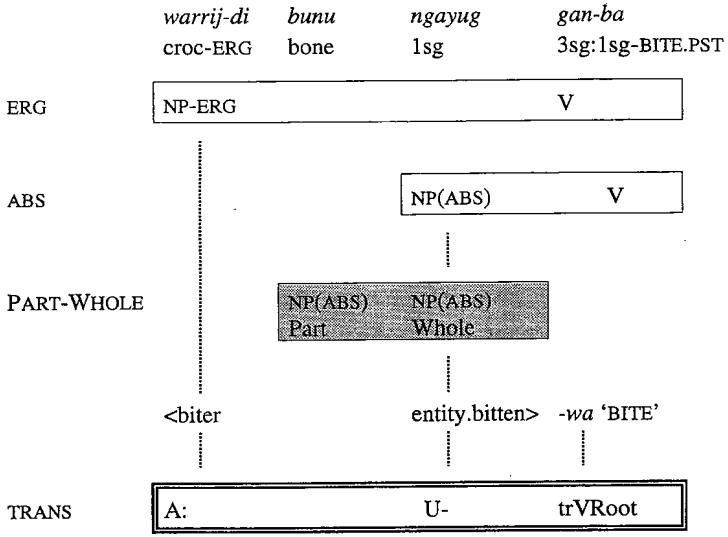
77 Several papers discussing the phenomenon in Australian languages are contained in Chappell & McGregor (1996); see also McGregor (1985), Dixon (1980: 293), and Blake (1987: 94ff.).

The grammatical status of the Part expression is a matter of debate in the literature: it has been described both as part of the same noun phrase as the Whole expression and as a separate phrase from the Whole expression (see Blake 1987: 95ff. for an overview), as 'range' (McGregor 1985), and even as 'secondary predicate' (Hale 1981, Laughren 1992). For the purposes of this study, it is sufficient to recognise the Part-Whole construction as a distinct type of construction, which in Jaminjung and other Australian languages is restricted to representing inalienable Part-Whole relations. Inalienable relations in Jaminjung include not only body part expressions, but also other expressions with referents in the personal sphere, such as a name or a shadow, but not kinship relations. The Part-Whole construction is not an argument structure construction, and hence does not reflect the semantic valency of a predicate in any way. Rather, any (body) Part expression licenses a Whole expression, which – if one of them corresponds to a central participant of the verb – assumes core argument status. In other words, it is the Whole that is represented as most involved in the event, and which therefore has grammatical argument status, while the Part expression merely provides an additional specification. The function of the Part expression is appropriately characterised by McGregor (1985: 210f.):

> [T]he body part specifies the EXTENT or LOCUS of the participant's involvement in the action. That is, it specifies the part of the individual which is most directly and intimately involved in the action.

The overlap of a Part-Whole construction with the argument structure constructions discussed so far is represented in Fig. 4-13. It shows that only the Whole, not the Part expression is linked to the participant of a predicate. This is true whether or not the Whole is represented by a separate noun phrase, as in (4-36b), or only by a bound pronominal, as in (4-36a) above.

Fig. 4-13. *Overlap of part-whole construction with argument structure constructions (ex. 4-36b)*



4.2.3.2 The quotation construction

Quotations differ syntactically in striking ways from arguments in the strict sense. Where (direct or indirect) speech is quoted, these quotes formally constitute finite clauses (and also units larger or smaller than a clause) which are not subordinated or otherwise marked as complements. This is illustrated in (4-37) for direct speech.

(4-37) Nangari gani-yu=ngarrgu **"wajama yurru-w-ijga"**
<subsection> 3sg:3sg-SAY/DO.PST=1sg.OBL fishing 1pl.incl-FUT-GO
'Nangari said to me "let's go fishing"' (DMc, TAP023)

Indirect speech, in Jaminjung, differs from direct speech not by being formally more integrated into the 'reporting' clause in any way, but only in 'point of view' (McGregor 1994a: 79), i.e. in what Munro (1982: 303) calls 'transparency of pronominal reference': in indirect quotation, deictic elements, such as pronominals and tense, receive their value from the speech situation itself, not from the reported speech situation. Expressions like that in (4-38) are much less frequent than expressions like (4-37) above.

(4-38) ba-yu=nu Iza-wu, **ga-wu-rum,** (...)
IMP-SAY/DO=3sg.OBL <proper.name>-DAT 3sg-FUT-COME
'say to Iza, she should come, ...' (NR, EV03018-9)

Other types of quotations include non-linguistic sounds, e.g. animal noise imitations as in (4-39), and quotations of non-verbal behaviour, i.e. by pantomime or iconic gestures, which are linguistically indexed only by the demonstrative coverb *maja* 'thus, do like that' (4-40) (see also §2.3.1.3). This is also the reason the term 'quotation construction' instead of the more usual 'reported speech construction' was adopted here.

(4-39) en malajagu=biyang **"hhhhhh"** +
and goanna=NOW <sound.imitation>
+ gan-**unggu**-m=yirrag=ngarndi jarriny- jarriny-ngunyi,
3sg:3sg-SAY/DO-PRS=1pl.excl.OBL=SFOC2 hole hole-ABL
'and the goanna then goes "hhhhh" at us from its hole' (imitating hissing noise) (IP, F01566)

(4-40) **maja'** gan-**unggu**-m
do.like.that 3sg:3sg-SAY/DO-PRS
darlarlab=bung ga-ngga warlnginy \
shiver=COTEMP 3sg-GO.PRS walking
'he does it like that, shakingly he walks' (with accompanying pantomime) (MJ, E04181)

The demonstrative coverb *maja* 'thus, (do) like that' may substitute for all types of quotations; the same holds for the corresponding interrogative coverb, *warndug* 'what (event)/how'?, which has to be used instead of *nganthan* 'what (entity)?'.

(4-41) warndug nga-wu-yu
do.what 1sg:3sg-FUT-SAY/DO
'what will I say' (could also mean: 'what will I do?') (JJ, MYA076)

As examples (4-37) to (4-41) show, all types of quotation are accompanied by the same verb of speech and performance, *-yu(nggu)* 'SAY/DO'. In addition, some trivalent simple and complex verbs of transmission, such as *-ngarna* 'GIVE', may also occur with quotations (see §5.7.1.3).

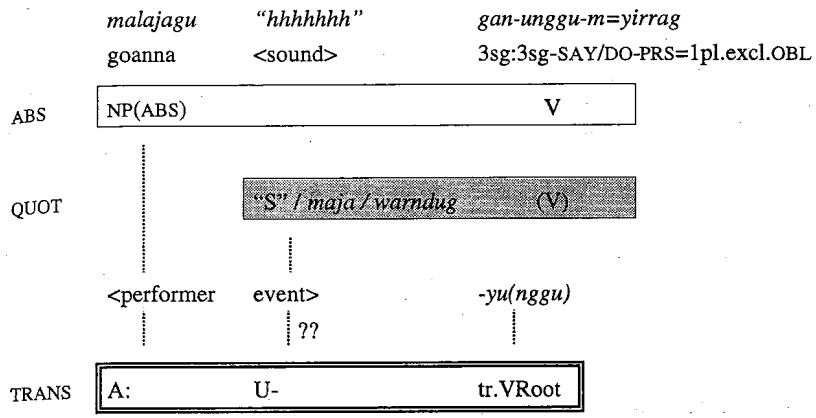
The precise syntactic analysis of quotation constructions is a matter of debate (see e.g. De Roeck 1994 and McGregor 1994a for an overview) and will not concern us here. For example, it is difficult, if not impossible, to determine whether the quotation is cross-referenced on the verb or not in Jaminjung (indicated by a question mark in Fig. 4-14 below). The U prefix invariably has

the third person singular form, and therefore could be analysed either as cross-referencing the quotation, or as a 'dummy prefix' as described in §4.2.2.1.3 above. The main point here is that the quotation construction has to be distinguished from argument structure constructions. As McGregor (1994a) points out, the relationship between the speech/performance predicate and the quotation is not adequately captured by a complementation or subordination analysis, and is perhaps best analysed as a 'framing relationship', following Rumsey (1982a: 157ff., 1994).

Since in our approach semantic and syntactic levels of argument structure are clearly separated, it is still possible to regard the quotation as representing a semantic participant of certain verbs, i.e. a propositional participant in the sense of Lehmann (1991: 204f.). This does not contradict a 'framing' analysis of the syntactic relationship. The verb *-yu(nggu)* 'SAY/DO' has, as part of its semantics, a propositional participant, i.e. an 'event performed' (see §5.6.2 for a refinement of this statement), just as a frame can be said to have a 'slot' for a picture (in the analogy used by McGregor 1994a). One of the possibilities of representing this participant is by a quotation. Quotations are not dependent on a framing verb since they very frequently occur without one, and may only be marked by suprasegmental means such as voice register. On the other hand, *-yu(nggu)* 'SAY/DO', and other verbs used in a similar way, require an overt representation of their propositional participant, even though this does not have to be part of the same intonation unit as the verb. This is the only case where the expression of a participant (other than where it is represented by a bound pronominal) is obligatory in Jaminjung. (A quotation construction, though, is not the only possibility of expressing a propositional participant; see §4.2.3.3 and §5.6.2). This is why obligatoriness, in addition to core argument status, was included among the criteria for central participant status proposed in §4.1.3.

The integration of the propositional participant of the verb *-yu(nggu)* 'SAY/DO' and the quotation construction (of which the 'framing' verb is only an optional part) is illustrated in Fig. 4-14. This figure also represents the equivalence between a verbal quotation, and the propositional pro-forms which may stand for both verbal and non-verbal quotations. Note that the addressee of the speech, or, more generally, the person towards whom the behaviour is directed, is not taken to correspond to a participant of the verb, but is regarded as an argument added by the construction, in line with the very general function of oblique pronominal clitics and dative-marked noun phrases outlined in §2.2.4.3.1 and §4.2.1.4.

Fig. 4-14. *The quotation construction with the performance verb* -yu(nggu) *'SAY/DO' (ex. 4-39)*



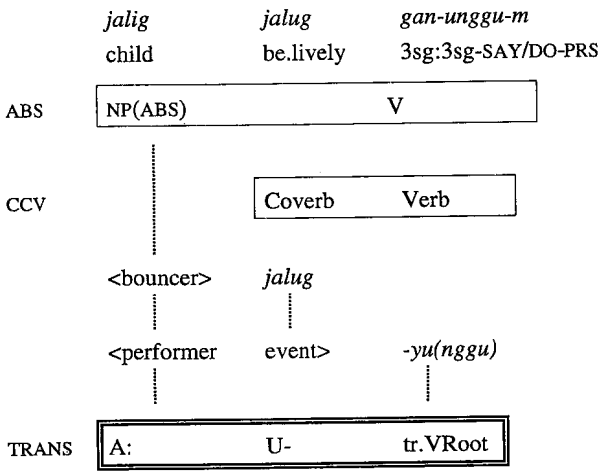
4.2.3.3 Coverbs as propositional 'arguments'

In the previous section (§4.2.3.2), a quotation was regarded as one of the possibilities of representing the propositional participant of the performance verb *-yu(nggu)* 'SAY/DO'. We will now consider the possibility of a coverb fulfilling the same function, i.e. fulfilling the valency requirements of this verb. As will be demonstrated in more detail in §5.6, *-yu(nggu)* 'SAY/DO' as a simple verb always has a reading of 'say', and accompanies a quotation or takes the 'cognate object' *liiny* 'word, speech'. However, it also functions as a part of complex verbs, with coverbs encoding types of sound emission, speech act, internal motion, and bodily and emotional condition. That is, quotations and coverbs, with this verb, are in complementary distribution. It is therefore plausible to assume that this verb requires a representation of a 'propositional participant', that is, a representation of something said, or of an event performed. The role of a propositional participant – unlike any other participant role – can also be filled by a coverb. (In fact, it was already shown in §4.2.3.2 that the demonstrative and interrogative coverbs *maja* and *warndug* are equivalent to a quotation). An example of a coverb encoding an event of 'internal motion', *jalug* 'be lively', is given in (4-42).

(4-42) jalig **jalug** gan-**unggu**-m \
child be.lively 3sg:3sg-SAY/DO-PRS
'the child is bouncing happily', 'the child does "bouncing"' (IP, F01549)

Although the coverb fills a semantic participant slot of the verb, it is not equivalent to a noun phrase here. Rather, the combination of coverb and verb in these cases is no different from other canonical complex verbs. As in other complex verbs, the coverb itself introduces a participant, which shares the Actor argument slot with the first participant of the verb. If the coverb is monovalent, like *jalug* 'be lively', this participant is always lexically encoded by an absolutive noun phrase, never by an ergative noun phrase. That is, the resulting complex verb behaves like a monovalent simple verb, even though the verb itself is formally transitive. The double status of a coverb both as a predicate in a complex verb, and as representing a propositional participant, is represented in Fig. 4-15. A similar analysis has been proposed for Hindi by Mohanan (1994, 1997), where nominals in complex predicates can function simultaneously as predicates and as arguments of the verb they combine with (see (7-12) in §7.2.1 for an example).

Fig. 4-15. *A coverb in a complex verb construction filling a participant slot of the verb -yu(nggu) 'SAY/DO' (ex. 4-32)*



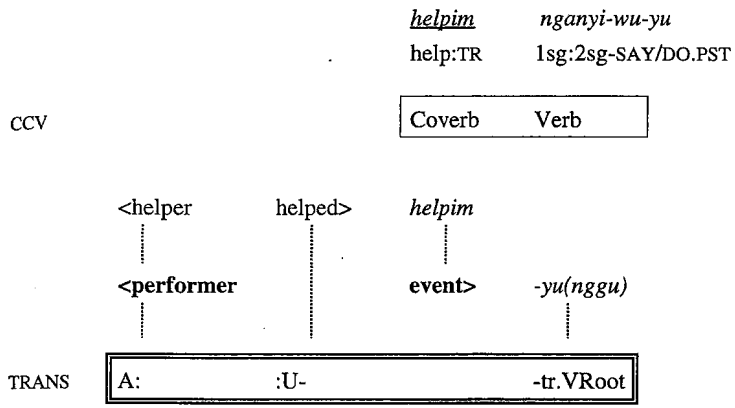
In Fig. 4-15, the 'event' participant is not linked to the U prefix. Just as in the case of quotations, it cannot be excluded with certainty that the propositional participant is also cross-referenced on the verb, since this is invariably in third person singular form and therefore there is no evidence from agreement. Note, however, that a coverb filling the propositional participant role may contribute a second participant to the complex verb, which in this case is represented as Undergoer. An example with a coverb borrowed from Kriol is given in (4-43) (see also §5.6.1.4 and §5.6.2.1 for further discussion and examples). In the light of examples like these, it seems unlikely that the propositional participant is

cross-referenced on the verb in the case of monovalent coverbs only. In §4.2.2.1.3, I suggested that the Undergoer prefix, in this case, should be regarded as a 'dummy' argument.

(4-43) **helpim** nganyi-wu-**yu**
help:TR 1sg:2sg-FUT-SAY/DO
'I will help you' (butchering a turtle) (JM, fieldnotes 1999)

The argument structure of (4-43) is represented in Fig. 4-16.

Fig. 4-16. -yu(nggu) *'SAY/DO' with a bivalent coverb (ex. 4-43)*



4.2.4 Summary

This section provided some justification for the constructional approach taken in this thesis, and illustrated the application of the criteria for core arguments and central participants proposed in §4.1. The separation of the semantic and the syntactic level of argument structure was shown to be fruitful for the description of the argument structure of Jaminjung predicates in several ways. First, it was demonstrated that the function of case-marked noun phrases (e.g. ergative-marked noun phrases) and the bound pronominal prefixes are best described by treating them as independent constructions which may overlap in representing the same semantic participant of a verb. For example, a participant represented as a pronominal Actor prefix may at the same time be represented as an ergative, ablative or absolutive noun phrase. A participant represented as a pronominal Undergoer prefix may correspond, in addition, to an absolutive, comitative or allative-marked noun phrase. Moreover, in some cases no participant may correspond to a pronominal prefix (instances of a 'dummy' U prefix). An absolutive noun phrase which formally looks like a core argument may not

correspond directly to a participant of the verb, but be introduced by a part-whole construction. On the other hand, a semantic participant may not correspond to any core argument, but may be represented as a quotation, or a coverb.

The discussion also provided the justification for excluding case-marked noun phrases (i.e. non-absolutive noun phrases) from core argument status in §4.1.1. No case-marked noun phrases can serve to unambiguously identify central participants; ergative-, ablative-, dative-, allative- and comitative-marked noun phrases all may or may not represent central participants of verbs or coverbs.

The notion of (semantic) valency as defined here, i.e. as based on the expression of central participants as core arguments throughout all constructions where a given predicate occurs, will be crucial for the description of argument sharing between coverbs and verbs in §4.3, as well as the more detailed account of the semantics of coverbs and verbs in Chs. 5 and 6.

4.3 Patterns of argument sharing in complex verbs

In this section, argument sharing of coverbs and verbs in a canonical complex verb construction will be addressed systematically for coverbs and verbs of different valencies. The discussion relies to some extent on the classes of verbs and coverbs to be established in Chs. 5 and 6. For reasons of space and readability, the relevant sections in these chapters will not always be cross-referenced, since they can be identified by the label given to the predicate class.

4.3.1 Argument sharing with monovalent verbs

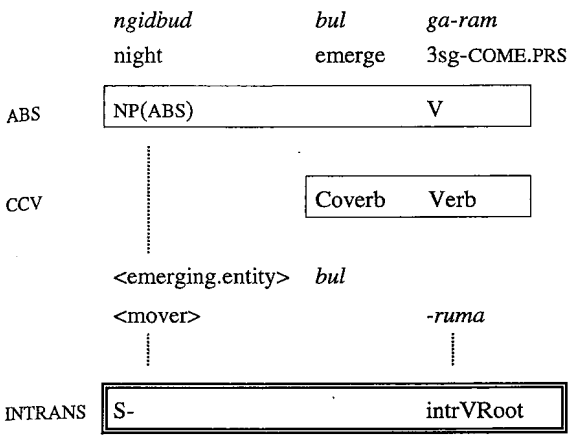
4.3.1.1 Monovalent coverbs

The set of monovalent verbs, by the criteria given in §4.1, is co-extensive with the set of formally intransitive verbs, i.e. verbs taking intransitive pronominal prefixes. Intransitive verbs (with the exception of *-yu* 'BE' and *-ijga* 'GO' in auxiliary function; see §4.2.1.3 and §4.3.1.2) only combine with monovalent coverbs. This presents the simplest logical possibility for argument sharing: the single participants of the coverb and verb are represented by both the S pronominal prefix on the verb, and by an (optional) absolutive noun phrase. This is illustrated in (4-44) and (4-45) for two of the five intransitive verbs, *-ruma* 'COME' and *-irna* 'BURN', and is schematically represented in Fig. 4-17.

(4-44) ngidbud=biyang **bul** ga-**ram**
night=NOW emerge 3sg-COME.PRS
'night falls' (DB, D13134)

(4-45) **bud** ga-w-**irna** ngunggu mangarra
cook.on.coals 3sg-FUT-BURN 2sg.OBL plant.food
'it will cook for you on the coals, the food' (IP, E09298)

Fig. 4-17. *Argument sharing of a monovalent verb and a monovalent coverb (ex. 4-44)*



Monovalent coverbs which combine with intransitive verbs in this way come from a number of classes. Although coverbs and verbs in the complex verbs listed below may stand in various semantic relationships to one another, they all behave alike from the point of view of argument structure.

(i) Coverbs of state, including the large class of coverbs of spatial configuration (position, posture, direction of gaze), combine with the stative verb *-yu* 'BE', as in (4-43) above, or (more rarely) with motion verbs in the reading 'move while in position' (see §5.3.1.4).

(ii) Most coverbs of spatial configuration, and some coverbs of path and change of location, combine with the verb *-irdba* 'FALL' (better glossed as 'change of locative relation'; see §5.2.3.1).

(iii) Coverbs of manner of motion and coverbs of path combine with the intransitive motion verbs *-ijga* 'GO' and *-ruma* 'COME', as in (4-44) above.

(iv) Coverbs of change of state combine with *-ijga* 'GO' in its 'change of state' reading (see §5.3.2.2), and – more rarely – with the verbs *-irdba* 'FALL' and *-irna* 'BURN' .

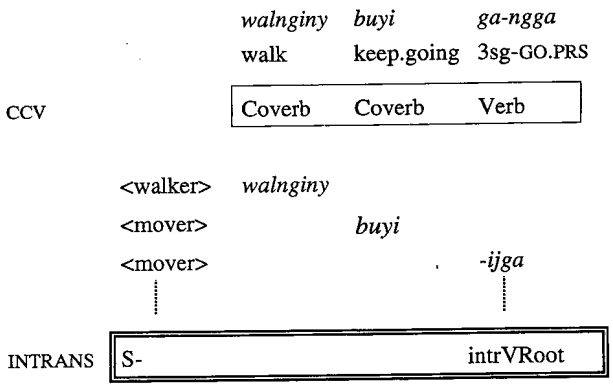
(v) Coverbs of cooking and burning combine with the verb *-irna* 'BURN' , as shown in (4-44) above.

More than one coverb from these classes may combine with the same verb in a single complex predicate, as long as the coverbs are semantically compatible with each other as well as with the verb (see also §3.2.2). The most frequently attested combinations are those consisting of multiple coverbs of spatial configuration and the intransitive verb *-yu* 'BE', and of multiple coverbs of path and/or manner of motion with an intransitive motion verb, as in (4-46).

(4-46) **walnginy** ga-**ngga** **buyi**
walk 3sg-GO.PRS keep.going
'he keeps on walking'

Argument sharing in this case is completely parallel to the case represented in Fig. 4-17 above: the single participants of all three monovalent predicates fill the same argument slots. For the sake of clarity, this is represented in Fig. 4-18.

Fig. 4-18. *Argument sharing of a monovalent verb and two monovalent coverbs (ex. 4-46)*



4.3.1.2 Bivalent coverbs with *-yu* 'BE' and *-ijga* 'GO' as auxiliary verbs

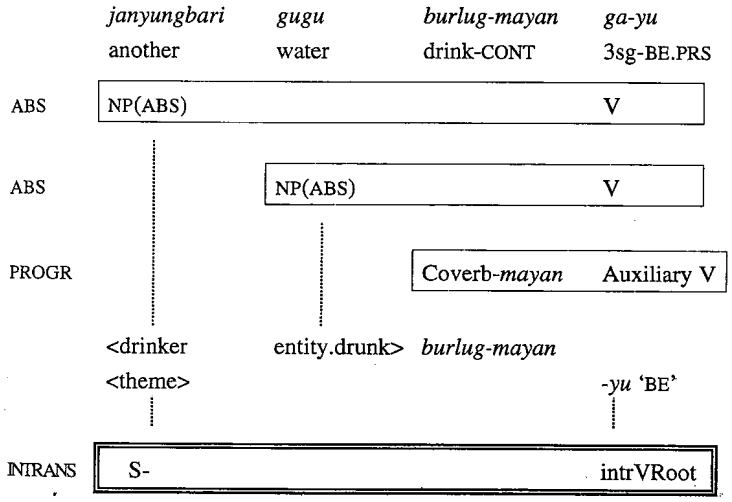
Two of the five intransitive verbs, namely *-yu* 'BE' and *-ijga* 'GO', may function as auxiliary verbs with nominal predicates and stative coverbs, as well as in the progressive construction and in its lexicalised counterpart, i.e. complex verbs formed with coverbs of continuous activity (see §3.3.1 and §6.3). The construction with *-yu* 'BE' is the more frequent one; the use of the verb *-ijga* 'GO' adds a semantic nuance of habitual or ongoing activity (see §5.3.2.3). The single participant of the auxiliary verb is thus neutral with respect to its role, and is simply represented as 'theme' in Fig. 4-19 below.

In this function, these two intransitive verbs may combine not only with monovalent coverbs, but also with bivalent coverbs. In this case, the first participant of the bivalent coverb is cross-referenced on the verb, and optionally represented by an absolutive noun phrase. The second participant may be represented as a second core argument, i.e. a second absolutive noun phrase, but is not represented by a pronominal prefix. This is illustrated for the productive progressive in (4-47) and for the 'lexicalised progressive' in (4-48), and is schematically represented in Fig. 4-19 (further examples can be found in §3.2.4, §3.3.1,§ 5.2.1.2, and §5.3.2.3).

(4-47) <u>en</u> janyungbari **burlug**-mayan ga-**yu** gugu \
and another drink-CONT 3sg-BE.PRS water
'and the other one is drinking water' (Farm Animals 9) (DMc, E13020)

(4-48) **thawaya**=biya burr-**inyi** <u>buliki</u> \
eating=NOW 3pl-BE.IMPF cow
'they were eating cattle' (crocodiles) (IP, EV03152)

Fig 4-19. *Argument sharing of a bivalent coverb and a monovalent verb in the progressive construction (ex. 4-47)*



4.3.2 Argument sharing with bivalent verbs

Coverbs combining with bivalent verbs may be monovalent, bivalent or trivalent. For monovalent coverbs, two possibilities of argument sharing exist: the only

participant of the coverb can be coreferential with the verb's Actor participant (§4.3.2.1) or the verb's Undergoer participant (§4.3.2.2).[78] Both possibilities are attested for several classes of coverbs, although the second type seems to be more frequent both in terms of types and tokens. With bivalent coverbs (§4.3.2.3), naturally, both participants of the coverb are represented as (A and U) bound pronominals, and optionally as noun phrases in ergative and absolutive case, or in one of the other cases discussed in §4.2. Bivalent verbs may also combine with more than one coverb which may differ in valency (§4.3.2.4). Rarely, bivalent verbs combine with trivalent coverbs (§4.3.2.5).

4.3.2.1 Monovalent coverbs aligning with A

Complex verbs in which the single participant of a monovalent coverb is represented by the Actor prefix of a bivalent verb include the following types:

(i) Coverbs of spatial configuration, including coverbs of direction of gaze, may combine with the verb *-ngawu* 'SEE'. With this verb, an unmarked coverb of spatial configuration is always interpreted as predicating on the Actor, as in (4-49). It can only be understood to predicate on the Undergoer if it occurs in a secondary predicate construction, marked with allative case (see §2.6.5.3).

(4-49) **gurdij** gan-**ngayi**-m=mindag, **mung**
stand 3sg:1-SEE-PRS=1du.incl.OBL watch

'he looks at us, standing' (clearly A standing, U sitting in the context) (IP, E17159)

Coverbs of spatial configuration also – rarely – align with the Actor of other transitive verbs. With some transitive verbs of motion, the resulting complex verb has the reading of 'moving while in a certain position', as in (4-50), with the positional *wamam* 'facing, face up'.

(4-50) ngiya=ma **wamam** gan-k**arrganthi**-ya=mindag +
PROX=SUBORD face.up 3sg:1-APPROACH-PRS=1du.incl.OBL

+ **warrng-warrng** walthub-ngunyi \
RDP-walk inside-ABL

'here he walks towards us, facing us, from inside' (man Enter/Exit animation video) (IP, E17153)

[78] This is really a shorthand for 'the semantic participant of the verb which is morphosyntactically represented as Actor or Undergoer, respectively'. Correspondingly, 'monovalent coverbs aligning with A' should be read as 'coverbs whose single participant is coreferential with that participant of the verb which is represented as A'.

Combinations of a coverb of spatial configuration and the verb *-mili/-angu* 'GET/HANDLE' may receive the interpretation 'act on something to maintain a position with respect to it', e.g. 'ride' in (4-51). Here, the single participant of the positional is also represented by the A prefix[79] (see also §6.1.1).

(4-51) nindu / nindu=ma **ngamang** burr-**angga**-m \
horse horse=SUBORD astride 3pl:3sg-GET/HANDLE-PRS

'horse, when they ride a horse,' (MJ, E04191)

(ii) Coverbs of manner of motion (e.g. *warrng-warrng* 'walk' in (4-50) above), as well as directional coverbs, like *ngirr* 'go past' (4-52) also align with the A of some transitive motion verbs.

(4-52) ngayug nganjin-**ngunga**-ny **ngirr**
1sg 2sg:1sg-LEAVE-PST go.past

'you went past me' (JM, E16418)

(iii) Some monovalent coverbs of continuous activity, and a few coverbs of manner and direction of motion, combine with the verb *-ma* 'HIT' in its reading of 'totally affect s.th.' (see §5.4.2.2); the resulting interpretation is 'A affects U by an activity' (see (6-27) in §6.3 for an example). Some coverbs of activity also combine with the verb *-ngawu* 'SEE' in its reading 'direct one's aggression at s.o.' (see §5.8.1.2).

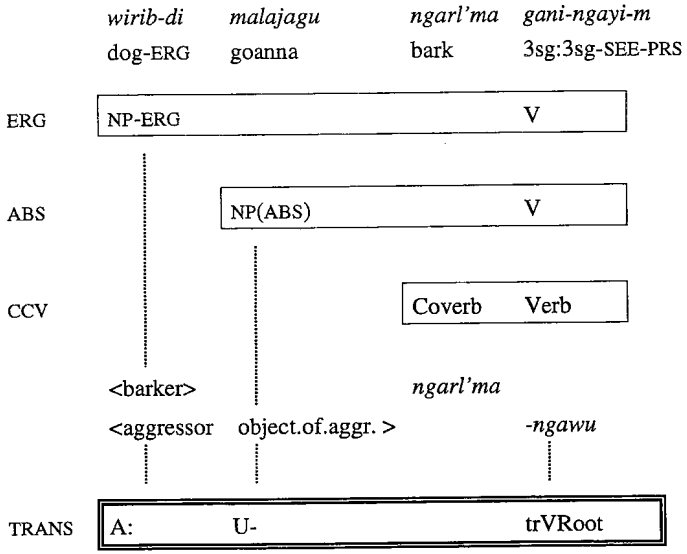
(4-53) wirib-di **ngarl'ma** gani-**ngayi**-m malajagu
dog-ERG bark 3sg:3sg-SEE-PRS goanna

'the dog is barking at the goanna' (DMc, CHE393)

Again, the kinds of semantic relationships found in complex verbs with monovalent coverbs aligning with A are diverse, but their behaviour with respect to argument structure is uniform. Argument sharing for a monovalent coverb aligning with the Actor of a bivalent verb is represented in Fig. 4-20.

[79] The 'location' participant of the coverb – not a central participant by the criteria used here – is coreferential with the second participant of the verb, and represented as Undergoer. The location participant can also be expressed as a locative noun phrase, as in (4-54) below.

Fig. 4-20. *Argument sharing of a bivalent verb and a monovalent coverb aligning with A (ex. 4-53)*



4.3.2.2 Monovalent coverbs aligning with U

Monovalent coverbs whose single participant shares an Undergoer argument with the second participant of a bivalent verb come from a large number of classes:

(i) Coverbs of spatial configuration regularly combine with the verb of induced change of locative relation, *-arra* 'PUT' (see also Fig. 4-2 in §4.1.3, representing argument sharing for the coverb *jurrb* 'be multiply'). The coverb illustrated in (4-54) is *bayirr* 'supported, on top'.

(4-54) gurang-ni **bayirr** gan-**arra**-ny langin-ki
old.man-ERG supported 3sg:3sg-PUT-PST wood-LOC
'the old man put it up in the tree' (ER, MIX150)

A few coverbs of spatial configuration also combine with *-mili/ -angu* 'GET/HANDLE' in a causative reading. When the verb *-arra* 'PUT' is used, as in (4-54) above, the complex verb focuses on the change of locative relation (with the latter specified by the positional). With *-mili/ -angu* 'GET/HANDLE', the focus is on the type of activity or contact that brings about the change in position, as in (4-55) (see also §5.4.1.2).

(4-55) murnunggu-ni **dirrg** ganuny-**mamila** \
string-ERG/INSTR tied.up 3sg:3du-RDP:GET/HANDLE.IMPF
'he tied up the two in chains' (a white station manager, two Aboriginal people who had run away from work) (DM, E19628; recorded by Mark Harvey)

(ii) Coverbs of spatial configuration also combine with the transitive verbs of possession and accompanied motion, *-muwa* 'HAVE', *-uga* 'TAKE', and *-anJama* 'BRING', in a depictive reading. Again, in all attested examples, the coverb aligns with U, that is, the position is predicated of the entity taken, brought, or possessed, as in (4-56).

(4-56) burdunburru **jarlarlang** gana-**ma**-ya
long.neck.turtle hang 3sg:3sg-HAVE-PRS
'he holds the long neck turtle hanging down (from his hands)' (IP, IZA002)

(iii) Coverbs of direction of motion, which show A alignment with some transitive verbs of locomotion (see §4.3.2.1 above), show U alignment with some other transitive verbs, including *-arra* 'PUT', *-mili/ -angu* 'GET/HANDLE' and *-wardgiya* 'THROW'; the resulting complex verbs have a causative reading, as in (4-57).

(4-57) wirib-di **jag** gan-**ardgiya**-ny thanthiya mu- munurru \
dog-ERG go.down 3sg:3sg-THROW-PST DEM <false.start> bee
'the dog has thrown down those bees' (Frog Story) (DBit, E07158)

(iv) Coverbs of change of state and coverbs of ballistic motion regularly combine with various transitive verbs of contact/force in a cause-result interpretation.

(4-58) **lag** yirra-**mila** bilij \
split 1pl.excl:3sg-GET/HANDLE.IMPF tree.species
'we used to split (wood off) the bilij tree' (EH, E17248)

(v) Monovalent coverbs of 'manner of heating', which also combine with the intransitive verb *-irna* 'BURN' (see §4.3.1.1 above), show U alignment with the corresponding transitive verb *-irriga* 'COOK'.

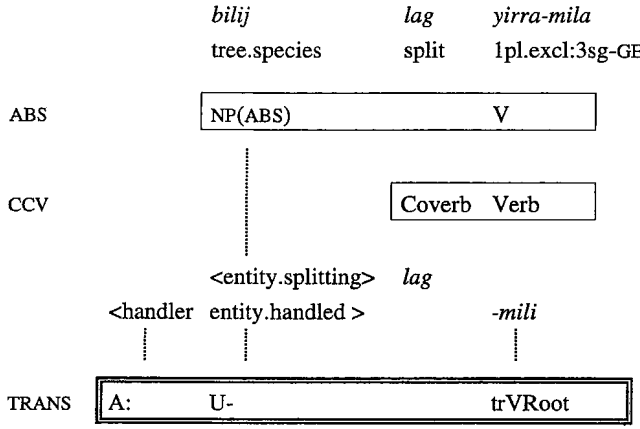
(4-59) jalang=biyang, **bud** gan-**irriga** Namij-ni,
today=NOW cook.on.coals 3sg:3sg-COOK.PST <subsection>-ERG
'today, Namij cooked it on the coals' (long yam) (CP, E09527)

(vi) Coverbs of activity combine with *-mili/ -angu* 'GET/HANDLE' in a causative reading. That is, the Actor of the transitive verb is interpreted as the causer, the Undergoer as the participant that is caused to perform the activity encoded by the

coverb (see (6-27) in §6.3 for an example). Very occasionally, such a causative construction is also found with *-(ma)linyma* 'MAKE'; however, this is not a preferred strategy of causative expression in Jaminjung (see §5.8.3.2).

Again, complex verbs of the type just illustrated, where the single participant of a monovalent coverb shares the Undergoer argument with the second participant of a transitive verb, do not receive a uniform semantic interpretation, but all behave like the complex verb illustrated in Fig. 4-21 with respect to argument sharing.

Fig. 4-21. *Argument sharing of bivalent verb and monovalent coverb aligning with U (ex. 4-58)*



At this point the question naturally arises whether the two types of monovalent coverbs – those aligning with A and those aligning with U – correspond semantically to predicates commonly found, in other languages, in an agentive ('unergative') class and an inactive ('unaccusative') class, respectively.

There is no straightforward answer to this question. Some types of monovalent coverbs, notably the coverbs of change of state and of ballistic motion, always show U alignment and fit the characteristics of inactive ('unaccusative') predicates semantically. Coverbs of manner of motion and coverbs of activity, on the other hand, always show A alignment except in some combinations with transitive verbs which clearly have an 'indirect causative' reading and do not entail that the Undergoer is inactive, so these are good candidates for an agentive ('unergative') class. Yet other coverbs, however, e.g. the positionals and coverbs of path, can show both U and A alignment depending on the verb they combine with. Positionals have been shown to vary in their predicate class assignment in other languages as well (see Levin & Rappaport Hovav 1995: 126ff.).

4.3.2.3 Bivalent coverbs

In the case of bivalent coverbs combining with bivalent verbs, we find a complete overlap in their argument structure. Both central participants share the A and U slots provided by the transitive verb, and any lexical argument, if present, that is cross-referenced by these bound pronominals.

Since the bivalent coverbs are those found to be restricted to the combination with transitive verbs (except with the two intransitive verbs that can function as auxiliaries), one would expect them to be more specialised in meaning, and therefore allowing less variability in the kinds of verbs they combine with. This prediction is indeed borne out by the data. A number of these coverbs are even restricted to cooccurrence with just one generic verb, but others are more variable. The types of combinations that are attested include the following:

(i) Coverbs of caused contact and effect, like *mam* in (4-60), and coverbs of 'pushing', combine with verbs of contact/force, and occasionally with other verbs like *-uga* 'TAKE'.

(4-60) ngabulu **mam** gani-**wa** ngiya,
breast hold.with.tight.grip 3sg:3sg-BITE.PST PROX
'it bit her here on the breast with a tight grip' (IP, F03408)

(ii) Coverbs of induced ballistic motion combine with the verbs *-wardgiya* 'THROW' or with *-yu(nggu)* 'SAY/DO' (in its reading of 'throw, release', see §5.6.1.4).

(4-61) **jubbany** ba-**wardgiya** jarrawul
spit IMP-THROW saliva
'spit out (your spittle)' (NG, FRA183)

(iii) Coverbs of induced change of location like *jarr* 'put down a single thing' are found with *-arra* 'PUT', and occasionally with verbs of accompanied locomotion. Argument sharing of a bivalent verb with a bivalent coverb was illustrated for this combination in Fig. 4-3 in §4.1.3.

(iv) Coverbs of 'holding', like *durd* 'hold a single thing' combine with the verbs *-muwa* 'HAVE', *-uga* 'TAKE', *-mili/ -angu* 'GET/HANDLE' or *-arra* 'PUT'.

(4-62) **durd** gan-**angu**=rndi=biya treile
hold.one 3sg:3sg-GET/HANDLE-PST=SFOC1=NOW trailer
gujarding-guluwa-ni ngarrgina Nawurla,
mother-KIN2-ERG/INSTR 1sg:POSS <subsection>
'she picked up the trailer, your mother did, my Nawurla' (IP, F03832)

(v) Quite a number of bivalent coverbs are restricted to occurrence with a single transitive verb (or sometimes two verbs). An example is the combination of a bivalent coverb of ingestion, *burlug* 'drink', with the verb *-minda* 'EAT'.

(4-63) gugu **burlug** nga-**minda**-ny,
water drink 1sg:3sg-EAT-PST
'I drank water' (JM, NUN238)

Often, in this case, the semantic contribution of the coverb and the verb is difficult to evaluate. An example is the coverb *gardaj* 'grind' in (4-64), classified as coverb of induced change of configuration, which exclusively combines with *-arra* 'PUT'.

(4-64) gayayi alrait, yirri **gardaj** yirr-**arra**-nyi,
waterlily.seeds all.right 1pl.excl grind 1pl.excl:3sg-PUT-IMPF
'the lily seeds all right, we used to grind them' (IP, E17326)

4.3.2.4 Argument sharing of bivalent verbs with more than one coverb

The same principles of argument sharing apply in the case where more than one coverb combines with a single verb, as was already illustrated for monovalent verbs and monovalent coverbs in §4.3.1.1. The data on multiple coverbs do not allow definitive generalisations on the conditions of their occurrence, but there seem to be no restrictions in terms of shared valency of coverbs. That is to say, more than one coverb can combine with the same verb as long as they are both semantically compatible with one another and with the verb. The coverbs may differ in semantic valency as long as their participants fully overlap with, or are included in, the participant set of the verb. Total overlap, i.e. a combination of two bivalent coverbs, is rare but attested; *waj* 'leave' and *jarr* 'put down' in (4-65) are both bivalent.

(4-65) murag-ngarna **waj** **jarr** yiny-**ngunga**-ny
shade-ASSOC leave put.down.one 1du.excl:3sg-LEAVE-PST
'we two put the camera down, leaving it' (DR, D27015)

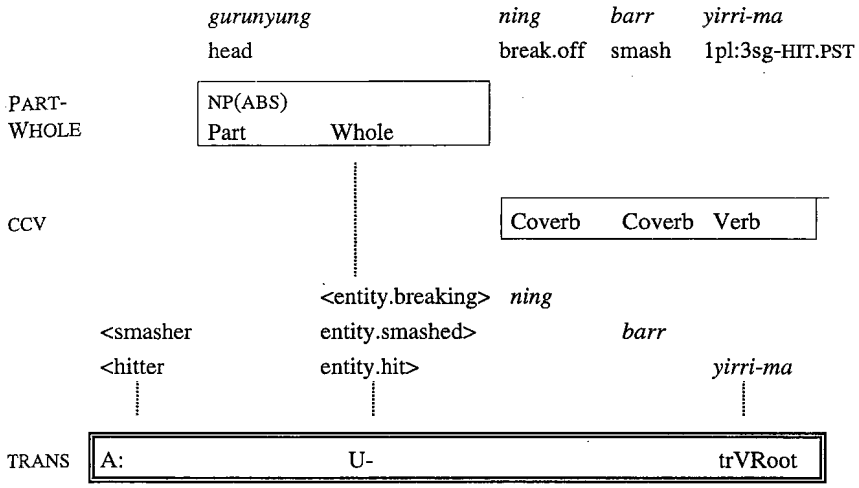
Argument sharing of two monovalent coverbs with a bivalent verb was illustrated in (4-50) above with the coverbs *wamam* 'facing' and *warrng-warrng* 'walking', both aligning with the A argument of the verb *-arrga* 'APPROACH'.

An example of incomplete overlap of the participants of two coverbs is shown in (4-66). Here, a monovalent coverb of change of state aligning with U, *ning* 'break off', and a bivalent coverb of contact and effect, *barr* 'smash against', are both combined with the same verb, *-ma* 'HIT'. This is represented in Fig. 4-22. Because the absolutive noun phrase represents a body part, it has to be assumed

that it is linked to the Undergoer argument through a Part-Whole-Construction as outlined in §4.2.3.1.

(4-66) **ning'**=biji yirri-**ma** gurunyung **barr** \
break.off=ONLY 1pl.excl:3sg-HIT.PST head smash
'we just killed it, smashing its head' (a flying fox who had bitten a woman) (IP, F03426)

Fig. 4-22. *Argument sharing of bivalent verb and both a monovalent coverb aligning with U and a bivalent coverb (ex. 4-66)*



4.3.2.5 Argument sharing of bivalent verbs with trivalent coverbs

As already indicated in §4.1.3, bivalent verbs may combine with trivalent coverbs, to form complex verbs which behave like trivalent simple verbs. That is, these complex verbs allow for a second absolutive argument, not cross-referenced on the verb.

There are only a few trivalent coverbs of this type; all are classified as 'coverbs of transfer' in §6.15. One is the coverb *nyilng* 'promise s.o. a wife' which combines with *-ma* 'HIT' in its reading of 'totally affect' (see §6.15.1 for an example). Two trivalent coverbs of transfer of a message, *yanggi* 'ask' and *yurrg* 'show, teach', combine with *-arra* 'PUT 'in its reading of 'transfer of a message'. The coverb *yanggi* 'ask', in addition to the 'speaker' and the 'addressee', has a propositional participant – the 'proposition asked' – which is usually represented by a quotation, as in (4-67).

(4-67) nga-ngu dalwag
1sg:3sg-GET/HANDLE.PST rock.cod

ngarrgina-ni ngaba-rni **yanggi** gan-**karra**-ny
1sg:POSS-ERG brother-ERG ask 3sg:1sg-PUT-PST

"mindi-mindi-ya dalwag"
1du.incl:3sg-EAT-PRS rock.cod

'I caught a rock cod, and my brother asked me: "let's eat rock cod"' (MMc, TIM112-3)

Argument sharing for the coverb *yurrg* 'show, teach' was already illustrated in Fig. 4-4 in §4.1.3.

Theoretically, bivalent verbs could also form trivalent complex verbs in combination with bivalent coverbs, through partial overlap of their participants. However, we would then expect these coverbs to also occur in other combinations which do not allow for a third core argument. Combinations of this type have not been found; all the coverbs listed in this section always allow for the expression of three core arguments.

4.3.3 Argument sharing with trivalent verbs

In analogy to the situation observed with bivalent verbs, coverbs of any valency (monovalent, bivalent or trivalent) should be able to combine with trivalent verbs. All these patterns are indeed found, but since complex verbs formed with trivalent verbs are very rare, there are not many instances of each type in the data, and more research is needed to determine whether the cases attested are representative of regular patterns, and whether they exhaust all possibilities.

4.3.3.1 Monovalent coverbs

The possibility of a monovalent coverb aligning with a trivalent verb is only marginally represented in the data. The change of state coverb *burrb* 'finish, to do all', the directional coverb *buru* 'go back, return', and the coverb of ballistic motion *lawu* 'spill' (4-68), may combine with *-ngarna* 'GIVE'.

(4-68) yeah, ngabuny-**ngarna**=biya na: .. **lawu** \
yes 1sg:FUT:2du-GIVE=NOW NOW spill

'yes, I will pour it for you two' (IP, F03726)

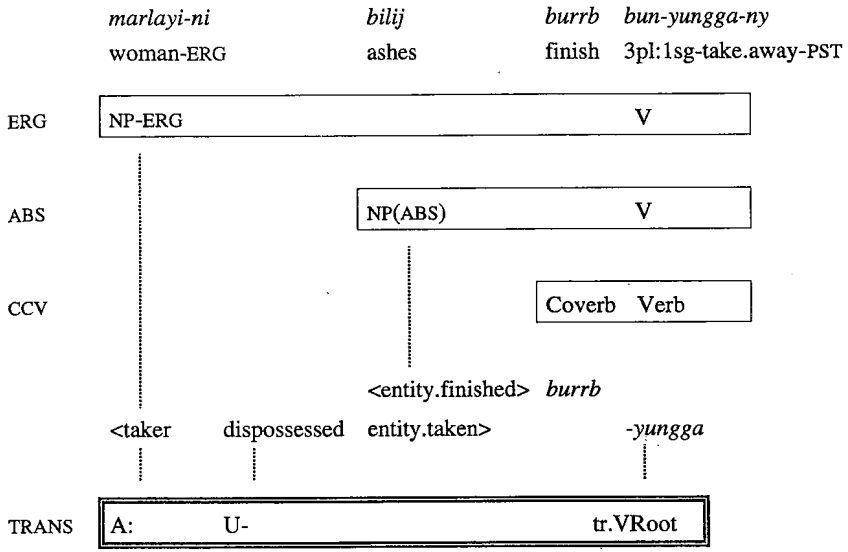
The coverb *burrb* 'finish, to do all' is also attested with *-yungga* 'TAKE AWAY'. The coverb always aligns with the 'secondary object', i.e. its only participant is represented by the absolutive noun phrase that is not cross-referenced on the verb (4-69). This is schematically represented in Fig. 4-23.

(4-69) **burrb** bun-**yungga**-ny marlayi-ni,
finish 3pl:1sg-TAKE.AWAY-PST woman-ERG

minyga=warra bilij
what's.it.called=DOUBT ashes

'the women took all of it from me, what's it called, ashes'[80] (ER, MIX051)

Fig. 4-23. *Argument sharing of a monovalent coverb with a trivalent verb (ex. 4-69)*



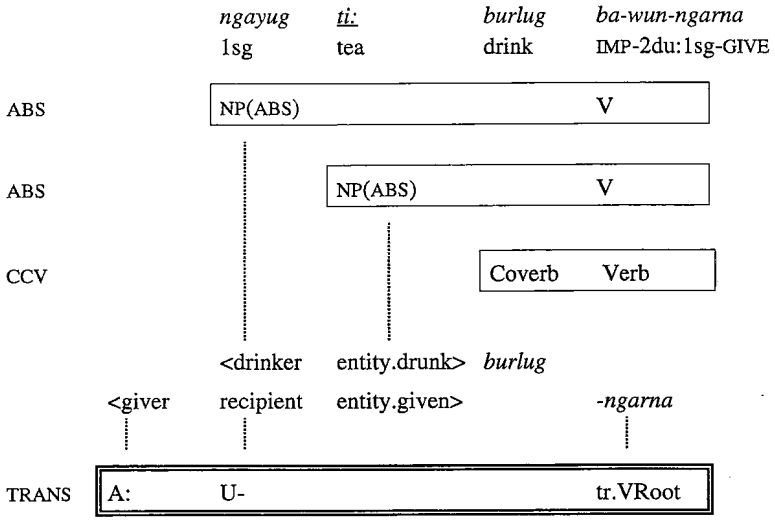
4.3.3.2 Bivalent coverbs

Examples of bivalent coverbs combining with trivalent verbs are also very rare. The only attested type of argument sharing is that of a bivalent coverb aligning with the 'recipient' and 'entity given' participants of the verb (4-70). This is also represented in Fig. 4-23.

[80] Ashes from certain trees are a valued commodity, since they can be mixed with chewing tobacco.

(4-70) ngayug=biya ti=binji ba-wun-**ngarna** **burlug** \
1sg=NOW tea=ONLY IMP-2du:1sg-GIVE drink
'me, give me only tea to drink, you two' (DB, E02055)

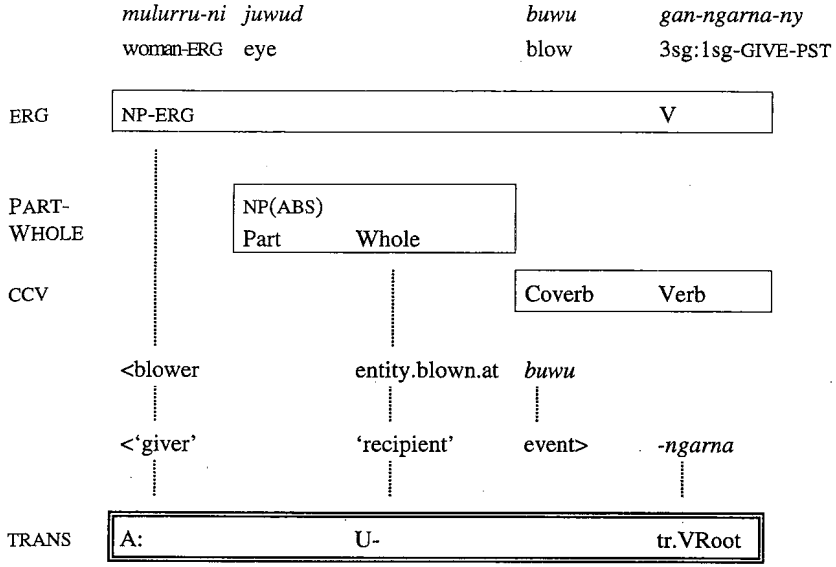
Fig. 4-24. *Argument sharing of a bivalent coverb with a trivalent verb (ex. 4-70)*



There also exists a different type of combination of *-ngarna* with bivalent coverbs. The verb, in this case, has a secondary sense of 'direct action at someone', and has an event participant metaphorically filling the role of the 'thing given' (see §5.7.1.4 for details). This event participant is filled by a coverb, which specifies the kind of effect on the 'recipient'. Consequently, the coverb has to be bivalent, and its two participants fill the same argument slots as the 'giver' and the 'recipient' participant of the verb. This type of complex verb, then, behaves syntactically like a bivalent simple verb, that is, it allows for two core arguments, while *-ngarna* as a simple verb allows for three core arguments. An example is given in (4-71), and its argument structure is represented in Fig. 4-25.

(4-71) mulurru-ni **buwu** gan-**ngarna**-ny juwud
old.woman-ERG blow.with.mouth 3sg:1sg-GIVE-PST eye
'The old woman blew (the dirt off) my eye.' (DM, Fieldnotes Mark Harvey)

Fig. 4-25. *Argument structure of complex verbs formed with* -ngarna *'GIVE' in its sense of 'direct action at' (ex. 4-71)*

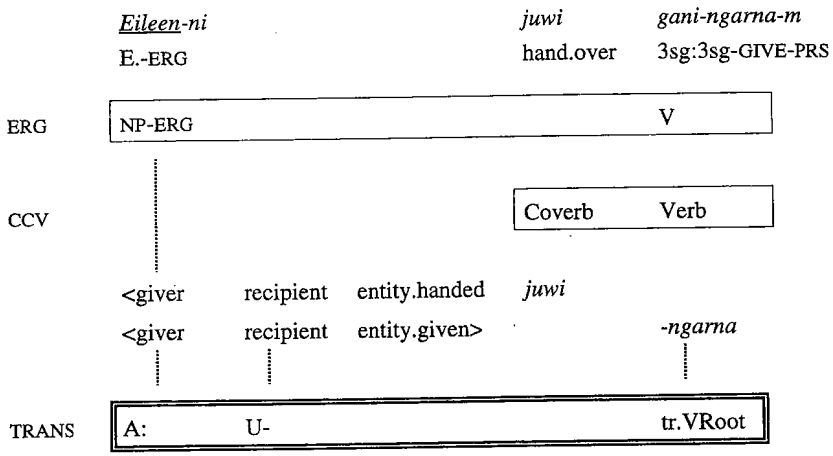


4.3.3.3 Trivalent coverbs

In combinations of a trivalent coverb and a trivalent verb, the participant roles of verb and coverb overlap completely. This is only attested for the coverb of transfer *juwi* 'hand over, pass over' with *-ngarna* 'GIVE', exemplified in (4-72) and illustrated in Fig. *5-26*.

(4-72) yinaya Eileen-ni=mang gani-**ngarna**-m **juwi** \
DIST <proper.name>-ERG=SUBORD 3sg:3sg-GIVE-PRS hand.over
'there is E. handing it to him' (materials for making a bough shade) (IP, F03962)

Fig. 5-26. *Argument structure of complex verbs formed with* -ngarna *'GIVE' and a trivalent coverb (ex. 4-72)*



Even taking into account that more combinations may exist which are not attested in the data, there is a very noticeable cline in frequency between complex verbs formed with trivalent verbs and/or trivalent coverbs, and those formed with bivalent or monovalent coverbs. In particular, monovalent coverbs are very versatile in the types of combinations that they may enter into: they may share a single participant with monovalent verbs, or share either an 'Actor' or an 'Undergoer' participant with a bivalent verb (or rarely, a trivalent verb).

4.4 Summary

In this chapter, I have argued for the need to keep morpho-syntactic and semantic argument structure distinct in the analysis of Jaminjung complex verbs. This is because both components of the complex verbs – coverbs and verbs – are semantically relational, i.e. have distinct argument structures on a semantic level, but are integrated with a single set of argument expressions on the morpho-syntactic level. Argument structure of complex verbs was described in terms of argument sharing: semantic participants of coverbs and verbs may share the same morpho-syntactic argument slots, and in fact, there is a restriction on complex verb formation in that coverb and verb have to share at least one argument. If the verb has a propositional participant as part of its semantic valency, a coverb may also fulfil the valency requirements of this verb (§4.2.3.3).

A construction-based approach was developed in §4.1 and §4.2 for the representation of argument sharing. Because of the lack of one-to-one correspondence of

bound pronominal marking and case marking, and other difficulties of distinguishing complements from adjuncts, only core arguments were considered in the definition of semantic valency of verbs and coverbs. Core arguments were defined as comprising both bound pronominal prefixes and absolutive noun phrases. Central semantic participants – i.e. those making up the 'basic' or 'minimal' valency of verbs and coverbs – were defined as those that are either expressed as core arguments, or expressed obligatorily, across constructions. In §4.3, the patterns of argument sharing in complex verbs were presented. Table 4-1 provides a summary of the attested patterns.

Table 4-1. *Patterns of argument sharing in Jaminjung complex verbs*

Verb / Coverb	monovalent	bivalent	trivalent
monovalent	√	√	√
bivalent	only Aux	√	√
trivalent	–	√	√

The generalisations that can be drawn from the attested patterns are in the range predicted by a 'nuclear juncture' analysis of Jaminjung complex predicates (e.g. Foley & Olson 1985): the sets of (central) participants shared by coverb and generic verb have to either fully overlap, or one has to be included in the other. In other words, the syntactic arguments of a complex verb construction correspond to the semantic valency of at least one of the constituent predicates. Usually the predicate with the richer valency is the verb. As we have seen, bivalent transitive verbs frequently combine with both monovalent and bivalent coverbs, and trivalent verbs may combine with monovalent, bivalent or trivalent coverbs. The possibility for a coverb to contribute an extra participant to the complex verb is severely restricted (the complex verb in this case can occur in constructions with an additional argument slot, compared with the constructions that the simple verb may occur in). Combinations of this type were only observed for bivalent coverbs of continuous activity in the progressive construction and in 'lexicalised progressives' with the intransitive verbs *-yu* 'BE' and *-ijga* 'GO' functioning as auxiliary verbs (§4.3.1.2), and for trivalent coverbs with a small number of bivalent transitive verbs (§4.3.2.5).

It should be kept in mind that, despite the different patterns of argument sharing and the different types of semantic relationships between verbs and coverbs that are attested, all complex verbs can be regarded as instantiating a single construction type, the canonical complex verb construction identified in §3.2.

SEMANTICS AND USE OF THE GENERIC VERBS

CHAPTER 5

5.1 Introduction

The most fascinating, but also the most difficult task in describing the verb system in Jaminjung and Ngaliwurru is to account for the use of the 'generic', closed-class, verbs. At first sight, some of these verbs can be given a straightforward, consistent translation, while others occur in a bewildering range of contexts, and their semantic contribution to certain complex verbs is difficult to establish.

This chapter is an attempt to characterise the meaning of each of the 26 verbs that are well attested in Jaminjung and Ngaliwurru,[81] and to show that their range of uses in both simple and complex verbs is, to a large extent, semantically motivated. It will also be shown that establishing the meaning of the individual verbs is not sufficient to account for their use. Rather, the verbs have to be seen as part of an overall system where they enter into oppositions with other verbs. Verbs may even have overlapping extensions; it will be argued that in these cases, pragmatic principles based on metalinguistic knowledge (as outlined in §1.4.2.3) also influence the choice of a verb.

The approach taken here is further based on the view, spelled out in more detail in §5.1.1, that the generic verbs serve to classify events. Since they form a closed class, and are obligatory in every finite clause, they exhaustively carve up the semantic space covered by verbal predicates. In other words, Jaminjung and other Northern Australian languages have an overt system of event categorisation. Describing the verbs' meanings thus allows us to establish which features of events are criterial for this categorisation.

5.1.1 The classificatory function of generic verbs

It will be argued throughout this chapter that the closed-class verbs in Jaminjung can be regarded as having a classificatory function, in that they categorise events.

[81] Nine additional, marginal verbs will be mentioned in passing and listed in §5.9; they are extremely infrequent, partly obsolete, and can be substituted for by other expressions. They therefore do not play any role in event categorisation.

This approach has some tradition in Australian linguistics, although the phenomenon has not received much attention outside Australia.

The basic idea behind this approach is that these verbs have a similar function, in the domain of verbs, to nominal classifiers[82] in the domain of nominals: They form a closed class, are obligatory in certain constructions (as it happens, in every finite clause), and serve to group all verbal expressions into a limited number of classes. This type of classification by verbs, of course, has to be distinguished from a phenomenon frequently referred to as 'verbal classification', where it is nominals (or nominal referents) that are classified by 'verbal means', e.g. the verb root itself, incorporated stems, or verbal morphology (see e.g. Allan 1977: 287, Dixon 1982e: 223ff., Mithun 1986; Merlan et al. 1997, Seiler 1986).

The earliest use of the term 'classifier' or 'classification' with reference to closed-class verbs in a Northern Australian language that I am aware of is by Capell (1979a). The term is also employed by, among others, Dixon (1982e), Rumsey (1982a), McGregor (1990, 2000, inter alia), Silverstein (1986), Hoddinott & Kofod (1988), Green (1989, 1995), Reid (1990), and Nicolas (1998). Others, e.g. Tryon (1974) and Walsh (1996), speak of 'verb classes' with clearly the same phenomenon in mind. Some of these authors make the parallel to nominal classification quite explicit. For example, Capell (1979a: 303), in referring to the Daly River group of languages (northern neighbours of Jaminjung), states that

> ... auxiliaries[83] classify actions in a way similar to noun prefixes classifying nouns. It is a classification by kind of actions, so that the same base can sometimes take different auxiliaries in a somewhat different sense.

This quote illustrates the need for clarification of exactly what is being classified when we speak of classification. Two contradictory possibilities are invoked here: although Capell clearly makes the point that the Daly River 'auxiliaries' classify concepts ('actions') and not other words (i.e. the semantically specific predicative lexemes), the analogy he draws is to noun prefixes classifying words (nouns), and not concepts.

In the literature on nominal classification, opinions diverge on whether it is words or concepts/referents that are classified (see Lucy in press for an overview). On the one hand, it is sometimes claimed that the choice of a classifier is determined by the nominal with which it is combined in a construction, and that it is therefore semantically redundant (e.g. Serzisko 1982). On the other hand, Allan (1977: 285) expresses the view that

> [nominal classifiers] have meaning, in the sense that a classifier denotes some salient perceived or imputed characteristics of the entity to which the associated noun refers.

The conflict can partly be resolved by recognising that systems of classification may actually differ in the degree of grammaticalisation,[84] and consequently also conventionalisation, of the association of a classifier with a given nominal. Allan himself (1977: 297) emphasises that classification is subject to 'conventions that restrict innovation'. On the one end of the scale there are generic nouns in classifier constructions, as found in several Australian languages (see e.g. Dixon 1982d, Johnson 1988, Walsh 1997, Wilkins in press). According to Wilkins, the choice of a generic noun in Arrernte clearly serves to highlight certain aspects of a referent in context (which could pertain to its inherent nature, its function/use, or social status); the choice of the classificatory noun is not simply determined by the noun that is classified.

Similarly, in systems of so-called 'possessive' or relational classification (e.g. Dixon 1982e, Lichtenberk 1983, Crowley 1996, Lehmann 1998), where the classifier reflects the relation between a possessor and a possessum (e.g. 'inalienable possession', 'food possession', 'transport possession'), the choice of classifier does not simply depend on the nominal, and therefore the same nominal typically appears with more than one classifier.

On the other hand, in systems of numeral classification, found for example in South-East Asian languages, the choice of classifier is more often determined by inherent properties of the nominal referent, such as shape, size, or animacy. This often leads to the impression that the classifier is redundant, and its choice is more or less determined by the nominal itself (cf. e.g. Serzisko 1982, Downing 1986). However, even for systems of this type some authors have emphasised that the choice of a classifier depends on its inherent meaning, as manifested in the cases of 'multiple classification', i.e. the combination of the same noun with a number of classifiers with resulting meaning differences in the complex expressions (e.g. Becker 1975, Lucy in press).

On the other end of the grammaticalisation scale there are noun class or gender systems of the type found in Bantu languages, Indo-European languages, and some Australian languages (Corbett 1991, Dixon 1982c, Harvey & Reid 1997). Here the basis for the classification often lacks semantic transparency, and

82 The term 'nominal classifier' should here be understood as covering classifiers in various types of constructions, including generic nominals, noun classifiers, numeral classifiers, possessive classifiers, and noun class markers.

83 The term 'auxiliary' is used in this quote, as elsewhere in the literature (see §2.4), for the closed-class verbs; in the Daly River languages the size of the class varies, but is comparable to that of Jaminjung (see §7.1). The term 'base' refers to the uninflected word class corresponding to Jaminjung coverbs (see also §2.3).

84 For accounts of the grammaticalisation of classifier systems see e.g. Dixon (1982a), Lehmann (1995a: 59f.).

consequently class membership is usually indeed lexically determined by each word (with exceptions; cf. e.g. Dixon 1982c: 166 for Dyirbal). In this case, what is classified are clearly words and not referents. (Therefore Capell, in the above quote, is correct in stating that noun prefixes classify nouns).

Several criteria have been adduced to allow identification of systems of nominal classification where the choice of classifier is not completely determined by a given nominal, but is made on a semantic basis, and can be used to highlight aspects of the intended referent for discourse purposes. The first criterion is 'multiple classification': nominals may combine with more than one classifier; therefore the choice of classifier cannot be lexically determined by the word. Rather, a speaker chooses 'a different classifier because he/she is interested in different qualities of the object in question' (Adams 1986: 243; see also Allan 1977, Becker 1975, 1986, Wilkins in press).

The second criterion concerns the assignment of loanwords and words for new objects. In a classifier system where the choice of classifier depends on the intended referent, one expects these words to be assigned to classes on a transparent semantic basis, rather than, e.g., on the basis of their phonological properties, and rather than being assigned to a single designated class (e.g. Allan 1977: 290, Dixon 1982c: 177, Carpenter 1986: 17).

A third criterion is that classifiers may be employed in a creative, figurative, or humorous use, in order to point out unexpected properties of an intended referent; this presupposes the possibility of multiple classification (Allan 1977: 296f., Adams 1986, Dixon 1982c: 166, Becker 1975, 1986, Wilkins in press).

These criteria can be supplemented by the general formal criteria for grammaticalisation (cf. e.g. Lehmann 1995); the most important ones in the present context are the degree of bondedness (on the scale: free form > bound form > zero), and the size of the paradigm (assuming that it constitutes a closed class in any case; cf. also Dixon 1982e).

The same criteria can be applied to the systems of verbal classification found in Northern Australian languages. For Jaminjung, they can be used to show that we are dealing with a system of classification with a low degree of grammaticalisation, and a high degree of semantic transparency. Evidence based on the formal criteria already points in this direction: the size of the verb class, with 26 core members and 10 or so very marginal members, is relatively large, though intermediate in comparison with other Northern Australian languages (see §7.1). In addition, the inflected verbs themselves are clearly free forms, since they exhibit some syntactic variability with respect to the coverbs, and moreover can form verbal predicates on their own, as simple verbs (see Ch. 3). In this respect, Jaminjung verbs are more similar to generic nouns than to other types of classifiers or class markers. The term '(generic) verb' was chosen for this word class partly in analogy to generic nouns. Consequently, I will not actually refer to

Jaminjung verbs as 'classifiers', but only as having classificatory function; the term 'classifier' could then be reserved for more strongly grammaticalised inflecting verbs of the type found e.g. in Gooniyandi (McGregor 1990; see also §7.1).

Turning to the semantic criteria, the first criterion mentioned above (multiple classification) is the one alluded to by Capell in the quote given above. Translated into the terminology employed here, it states that coverbs may often appear with more than one verb; this is true for Jaminjung just as it is for the Daly River languages. The choice of verb therefore cannot be determined by the coverb, nor can coverbs be divided into disjoint classes, each of which is assigned to a single verb. In Ch. 6, it will be shown that coverbs can be divided into classes according to the **sets** of verbs they combine with. The choice of a verb, however, depends not on the coverb, but on the event that is described. Examples are given in (5-1) to (5-3). The coverb *jab* can be translated as 'get detached, of entity that is attached with its end point to a surface (e.g. hair, feather, grass, leaf)'. This coverb may form a complex verb with the intransitive locomotion verb *-ijga* 'GO', which classifies the whole event as one of motion[85] (§5.3.2.1).

(5-1) marring wirib, **jab** ga-**ngga** wirra
bad dog detach.point 3sg-GO.PRS hair
'the dog is sick, it is losing hair' (DB, BUL314)

In addition, *jab* may combine with either of two transitive verbs; *-mili/ -angu* 'GET/HANDLE' and *-ma* 'HIT'. The verb *-mili/-angu* 'GET/HANDLE' categorises events of manipulation by ongoing contact (§5.4.1.1), and consequently the complex verb has the reading 'pull out'.

(5-2) warnda=biyang **jab-jab** burra-**mila**,
grass=NOW RDP-detach.point 3pl:3sg-GET/HANDLE.IMPF
'grass then they used to pull out' (CP, E09582)

The verb *-ma* 'HIT' has a secondary sense where it categorises events of 'complete affectedness' (§5.4.2.2); the complex verb formed with *jab* and this verb has the specialised reading 'shave'.

(5-3) **jab** nga-**ba**-ji ngurungurung
detach.point 1sg-FUT:HIT-REFL beard
'I want to shave' (DD, DAR017)

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85 Alternatively, one could argue that the change of state reading of -ijga 'go' is invoked here (see §5.3.2.2).

As these examples show, the verb may add a semantic component that is not present in the coverb, but is relevant to the event as a whole. This point was already made with respect to the argument structure of verbs and coverbs in Ch. 4. For example, the verb *-mili* 'GET/HANDLE' in (5-2) introduces an agentive participant, and also specifies the manner – manipulation by enduring contact – in which this participant acts on the other, to achieve the result encoded by the coverb *jab* 'get detached (of point attachment)'. Thus, by the criterion of 'multiple classification', generic verbs in Jaminjung categorise events and are not classifiers of coverbs (except in the sense that all coverbs that may combine with a given verb of course constitute a class which is defined formally by exactly this property, but which is not defined semantically, i.e. by any semantic component common to all of these coverbs).

The pervasiveness of borrowing from and code-switching to Kriol among present-day Jaminjung speakers provides an excellent opportunity to apply the second criterion, the combination of loanwords with a classifier. Kriol verbs are very frequently integrated into Jaminjung as coverbs, and combined with verbs in the way described in §3.5. The choice of verb in these cases is variable, that is, there is no single verb that all loanwords combine with, as in some other languages with complex verbs such as Kanuri (Hutchison 1981). With loanwords from Kriol, just as with Jaminjung coverbs, the choice of verb is therefore based on salient features of the event described, and we find multiple classification even here. For example, in (5-4), the Kriol loan *tayimap* 'tie up' is employed as a coverb and combined with the verb *-arra* 'PUT'. The characteristics of the event that is foregrounded by the choice of this verb – a verb of caused change of locative relation – is that the dog is placed in a fixed position by means of tying it up.

(5-4) Winnie ba-yu=nu
<proper.name> IMP-SAY/DO=3sg.OBL

tayimap gani-w-**arra** that dog
tie.up:TR 3sg:3sg-FUT-PUT that dog

'tell Winnie she should tie up the dog' (ER?, NOT079)

In (5-5), on the other hand, the same coverb is combined with the verb *-ma* 'HIT' (in its secondary sense of 'completely affect'). The resultant reading here corresponds to English 'bandage', i.e. 'affect someone by tying something around her' (see also §5.4.2.2).

(5-5) mirrung-mayan yawayi, **tayimap** bun-**ma**=biyang
lie-CONT yes tie.up:TR 3pl:1sg-HIT.PST=NOW

'pretending (i.e. just acting), yes, they bandaged me then' (on a video demonstrating traditional use of bush medicine) (IP, F03762)

The third criterion mentioned above is less straightforwardly applied to the Jaminjung verbs. I have no clear examples of humorous use of the verbs, although they are sometimes used figuratively (but in apparently conventionalised expressions). In order to explore the degree of semantic transparency of complex verbs, descriptions of unfamiliar events were elicited, e.g. by means of the video stimuli mentioned in §1.3.4. Here we find a good deal of variation among speakers in their choice of verb to describe the same real-world event, which would certainly support the claim that the verbs are employed in a creative way. Examples will be given throughout this chapter.

Needless to say, we will also encounter cases where the choice of verb indeed seems to be lexically determined by a given coverb, and the combination is not transparent. In §1.4.1.3 and §3.2 I already pointed out that, although complex verb formation is productive and licensed by a construction, many complex verbs are collocations, i.e. conventionalised expressions that are part of the lexical knowledge of speakers. In other words, although the majority of complex verbs are compositional, they can be regarded as encoding idioms — motivated, but not predictable. Since conventionalisation is a matter of degree, it is not surprising that there are also some combinations which are apparently idiomatic in the narrow sense, i.e. decoding idioms. Candidates will be pointed out throughout this chapter; however, the focus is on accounting for compositional combinations.

The criteria just listed will be applied throughout this chapter, and alluded to in the description of the meaning and range of uses of each individual verb, to support the claim that Jaminjung verbs categorise events, in the sense of the term introduced in §1.4.3. Crucially, according to this analysis, the classificatory function of the verbs extends to their use as simple verbs. Recall again the analogy to generic nouns. To use Jaminjung examples, the expressions *ngayiny* 'animal' and *ngayiny malajagu* 'animal goanna' both have denotata that belong to the class of 'animals'. This is true whether the generic noun combines with a specific noun or not, and whether it receives a more specific interpretation in context, or can only be given a non-specific interpretation. By analogy, if a verb is used as a simple verb without a coverb (see §3.1), it conveys the idea that the event in question falls into the same category as another event which may be encoded by means of a canonical complex verb (see §3.2) formed with this verb.

The relevance of systems of nominal classification as a window on human categorisation has been widely acknowledged, and quite a lot is known by now about nominal classification in this respect. In language after language, nominal classifiers draw on the features of animacy, sex, shape, size, consistency, or function (e.g. edibility) of entities, but not, e.g., on colour, sound or temperature (e.g. Allan 1977: 297, Dixon 1982e: 227, Craig 1986a, Lakoff 1987, Senft in press). It has also been shown that classifiers may be polysemous, and may form

radial categories, with chains of subsenses linked by common semantic components, which are not necessarily present in all subsenses (e.g. Lakoff 1987).

The question is whether similar cross-linguistically valid principles of categorisation can be established for events. In other words: What are the perceived components of events that form the basis for a categorisation by generic verbs? With regard to the Northern Australian languages Worora and Gooniyandi, Silverstein (1986) and McGregor (1990) suggest that valency and aktionsart (lexical aspect) form an important basis of categorisation. In addition, classification by verbs has been shown, e.g. by McGregor (1990, 2000) and Reid (1990), to be based on schematic representations of trajectories and configurations in events of, e.g., motion, contact and impact. The semantic components lexicalised in the Jaminjung verbs will turn out to be similar. Moreover, some of the verbs are polysemous, and form radial categories based on metaphorical or metonymic extensions of some of these components. The question whether these components are language-specific, or are likely to be cross-linguistically valid in event categorisation, can only be touched upon in passing here.

5.1.2 Organisation of the chapter

In the remainder of this chapter, the meaning of each of the generic verbs is discussed in turn, taking into account its uses both as a simple verb, and as part of (canonical) complex verbs. Only the meaning and use of verbs is considered here; their formal properties such as inflections, stem allomorphy and suppletion, as well as dialectal variation, have been discussed in §2.4. Reference will be made, of course, to the valency of the verbs, and their contribution to the argument structure of the complex verbs, on the basis of the criteria established in Ch. 4.

In describing the range of uses of a particular verb, frequent reference will be made to classes of coverbs that these verbs may combine with. These classes are established on the basis of formal evidence in Ch. 6. Thus, both chapters are dependent on one another in supporting the argument that the use of verbs is semantically motivated. For reasons of readability, references to the section numbers in Ch. 6 are generally omitted, since the relevant sections can easily be identified by the label used for the coverb class.

The principles of semantic description employed here have already been stated in §1.4.2. Monosemy will be taken as a heuristic guide, with the aim of establishing semantic invariants that will account for all uses of a given verb. However, polysemous verb senses will be recognised where necessary. The types of semantic links between polysemous senses (e.g. metaphor, metonymy) will also be described in these cases. In addition, it will be shown that pragmatic principles may account for some of the limits in the use of verbs that are not predictable from their semantics alone.

For each verb (or sense of a verb) a semantic characterisation is suggested; for ease of reference, these characterisations will be numbered, marked with 'S'. The metalanguage employed in the semantic characterisation is relatively informal, i.e. the metalanguage is English (some problems with a formal approach to semantic decomposition for the task at hand have been pointed out in §1.4.2.1). The main purposes of these characterisations are, first, the representation of semantic components that are present in more than one verb and thus the indication of semantic relationships between verbs; second, the representation of semantic links between polysemous senses; and third, a clear indication of central participants of the verbs, as defined in §4.1.

The notational conventions employed are as follows. Semantic components are written on separate lines where no particular ordering relation is assumed to hold between them. Central participants are indicated by variables (x, y, z); in addition, a special variable (E) is employed for propositional participants of some verbs which may be encoded by a coverb (see §4.2.3.3). As already indicated, participant roles are assumed to be predicate-specific and to fall out from the semantic characterisation of a given predicate. For example, in the semantic characterisation proposed for *-arra* 'PUT' in §5.2.4.1, 'x causes y to be in a locative relation with respect to a location', the variables x and y indicate that the verb has two central participants which are expressed as core arguments. They are not variables for a specific type of morphosyntactic expression (for example, 'x' should not be taken to stand for 'ergative-marked noun phrase'), since, as already shown in §4.2, there is a good deal of flexibility in the expression of core arguments. Rather, the variables stand for roles of participants that can be characterised purely in terms of the meaning of the predicate. For example, in the characterisation of *-arra* 'PUT' given above, x is the 'entity causing another entity to be in a locative relation with respect to a location'. These derived participant roles correspond to the informal roles such as 'putter' and 'entity put' that were employed in Ch. 4.

It is recognised that paraphrases suggested here are only one of the possible ways to capture the semantic analyses behind them. In fact graphic representations will be offered as alternatives to the propositional representations in some cases. The overall goal throughout this chapter, rather than to argue for a particular paraphrase, is to provide a genuine insight into the basis of categorisation by verbs in Jaminjung, the division of labour among the verbs (including the differences in functional load), and the lexicalisation patterns involved. Therefore, care is taken to illustrate the full range of uses against which the semantic characterisation(s) proposed for each verb can be judged, and to distinguish typical and frequent uses from marginal ones.

The chapter is subdivided by subgroups of verbs, which are established on the basis of (mostly) formal evidence. Evidence comes from complex verb formation (the combination of verbs from one subgroup with coverbs from the same class)

as well as argument structure; the first criterion takes precedence over the second, so that formally intransitive and transitive verbs will be found in the same subgroup. As will be emphasised repeatedly, most verbs are in opposition on different levels – formal, semantic, or pragmatic – and therefore alternative subgroupings are conceivable. For example, the formal transitivity distinction between verb stems (based on the choice of the intransitive or transitive paradigm of pronominal prefixes) has not been incorporated into the subdivision.

The grouping proposed here is based mainly on the types of coverbs that the verbs may combine with; this criterion is supplemented by the occurrence in certain argument structure constructions. The resulting subgroups of verbs are verbs of location, possession, and change of location (§5.2); verbs of locomotion (§5.3), verbs of contact and force (§5.4), verbs of burning and cooking (§5.5), verbs of change of possession (§5.7), and a residual class of 'other verbs' (§5.8). Each verb is discussed in a separate subsection; the multi-functional verb *-yu(nggu)* 'SAY/DO' is treated in a separate section (§5.6). Brief mention is also made of a number of very marginal verbs (§5.9). Further subsections within each of these sections usually correspond to polysemous senses of a given verb (if there are any), with the exception of some introductory sections.

5.2 Verbs of location, possession, and change of locative relation

The four verbs grouped together in this section are *-yu* 'BE' (§5.2.1), *-muwa* 'HAVE' (§5.2.2), *-irdba* 'FALL' (§5.2.3) and *-arra* 'PUT' (§5.2.4). The close semantic and formal relationship between expressions of location/existence (like those formed in Jaminjung with *-yu* 'BE') and expressions of possession (like those formed with *-muwa* 'HAVE') has been repeatedly noted in the literature also for other languages (e.g. Lyons 1967, Clark 1978b, Lehmann 1995: 26, Freeze 1992). The inclusion of *-irdba* 'FALL' and *-arra* 'PUT' in the same set will be justified below, by arguing that they have to be analysed as verbs of change of a locative relation, rather than verbs of motion in the narrow sense.

Formally, the semantic component of 'locative relation' common to these four verbs (in their basic sense) is reflected in their systematic combination with positional coverbs, which encode the configuration of a figure[86] with respect to a location (§6.1). This is illustrated in (5-6) with the coverb *bayirr* 'supported, on top', in combination with all four verbs.

[86] This use of the term 'figure' is based on Talmy (1985: 61); it is employed here to characterise a participant that is located. The term 'location' will be employed here instead of Talmy's 'ground'.

(5-6a) birrigud ga-yu gugu-**ni** \ **bayirr** ga-**yu**
tin 3sg-BE.PRS water-LOC supported 3sg-BE.PRS
'a billycan is in/on the water \ it is supported by the water' (big tin floating – but motionless – in the water) (DMc, CHE330)

b) mangarra galya=gun, gana-**ma**-ya **bayi-bayirr** \
plant.food lily.seeds=CONTR 3sg:3sg-HAVE-PRS RDP-supported
'the seed bulb food, it has them on top' (i.e. the lily has the seeds in a supporting relation) (MJ, MIG005-6)

c) ngarrgina Nawula **bayirr** ga-**rdba**-ny=ni=biya
1sg:POSS <subsection> supported 3sg-FALL-PST=SFOC1=NOW
baujed-**gi**
bough.shade-LOC
'... my Nawula got on top of the bough shade' (IP, F03810)

d) gurang-ni **bayirr** gan-**arra**-ny langiny-**gi**
old.man-ERG supported 3sg:3sg-PUT-PST wood-LOC
'the old man put it up in the tree' (meat) (ER, MIX150)

The centrality of the component of 'location' to the meaning of these verbs is further confirmed by the fact that with all four verbs, the (end) location of the figure can be specified with a locative-marked noun phrase. This is illustrated for *-muwa* 'HAVE' in (5-7) below, and for the other three verbs in (5-6a), (5-6c) and (5-6d) above.

(5-7) gana-**ma**-ya **tharrmarrb** jarra-**g**
3sg:3sg-HAVE-PRS stick.out mouth-LOC
'he has it sticking out in his mouth' (cigarette) (DP, SPA050)

In addition to their basic, locational sense, these verbs – with the exception of *-muwa* 'HAVE' – also have secondary senses: *-yu* 'BE' has an auxiliary function with predicates of state and activity (§5.2.1.2), and *-irdba* 'FALL' has some idiomatic metaphorical uses (§5.2.3.2). The verb *-arra* 'PUT' has a somewhat wider range of functions; it has the secondary senses of 'transformation' and 'conventional naming' (§5.2.4.2), 'transfer of a message' (§5.2.4.3), and 'induced change of configuration' (§5.2.4.4); in addition, it also has some more idiomatic uses (§5.2.4.5).

5.2.1 *-yu* 'BE'

Jaminjung only has a single intransitive stative verb, *-yu* 'BE'.[87] As a simple verb, and as part of some types of complex verbs, it is used to predicate existence or location of a figure (§5.2.1.1). Together with nominal predicates or coverbs of state, and coverbs of continuous activity, *-yu* takes on a secondary function as an auxiliary verb (§5.2.1.2).

5.2.1.1 Existence, location and position

Etymologically, *-yu* 'BE' is a positional verb (see §2.4.2.1), and since it is the only intransitive stative verb, it can be regarded as a 'neutral' positional. It predicates of a figure that it is at rest, and implies that it is also located. Since existence can be regarded as location in an underspecified, or understood, place, the same verb can be used to predicate existence; the close semantic link between these types of expressions is reflected by their cross-linguistically attested formal relationship (cf. e.g. Lyons 1967, Clark 1978b, Lakoff 1987: 518f.). In Jaminjung, *-yu* as a simple verb carrying primary sentence stress is used to express existence, as in the brief exchange in (5-8).

(5-8) A: gugu **^ga-yu**?
water 3sg-BE.PRS

B: **^ga-yu** \
3sg-BE.PRS

'Is there water?' – 'There is.' (upon arriving at a place) (CHE432)

If a location is specified, the expression can be a predication of existence or of location, depending on the information structure of the sentence in question. In (5-9), the sentence focus clitic *=ngardi* marks an all-new-utterance, that is, the referent, *wagurra* 'rock', is newly introduced, and the clause is interpreted as an existential statement.

(5-9) wagurra thanthiya gujugu ga-**yu**=ngardi:::,
rock DEM big 3sg-BE.PRS=SFOC2

wagurra: gujugu
rockbig

'there is a big rock, a big rock!' (on the road) (DB, D13073)

In (5-10), on the other hand, the referent (a crocodile) had been introduced previously, and it is its location that is asserted here.

[87] In fact, there seems to have been a second stative verb, *-yangi*, which is now obsolete; see §5.9.9.

(5-10) A: "gurrany ya-ngayi-m Nanagu",
NEG IRR:1sg:3sg-SEE-PRS <subsection>

B: "thanthiya gugu-ni ga-**yu**" \
DEM water-LOC 3sg-BE.PRS

'A: I can't see it, Nanagu' (i.e. the crocodile mentioned by N.).
B: 'there in the water it is!' (DR, D27063-4)

In locational expressions formed with *-yu* 'BE', not only the location, but also the configuration of the figure with respect to the location may be specified. Most frequently, this is done with a coverb of spatial configuration, which can be semantically quite specific, like *bayirr* 'supported, on top' in (5-3) above, or *balb* 'be flat/engraved on s.th.' in (5-11).

(5-11) Guwarlambarla=biya yina ga-**yu** **balb** \
short.neck.turtle=NOW DIST 3sg-BE.PRS flat

'the Short Neck Turtle is over there as a painting' (discussing Dreaming sites) (DM, EV06015-6)

Since there exists no other specific expression in Jaminjung to encode prolonged stay in the same location, *-yu*, both as a simple verb and in complex verbs with the positional *waga* 'sit',[88] can receive an interpretation of 'stay' or 'wait'. In (5-12), it is clear from the context that it is not a location as such that is predicated of the water, but its prolonged stay in a previously mentioned location (the river bed); likewise, the context in (5-13) makes it clear that the interpretation of 'waiting' is intended.

(5-12) that's where gurrany bawu ga-jga-ny=mindi, gugu,
NEG open 3sg-GO.PST=1du.incl water

ga-**gba** biyang \
3sg-BE.PST NOW

'that's where it didn't flow out "on you and me", the water, it stayed' (causing flooding) (JM, F04058)

(5-13) girdangung=biya **waga** yurru-**yu**=nu,
hold.on=NOW sit 1pl.incl-BE.PR=3sg.OBL

ga-, ga-w-irna=guji \\ juyug \
<false.start> 3sg-FUT-BURN=FIRST ripe/cooked

'hold on, let's wait for it, let it cook first, (until) cooked' (VP, E11268)

[88] As in many other Australian languages including Kriol, the term for 'sit' is often used to express general location of humans (and even non-humans), not just the specific position of 'sitting'.

So far, the meaning of *-yu* 'BE' can be characterised as in S5-1(i).

S5-1(i) *-yu* 'BE' | x is located at a location

Under the analysis that existence is location at an unspecified place, this characterisation is consistent both with the 'exist' reading of the verb, and with an ascription of a location which may or may not receive detailed specification. It also accounts for the more specific reading of 'prolonged stay at a location'.

Based on the interpretation of 'prolonged stay in an (understood) location', the third person singular future/potential form of *-yu* 'BE' has taken on a further reading with imperative illocutionary force, i.e. 'give it up, abandon it'. This reading is lexicalised and is regularly translated by speakers with the Kriol verbs *letim* 'let it' or *libim* 'leave it', as illustrated in (5-14). This expression may be understood quite literally, as an order to let something stay in the same location rather than, e.g., taking it, as is the case with the (hypothetical) fruits referred to in (5-14). But it may also be used metaphorically, as in (5-15); in this case what is supposed to be abandoned is an event rather than an entity.

(5-14) darlu-wurru mangarra, (...)
hole-PROPR plant.food

"ga-w-iyaj", yu tok **"ga-w-iyaj**, yu libim \ marring" \
3sg-FUT-BE you talk 3sg-FUT-BE you leave:TR bad

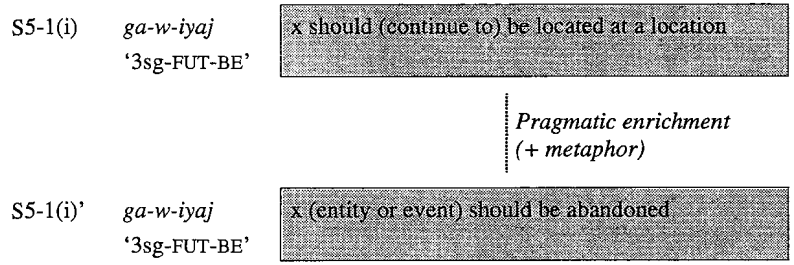
'"it has a hole, the fruit" (...) "Let it stay", you say "let it stay, leave it (there) – it is no good"' (JM/MW, E16159-61)

(5-15) **ga-w-iyaj** wirrij-wirrij-mayan
3sg-FUT-BE RDP-argue-CONT

'stop fighting!' (fieldnotes Caroline Jones)

As pointed out in §2.4.1.3.1.1, the prefix glossed as 'FUT' here has a broader modal meaning which may give rise to a 'potential' or 'desiderative' reading. The compositional combination of the verb meaning and the prefix meaning is represented in the upper part of Fig. 5-1. The extended meaning of the third person singular future/potential form is derived by lexicalisation of a pragmatic enrichment ('an entity should be located at a location' may imply 'leave an entity at its original location, abandon it'). In addition, an event may be metaphorically treated as the located figure, as in (5-15), resulting in a loosening of the selectional restrictions of the verb. This extended meaning is represented as S5-1(i)' in Fig. 5-1.

Fig. 5-1. -yu *'BE' in its reading of 'abandon'*



5.2.1.2 Auxiliary function

In another and more systematic secondary sense, *-yu* 'BE' is found in auxiliary-like function. The main predicate may encode a temporary property or state, like the nominal *warrij* 'crocodile' in (5-16) – where the intended reading is that someone was acting as a crocodile, not that she should be identified as a crocodile – or the coverb *guyawud* 'hungry' in (5-17). (The boundary between predicative nominals and stative coverbs is not always clearcut; see §2.2.2.3).

(5-16) Nangari=biyang **warrij** ga-**gba** yinyag \
<subsection>=NOW freshwater.crocodile 3sg-BE.PST 1du.excl.OBL

'Nangari was being a crocodile for us two' (playful acting) (DR, D27175)

(5-17) mangarra-wu **guyawud** **ga-yu** \
plant.food-DAT hungry 3sg-BE.PRS

'she is hungry for food' (DP, F01368)

Alternatively, the main predicate can be a coverb of continuous activity. In the productive progressive construction (see §3.3.1), the coverb is derived with the continuous suffix *-mayan*, as in (5-18). In complex verbs of the 'lexicalised progressive' type, coverbs such as *yalugaja* 'dig with a digging stick' in (5-19) below correspond diachronically to a derived form, but are now lexically restricted to a combination with *-yu* 'BE' and the other verb that can function as auxiliary, *-ijga* 'GO' (see also §3.3.1 and §6.3).

(5-18) girrang bu'-**mayan** mindi-**yu** gurang,
hold.on blow.with.mouth-CONT 1du.incl-BE.PRS old.man

'wait, let's have a smoke, old man' (DB, E10023)

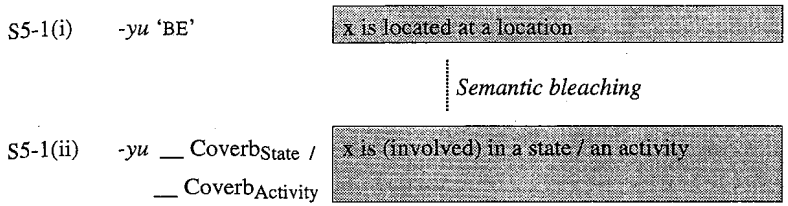
(5-19) Nangari gayi, **gagawurli-warni** ga-**gba**,
<subsection> ALSO long.yam-MOTIV 3sg-BE.PST
yalugaja ga-**gba**
digging 3sg-BE.PST
'Nangari too, she was busy with the long yam, she was digging' (VP, E09359)

As (5-19) shows, an activity can also be expressed metonymically, for example by a noun phrase marked with the 'MOTIVative' case *-garni ~ -warni* , which indicates that an event is motivated by, or centered around, the referent of the noun phrase (see also §2.2.3.3.5).

Since English exhibits a similar range of uses of *be* (as copula with nominal predicates, and as auxiliary in the progressive construction), the Jaminjung expressions in (5-16) to (5-19) can be translated quite literally into English. The grammaticalisation of a positional verb to an auxiliary verb is of course widely attested cross-linguistically, and has been explained by a metaphorical replacement of a 'location' with a 'state' or 'activity' (e.g. Bybee & Dahl 1989: 78f., Lehmann 1995: 30). In Jaminjung, *-yu* 'BE' in this function is paralleled by the motion verb *-ijga* 'GO', which conveys an additional nuance of prolonged or habitual state or activity (see §5.3.1.3). Unlike *-yu* 'BE', *-ijga* 'GO' does not have a location participant as part of its semantics that could be replaced by a state or activity in a metaphorical reading. In order to capture the parallel between the auxiliary use of the two verbs, both types of expressions are analysed as containing secondary predicates which have become main predicates through semantic bleaching of the verb, which now no longer entails locatedness, or motion. The auxiliary function of *-yu* 'BE' partly accounts for the fact that this is by far the most frequent Jaminjung verb, making up almost a quarter (22.2%) of all verb tokens in the database.

The secondary sense of *-yu* 'BE' as an auxiliary verb is represented in S5-1(ii); Fig. 5-2 at the same time indicates the link to the basic sense of the verb (S5-1(i)). This link is simply the loss of the locational component; the verb in its auxiliary function only signals atelicity. Thus, the disjunctive paraphrase is merely an artefact of English as a metalanguage; whether the atelic event is a state or an activity follows from the nature of the coverb in the context of which the verb occurs.

Fig. 5-2. -yu *'BE' as an auxiliary verb*



5.2.2 *-muwa* 'HAVE'

The verb *-muwa*, in most of its uses, straightforwardly translates as 'have'. It encodes a possessive relationship between two participants, the 'possessor' and the 'possessed'. Just like English *have*, it formally behaves like other transitive verbs in the language, that is, the possessor is always encoded as Actor, the possessed as Undergoer. Both 'possessor' and 'possessed' may be animate as well as inanimate; in each case, the relationship of 'possession' is interpreted in a slightly different way. The prototypical case of 'possession' is one where the possessor is animate and the possessed inanimate; here the relationship predicated of them is one of spatial contiguity and immediate control. Just as with English *have*, the difference between 'permanent belonging' and 'temporary control/use' is irrelevant. In (5-20), for example, reference is made to a crowbar which was shared among several women, although it 'belonged' to only one of them.

(5-20) yirra-**ma**-na jungulug=biji kroba
1pl.excl:3sg-HAVE-IMPF one=ONLY crowbar
'we had only one crowbar' (to dig yam roots with) (DR, E09400)

The inanimate 'possessed' does not have to be a tangible entity, but could be something that is known, e.g. a language, or a part or characteristic of the possessor like a sickness or sore, as in (5-21).

(5-21) gan-bu-ngawu nganjan nga-**ma**-ya janga
3sg:1sg-FUT-SEE what 1sg:3sg-HAVE-PRS sore
'he is going to look at me (to see) what sickness I have' (doctor) (MW, CHE125)

The last example could also be interpreted as an instance of a part-whole relationship. Indeed, the use of *-muwa* generally extends to such relationships; all the examples with inanimate 'possessors' (and consequently, inanimate 'possessed entitites') are of this type, as illustrated in (5-22) (see also §4.2.1.3).

(5-22) ngiyinthu house jalag window murrgun gana-**ma**-ya
PROX house good window three 3sg:3sg-HAVE-PRS
'this good house has three windows' (JM, STO098)

If the 'possessed' participant is animate, the relation between possessor and possessed is often one of kinship, e.g. 'child'. But *-muwa* 'HAVE' can also express a relationship of control over and/or responsibility for someone who is not related. The relationship is then associated with long-term physical proximity (which does not entail physical proximity at every point in time).

(5-23) thanthiya mulurru yurra-**ma**-na,
DEM old.woman 1pl.incl:3sg-HAVE-IMPF
buru=biyang ga-ruma-ny
return=NOW 3sg-COME-PST
'that woman we had here, she came back' (DP, RIV035)

In a fashion completely parallel to *-yu* 'BE', *-muwa* can apply to the prolonged association with a presupposed location; in this function, it translates as 'keep'. The parallel is illustrated in (5-24), from a historical narrative about a man convicted for murder.

(5-24) Fannie Bay-bina=biya ga-jga-ny, olegija=wung, ga-**gba** \
<place.name>-ALL=NOW 3sg-GO-PST altogether=COTEMP 3sg-BE.PST
Darwin .. burra-**ma**-na \
<place.name> 3pl:3sg-HAVE-IMPF
'He went to Fannie Bay (gaol) then, for good, (and) stayed (there).
They kept him in Darwin' (DM, E19406-9, recorded by Mark Harvey)

As already noted at the beginning of this section, the parallelism between *-muwa* and *-yu* 'BE' extends to their behaviour in complex verbs. The coverbs combining with *-muwa*, with very few exceptions, are coverbs of spatial configuration. Generally, though, the verbs differ in that *-muwa* is used much less frequently as part of a complex verb than *-yu* 'BE', which partly accounts for its low general frequency of 1.8% in the textual database.

An example of a coverb of spatial configuration combining with *-muwa* is given in (5-25). The position is predicated of the possessed and not of the possessor; this is true for all attested combinations of this type. Ergative marking of the possessor leads to the interpretation that what is predicated is not just a part-whole relationship (as in (5-22) above), but the active maintenance of the configuration specified by the coverb. This is in line with the observation put forward in §4.2.1.3 that ergative-marking (as opposed to absolutive status) of noun phrases signals a higher degree of effectiveness (or non-predictability) of the agentive participant.

(5-25) langa=malang **jard** gana-**ma**-ya ngiyinthu-ni wirib-di
ear=GIVEN upright 3sg-HAVE-PRS PROX-ERG dog-ERG
'it has its ears standing up, this dog' (JM, STO079)

Bivalent coverbs of 'holding', a subclass of coverbs of spatial configuration, also regularly combine with *-muwa*. Coverbs of this type encode a spatial configuration between two entities, e.g. *jurluj* 'hold under one arm' in (5-26).

(5-26) **jurluj** .. gana-**ma**-ya mangarra
hold.under.arm 3sg:3sg-HAVE-PRS plant.food
'she is carrying food under her arm (in a cooliman)' (DP, C10029)

One of the few examples where a coverb combined with *-muwa* does not specify a spatial configuration is (5-27). Instead, the manner of the crocodile's keeping or guarding its nest is expressed.

(5-27) **jirrija** gana-**ma**-ya nuwina, mularrij \
jealous 3sg:3sg-HAVE-PRS 3sg:POSS cheeky
'it guards it jealously, its (nest), (it is) dangerous' (saltwater crocodile) (JM, NUN026)

It is difficult to come up with a single semantic characterisation which would account for the range of uses of *-muwa,* just as it is for its English translation equivalent *have.* The characterisation in S5-2 captures the semantic core, as well as the parallel to the verb of location/existence, *-yu* 'BE'. In most of the uses of *-muwa* 'HAVE', the 'possessor' can at the same time be seen as the location of the 'possessed' (cf. e.g. Freeze 1992: 580), that is, both are in a relation of spatial contiguity. In addition, the 'possessor' has immediate control over the 'possessed', in the sense that he can manipulate it. However, to account for some of the uses of the verb, the two semantic components in S5-2 have to be seen as disjoint, although prototypically they are conjoint (cf. Wilkins 1989: 198 for a similar proposal with respect to the proprietive/'having' suffix in Arrernte). In the relation between animate 'possessors' and 'possessed' animates like children or spouses, or country, the notion of control and responsibility is more important than actual physical proximity at every single point in time. In a part-whole relation between two inanimates (or an animate and an inanimate), the component of location is crucial, and the 'possessor' can be said to 'control' the 'possessed' only in the sense that it controls its position by virtue of being the whole including the part.

S5-2 *-muwa* 'HAVE' x is located at y
y controls the location of x

The characterisation proposed in S5-2 also captures the semantic relationship to the verbs of accompanied locomotion, *-uga* 'TAKE' and *-anJama* 'BRING', which share many properties with *-muwa*, but have an additional semantic component of locomotion (see §5.3.4.1 and §5.3.5). In particular, *-uga* 'TAKE' has a secondary, metonymic sense of permanent attachment, and can sometimes be used interchangeably with *-muwa* 'HAVE' in this sense (see §5.3.4.2).

Another verb which bears some semantic relationship with *-muwa* is the verb of 'manipulation by extended contact', *-mili/ -angu* 'GET/HANDLE' (§5.4.1.1). Both verbs partly overlap in function in the context of some coverbs of 'holding' (see §6.1.4 for examples). Under the analysis proposed here, the verbs differ in that *-mili/-angu* 'GET/HANDLE' entails that the first participant affects the other, rather than just controlling it. The semantic relationship of the verb *-muwa* and the proprietive suffix on possessors was already briefly discussed in §2.2.3.4.1. Unlike the verb, however, the proprietive encodes the possessive relationship as a property of the possessor.

5.2.3 *-irdba* 'FALL'

Although the intransitive verb *-irdba* is used to describe events of 'falling', the gloss 'FALL' is potentially misleading. I will argue that *-irdba* has a very general meaning of 'change of locative relation' (§5.2.3.1), which accounts for all of its uses except for some idiomatic expressions, e.g. of 'birth' and 'death' (§5.2.3.2).

5.2.3.1 Change of locative relation

Both as a simple verb and with certain classes of coverbs, *-irdba* 'FALL' is used to describe scenes of 'falling'. In (5-28), a complex verb formed with *-irdba* describes reaching the ground as a result of downward motion.

(5-28) mayany wurdu **jag** ga-**rdba**-ny jurru-giyag gulban-bina
young small go.down 3sg-FALL-PST nest-ABL ground-ALL

'the small young animal (baby bird) fell down from the nest to the ground' (DR, BAR012)

The same verb is used, in (5-29), to describe a change in the canonical vertical orientation of a figure to a horizontal orientation, i.e. 'falling over'.

(5-29) wardba gan-ngangu, gurrany nga-w-**irdba**,
entangle 3sg:1sg-GET/HANDLE.PST NEG 1sg-FUT-FALL.IMPF

gurdij=jung nga-gba
stand=COTEMP 1sg-BE.PST

'I got caught in something, (but) I didn't fall, I stayed upright' (DP, E04020)

Now *-irdba* not only covers involuntary falling, but also controlled events of 'getting down', as shown by its use in the imperative in (5-30), and its use in complex verbs where the coverb entails control; in (5-31), this is the Kriol loan *getap* 'get off'.

(5-30) **jid** ba-**rdbaj**
go.down IMP-FALL

'get down!' (to child sitting in a tree)

(5-31) **getap** ga-**rdba**-ny
get.off 3sg-FALL-PST

'she got off (the bus)' (ER, MIX154)

It can also be shown that *-irdba,* even as a simple verb, does not entail downward motion. For example, this verb may be used to describe 'bumping into' or 'hitting against' something after moving on a horizontal surface, as in (5-32).[89]

(5-32) ga-ruma-ny na, ga-**rda**-ny=biya \\ ngabulu \
3sg-COME-PST NOW 3sg-FALL-PST=NOW breast

'she came and bumped into it, (with her) breast' (comments on enacted 'bumping into open car door') (MW, F04320-1)

Moreover, *-irdba* is the regular 'inchoative' verb with positional coverbs, that is, it conveys the interpretation that the figure assumes the position that is specified by the coverb. Again, it is clearly not entailed that the figure moves in a downward direction in order to reach this position. For example, (5-33) describes the movements of a toy figure, and (5-34) the stopping of cars, both moving on a flat surface prior to assuming the position.[90]

(5-33) **walthub** ga-**rda**-m brij-gi, barraj bul gani-ma-m
inside 3sg-FALL-PRS bridge-LOC further emerge 3sg:3sg-HIT-PRS

'he goes underneath the bridge and then comes out' (toy figure) (DP, D05100)

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89 A transitive verb of contact/force could also be used in this case, but it appears that *-irdba* is preferred over, e.g., *-ma* 'HIT' (§5.4.2) if the effect on the moving entity exceeds the effect on the contacted entity.

90 For further examples, see (5-6c) at the beginning of §5.2 and IV/9 in the Appendix.

(5-34) gurrany **gurdij** burr-**irda**-m
NEG stand 3pl-FALL-PRS
'they are not stopping for us' (waiting in a car that has broken down) (VP, TIM190)

Finally, *-irdba* may be used even though the figure does not move at all. In (5-35), the speaker was telling her children not to touch bread dough lying on a drum, because it would get stuck on it. Here it is clear that the dough would not move, but merely change its relation to the drum from 'not sticking on' to 'sticking on', the position specified by the coverb *nang*.

(5-35) **nang** ya-**rdbaj**
stick IRR:3sg-FALL
'it might get stuck' (bread dough on drum)

In sum, the range of uses of *-irdba* 'FALL' suggests that neither involuntary motion, nor downward motion, are entailed by this verb. Rather, its crucial semantic component is that a figure reaches a location, or more precisely, comes to be in a locative relation with respect to a location. That is, *-irdba* is not, strictly speaking, a motion verb, but a punctual telic (or achievement) verb, which only encodes a transition from 'not being in a particular locative relation' to 'being in a locative relation with respect to a location'.

Further evidence for this analysis comes from the textual distribution of this verb. First, *-irdba* contrasts in several respects with the 'true' verbs of locomotion, which have a semantic component of motion along a path (§5.3). For example, all locomotion verbs, but not *-irdba*, may combine with coverbs of manner of motion. Moreover, the goal location – if specified at all – may be marked with the locative case only with *-irdba* (as e.g. in (5-33) above), but not with the locomotion verbs, where only the allative case is used[91] (see §5.3.1). This does not mean that the specification of a direction of motion is not compatible with *-irdba,* since the verb may occur with both ablative- and allative-marked noun phrases, and also with coverbs of path such as *jag* 'go down', as in (5-28). But in this case, the construction and/or the coverb indicate that motion took place; this is not part of the verb's meaning.

The contrast between *-irdba* and the intransitive locomotion verb *-ijga* 'GO' is illustrated very clearly in an account of parachute jumping, reproduced as Text I in the Appendix. The coverb *dibard*[92] is used throughout to refer to the

91 There is one exception, to be discussed below.

92 Since *dibard* 'jump' combines with *-irdba* as well as with locomotion verbs, this coverb was assigned both to the class of coverbs of manner of motion and the class of coverbs of ballistic motion.

'jumping', but it is only combined with *-irdba* 'FALL' either in summary descriptions of the whole event (I/1 and I/10-11), or when specific reference is made to the landing phase (I/15-17). In descriptions of the phase of downward motion through the air, on the other hand, *-irdba* is not applicable, and only *-ijga* 'GO' is used (I/3, I/12-13). (A third verb, *-mili l-angu* 'GET/HANDLE', is used in a somewhat idiosyncratic sense in I/7-8 to describe 'jumping off', i.e. away from a location; see §5.4.2.5).

Other descriptions of motion events are also frequently split up into phases of locomotion (described by means of a locomotion verb), and moments of transition or change of location (described by means of *-irdba* 'FALL' or one of the other verbs employed in this function). Example (5-36) describes a scene of crawling underneath a fence. The transition from not being underneath to being underneath the fence is expressed using *-irdba*, while the 'crawling' phase is expressed using *-ijga* 'GO'.

(5-36) thamurru-yun **walthub** ga-**rdba**-ny +
underneath-L.ABL inside/under 3sg-FALL-PST
+ **mingib** ga-**ngga** gurdij ga-yu
crawl 3sg-GO.PRS stand 3sg-BE.PRS
'he went underneath, crawls, and is standing up' (DP, JAM088)

The speaker's Kriol translation of (5-37) also captures the difference between the motion phase (*-ruma* 'COME' in Jaminjung and *come back* in Kriol) and the point of reaching the ground (*jid* 'move down' plus *-irdba* in Jaminjung, *getdan* 'get down' in Kriol).

(5-37) thangga-ngunyi ga-**ra:::m**, **jid** ga-**rda**-m gulban-bina
above-ABL 3sg-COME.PRS go.down 3sg-FALL-PRS ground-ALL
'he comes from on top, and gets down to the ground' (Orig. Transl.: 'where im come back from hill, getdan la ground, and walk la ground') (DB, D14033)

A number of restrictions in the distribution of *-irdba* with coverbs further corroborate the semantic analysis proposed here. Thus, although *-irdba* regularly forms inchoative complex verbs with positional coverbs which encode the configuration of a figure with respect to a location, it does not combine with coverbs of posture, such as *rang* 'ears standing up', which encode an internal configuration of body parts, with no reference to a location (see also §6.1.2). Likewise, *-irdba* is regularly used with coverbs which encode a change of location that is compatible with reaching an end location, such as *wurlurlu* 'enter a 3D container through an opening' in (5-38) and *buwu* 'enter water' in (5-39). Again, downward motion is not entailed; in (5-38), the children were moving upwards into the back of a car.

(5-38) tharrey=biya:, Gandama-yurlu motika,
there=NOW <proper.name>-POSS2 car

jarlig **wurlurlu** burr-**irda**-m \
child enter.through.opening 3pl-FALL-PRS

'there now, G.'s car, the children are getting in' (IP, EV03009-10)

(5-39a) balarraj-gi=biyang **jajurr** ga-**rda**-ny
cliff-LOC=NOW halt 3sg-FALL-PST

b) jalig=malang **buwu** ga-**rda**-ny \
child=GIVEN enter.water 3sg-FALL-PST

'at the cliff he stopped suddenly, and the child fell into the water' (Frog Story) (CP, E18278)

The example in (5-39a) at the same time illustrates the combination of a coverb of 'stopping', *jajurr* 'halt' with the verb *-irdba*. Again, the use of the verb to describe the transition from motion to non-motion is consistent with a sense of 'assume a locative relation'.

On the other hand, *-irdba* is never found with coverbs encoding rising and detachment, such as *gud* 'get up, rise' or *gub* 'come off' (see §6.5.3), or with coverbs of 'emerging' such as *bul* 'emerge' (see §6.5.4). These coverbs encode a change of location defined by the source location, while the coverbs exemplified in (5-38) and (5-39b) above encode a change of location, or locative relation, which ends in a specifiable location. There is therefore a lot of evidence that *-irdba* has a very general meaning which can be characterised as in S5-3.

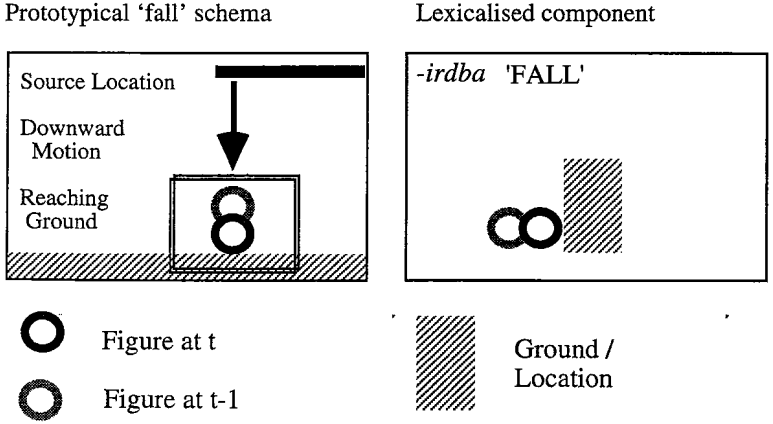
S5-3 *-irdba* 'FALL' x comes to be in a locative relation with respect to a location

This characterisation accounts for the range of uses of *-irdba* discussed so far, including the interpretations of 'bumping against something' and 'assuming a position which can be specified with respect to a location'. It also allows for the possibility that the figure does not move at all. It applies to real-world events of uncontrolled downward motion or of falling over from an upright position, i.e. prototypical 'falling', if – and only if – the ground is reached. In the real world, of course, it is rare to observe a situation where unhindered (especially involuntary) downward motion does not immediately result in contact with the ground. One could therefore very well maintain that the meaning of the verb centers around a prototypical, or default, interpretation of 'falling'.

However, this prototype may yield different lexical semantic correlates in different languages since verbs may lexicalise different aspects of the prototypical situation: For English, sentences like *The young bird fell out of the nest but fortunately it was able to fly and did not hit the ground* show that reaching a location is not entailed in the English verb *fall*; arguably, the component of involuntary downward motion is central here. In other languages, it may be the point of 'falling off' that forms the basis for the lexicalisation. An interesting case in this respect is the 'fall' verb in Urdu, which also figures prominently as a 'light verb' in complex verb formation. Butt (1997) argues that in the latter function, this verb contributes the semantic component of 'inception' (as well as 'non-conscious choice'). Interestingly, this verb exhibits an almost complementary pattern of distribution in complex verbs when compared with Jaminjung *-irdba*: it cannot be used in expressions of assuming a position (e.g. 'sit down'), but may be used in expressions of 'getting up' (Butt 1997: 127; see ex. (7-13) in §7.2.1).

In Jaminjung, on the other hand, only the final component of a typical 'falling' event is lexicalised in the verb *-irdba* 'FALL'; this is the transition of a figure from not being on the ground (at time t-1) to being on the ground (at time t). Since the 'lexicalisation window' does not include the component of downward motion, the meaning of *-irdba* is neutral in this respect. This is graphically illustrated in Fig. 5-3. The left box depicts a prototypical 'fall' schema, including the components of leaving a location, downward motion, and reaching the ground. The double-framed box here singles out the component entailed by *-irdba* 'FALL', which is reaching the ground, depicted again in a more schematic fashion in the right box.

Fig. 5-3. *The meaning of* -irdba *as a lexicalisation of the final component of a 'fall' schema*



However, a note of caution is in order, since we find a curious restriction in the applicability of *-irdba*. It is never combined with the coverb *burduj* which

specifically encodes upward motion. This coverb can only combine with locomotion verbs, mostly the intransitive verbs *-ijga* 'GO' or *-ruma* 'COME', as in (5-40).

(5-40) **burduj** buny-**angga** log-gi \
move.up 3du-GO.PRS log-LOC
'the two are going up on a log' (Frog Story) (DP, E07089)

That this is a real restriction, leaving a 'semantic gap' in the verb system, is shown by the fact that complex verbs formed with *burduj* 'go up' and a locomotion verb are used, with remarkable frequency, in a construction where the end location is marked with the locative case, as in (5-40), rather than the allative case. While this use of the locative case is common with *-irdba*, it is not otherwise found with the 'true' locomotion verbs (see §5.3.1). Note that the log in (5-40) cannot be interpreted as the location of the motion event as a whole, because the log in the Frog Story picture book has a horizontal, not a vertical extension and so the boy and the dog could only have climbed up onto it (after being in the water) rather than further upwards on it.

This suggests that the semantic characterisation in S5-3 is perhaps slightly overgeneralised, even though it can account for the fact that this verb covers all types of 'assuming a position', regardless of whether the real-world situation involves downward, horizontal, or upward motion, or no motion at all. The prototype event of 'falling', and its component of downward motion, may still play a certain role in speakers' semantic representation of this verb, and rule out the combination with *burduj* 'move up'.

5.2.3.2 Metaphorical uses: birth, death, sickness

There are only a few metaphorical uses of *-irdba* 'FALL' which are not captured by the semantic characterisation proposed in §5.2.3.1. Since these uses are restricted to a few semantic domains, they will be treated as idiomatic, that is, no general semantic characterisation will be offered here to account for them. However, in the semantic domains involved, including 'birth', 'sickness' and 'death', *-irdba* is used productively, as shown by the fact that Kriol loans regularly appear as parts of complex verbs.

As a simple verb, *-irdba* can be used as a euphemistic expression for 'dying', and it also occurs with a euphemistic Kriol coverb, *luj/lusim* (< Engl. *lose*).

(5-41) gujarding ga-**rdba**-ny ngiyinawula \
mother 3sg-FALL-PST DIST:DIR
'(his) mother died over there' (DB, D14125-6)

(5-42) klosap **lusim** ga-**rda**-m \
almost lose:TR 3sg-FALL-PRS
'she is almost dying' (NG, E11062)

In combination with a coverb meaning 'sick, sore', *warlad*, or its Kriol equivalent *sik* (5-43), as well as with *mugurn* 'lie/sleep' (III/23), *-irdba* is also used in an inchoative reading (cf. English *fall ill, fall asleep*).

(5-43) **sik** ga-**rdba**-ny
sick 3sg-FALL-PST
'she got sick' (DBil, FRA098)

However, the metaphorical uses of *-irdba* cannot be reduced to an orientational metaphor according to which 'sickness and death are down' (Lakoff & Johnson 1980: 15). For a start, as we have seen, it is questionable whether the verb in its basic sense invokes downward motion at all. Moreover, the same verb is also used in connection with a positive health development in (5-44), with the Kriol loan *jeldan* 'settle down'. Like translation equivalents in many other Australian languages *-irdba* also gets used to describe birth, as in (5-45) with the Jaminjung coverb *barlaya* and in (5-46) with the Kriol loan *bon.*

(5-44) **jeldan** nga-w-**irdbaj**
settle.down 1sg-FUT-fall
'I want to settle down first' (speaker feeling no good in the morning) (DP, RIV049)

(5-45) wuju jalig wininggirri, **barlaya**=biyang ga-**rda**-ny \
small child young be.born=NOW 3sg-FALL-PST
'a small young child, it was born' (JM, F04176)

(5-46) ... wa **bo:n**=ma nga-**rdba**-ny
where born=SUBORD 1sg-FALL-PST
'... where I was born' (IP, F03461)

Rather, therefore, all of these uses seem to be motivated by a categorial metaphor: a state that is reached is linguistically treated like a goal location. In most of the cases, the spatial schema is still strongly present: being born, falling ill, and dying arguably also count as literal changes of location. The Kriol coverb *jeldan* 'settle down' in (5-44) likewise invokes the spatial analogy. The strong presence of the spatial component may explain why *-irdba* is so restricted in its metaphorical usage, forming idiomatic expressions in a small number of semantic domains. Other verbs which are more productively used in a – non-spatial – inchoative reading are the locomotion verb *-ijga* 'GO' with coverbs of change of state (§5.3.2.3), and *-yunggu* 'SAY/DO', which is the regular

inchoative verb with stative predicates (§5.6.1.6). On the other hand, the very general applicability of *-irdba* as a verb categorising events of change of locative relation, including its productive use as an inchoative verb with positionals, makes this one of the verbs with the highest frequency, making up more than 5% of all verb tokens in the database.

5.2.4 *-arra* 'PUT'

Although the transitive verb *-arra,* especially as a simple verb, often translates as 'put (down)', its basic meaning can be characterised more precisely as 'cause change of locative relation'. In this way, it parallels the intransitive verb *-irdba* 'FALL', with an additional causative component (§5.2.4.1). It also occurs in the secondary, metaphorical senses of 'transform' and 'conventionally name' (§5.2.4.2) and 'transfer of a message' (§5.2.4.3), and may be used to express caused change of configuration (§5.2.4.4). Finally, some of its combinations with coverbs have to be regarded as idiomatic, although potential semantic links to the spatial sense will be suggested (§5.2.4.5).

5.2.4.1 Caused change of locative relation

As a simple verb, *-arra* is used most frequently in expressions like those in (5-47), where it translates as 'put' or 'transfer'. The 'agent' and the 'entity transferred' are obligatorily cross-referenced on the verb. The end location, on the other hand, is more often than not[93] left unspecified and has to be inferred from the context, that is, most uses of *-arra* are of the type illustrated in (5-47). These quasi-minimal pairs illustrate the wide range of interpretations that are possible for *-arra.* The theme is *gugu* 'water' in all three cases, but its 'transfer' is brought about by quite different actions – by producing clouds that will subsequently rain in (5-47a), by turning on a tap in (5-47b), and by transferring water in a container onto a stove in (5-47c).

(5-47a) burunya-ni gan-**arra**-m gugu
marsupial.rat.species-ERG 3sg:3sg-PUT-PRS water

'the Burunya rat is making rain' (mythological account) (VP, TIM167)

b) gugu nga-w-**arra**=biyang, ba-wurr-ijga
water 1sg:3sg-FUT-PUT=NOW IMP-2pl-GO

'I am going to turn on the water now, (you all) go away' (quoting a man who turned on sprinklers on the lawn) (DP, D11021)

93 In a text count, it was expressed in less than 25% of the clauses with *-arra* in its basic reading.

c) gugu nga-w-**arra**=ngarndi!
water 1sg:3sg-FUT-PUT=SFOC2

'I'm going to put on water now!' (announcing the intention to put a kettle on the stove to heat up water) (DR, CHE045)

If the end location is lexically specified, it may be marked with either locative or allative case (compare (5-50) and (5-51) below). I already argued with respect to *-irdba* 'FALL' that the possibility of locative marking of the end location is connected to the absence of a locomotion component in the meaning of the verb. This is confirmed by various examples in the data; one is (5-48), where the agent (a toy man) did not cause the tree to be at his back by moving it, but rather by turning his own back to it. Compare this to (5-49) where the agent does move the stick to a location, which also happens to be a body part.

(5-48) langiny ngagaj-gi gan-**arra**-m
wood back-LOC 3sg:3sg-PUT-PRS

'he has his back turned to the tree' (lit. 'he puts the tree at his back') (Man & Tree) (DB, D25B)

(5-49) langiny.. ba-**rra** nawij-gi
wood IMP-PUT neck-LOC

'put a stick at your neck' (in a dance) (DP, C10028)

Transitive *-arra* also parallels intransitive *-irdba* 'FALL' in that it systematically combines with coverbs of position. The resulting complex verbs have a causative rather than an inchoative interpretation, as shown for *jubard* 'shut in' in (5-50), and *walyag* 'inside' in (5-51).

(5-50) **jubard** nganth-**arra**-ny kap-gi
shut.in 2sg:3sg-PUT-PST cup-LOC

'you shut it in the jar' (addressee was pretending to catch a fly in a small jar, turned over) (DB, SPA008)

(5-51) jabarlng **walyag** buny-**garra**-ny mulugun-bina \
frog inside 3du:3sg-PUT-PST glass-ALL

'the two put the frog into a jar' (Frog Story) (DR, E01206)

Again, it is not entailed that the something is caused to move into the position specified by the coverb, only that it is caused to assume the position, i.e. ends up in a specific locative relation. For example, in (5-50) above, it is the location – a container – which is moved such that the fly ends up enclosed in it. As one would expect, only the locative, not the allative, can mark the end location in this case, whereas the allative is possible in cases like (5-51) where the frog was indeed moved.

Just like *-irdba* 'FALL', *-arra* combines with directional coverbs like *wurlurlu* 'enter a 3D container through an opening' in (5-52), but is not compatible with coverbs which encode detachment or exiting (see §6.5.3), like *gub* 'come off' or *yirr* 'move out'. (Invariably, *-mili/ -angu* 'GET/HANDLE' is used with these coverbs to form complex verbs in a causative reading.)

(5-52) **wurlurlu** ba-**rra** beg-gi, bany mindag \
enter.through.opening IMP-PUT bag-LOC IMP:BRING 1du.incl.OBL
'put them in a bag, and bring them for you and me' (goose eggs) (IP, F01179)

Since *-arra* is a bivalent verb, it may, unlike *-irdba* 'FALL', also form complex verbs with bivalent coverbs. These could be coverbs of 'holding' like *wurlg* 'carry on the shoulder', illustrated in (5-53).

(5-53) ngiyi=biya ho:n-bina **wurlg** gan-**arra**-ny \
yes=NOW horn-ALL carry.on.shoulder 3sg:3sg-PUT-PST
'here on the horns it put him to carry' (IP, F03201)

Bivalent coverbs which themselves encode an induced change of location, not surprisingly, also combine with *-arra*; an example is *jarr* 'put down a single thing' in (5-54) (see also §4.1.3).

(5-54) **jarr** gan-**arra**-ny jiya-bina \
put.down.one 3sg:3sg-PUT-PST chair-ALL
'she put it down on the chair' (a book) (IP, E08214)

Often, coverbs with a semantics of change of location or induced change of location are borrowed from Kriol, and *-arra* is used productively with these loans; two examples are given in (5-55) and (5-56).

(5-55) **bilimap** gani-w-arra dijel
fill.up:TR 3sg:3sg-FUT-PUT diesel
'he is going to fill diesel (into the tank)' (CHE439)

(5-56) nankurrg **jenjim** nga-w-arra nu
clothing change:TR 1sg:3sg-FUT-PUT 3sg.OBL
'I'm going to change his nappies' (DR, KRI026)

All uses of *-arra* discussed so far, whether as a simple verb or as part of complex verbs, are captured by the semantic characterisation in S5-4(i). This parallels exactly the characterisation given for *-irdba* 'FALL' in S5-3, with an additional causative component. Thus, *-arra* does not encode just any case of caused motion, but entails that a specifiable (but not necessarily specified) end location is reached.

S5-4(i) *-arra* 'PUT' | x causes y to be in a locative relation with respect to a location

One extension that cannot necessarily be predicted from the above characterisation is the systematic usage of *-arra* to encode 'painting', 'drawing' or 'writing'.[94] However, it is compatible with the basic, spatial meaning of *-arra* if one regards 'painting' or 'drawing' as induced change of location of an independently existing entity (i.e. putting the 'thing drawn' at a certain place), rather than as bringing an entity into existence (in which case the verb *-(ma)linyma* 'MAKE' should be used). The same construal is also reflected in English expressions referring to writing, such as *put something down* or *put a question mark* (Pauwels 1995: 150). Indeed, *-arra*, in this reading, may appear in the same argument structure constructions as in its reading of induced change of locative relation: the 'thing drawn' is in the absolutive, as shown in (5-58), and the location in the locative, as in (5-57). As (5-58) also shows, *-arra* is used productively in this function with Kriol loans describing writing or drawing.

(5-57) gumi-ni nga-**rra**-m **durlwan-ki**
red.ochre-ERG/INSTR 1sg:3sg-PUT-PRS shell-LOC
'I paint on a turtle shell with red ochre' (DJ, MYA025)

(5-58) **drawim** burr-**arra**-ny **birini** \
draw:TR 3pl:3sg-PUT-PST stingray
'they had been drawing stingrays' (DR, D27117)

5.2.4.2 Transformation and conventional naming

As a simple verb, *-arra* has two further readings which are grouped together here because of certain formal and semantic similarities; they might however have to be regarded as distinct subsenses.

In both readings, *-arra* does not occur in a construction with a locative-marked noun phrase, but allows for three core arguments, in other words, it has to be regarded as trivalent. The first reading of 'transform' is only attested for *-arra* in its reflexive form, possibly because the verb *-(ma)linyma* 'MAKE' (see §5.8.3.1) gcan be used in a 'transformation' reading where Actor and Undergoer are not coreferential. Most examples, including (5-59), are from mythological narratives recounting the transformation of a Dreamtime hero. As (5-59) shows, the 'entity turned into' is encoded as an absolutive noun phrase. The 'transformer' and the

94 Writing as an activity is also sometimes encoded with *-ijja* 'POKE', because of the pointed instrument used; see §5.4.5.

'entity transformed' are both represented by the S prefix (and optionally by an absolutive noun phrase), and their coreferentiality is indicated by the reflexive suffix.

(5-59) imin .. binij na, **wagurra** biya **ga-rra-ja,**
3sg:PST finish NOW rock NOW 3sg-PUT-REFL.PST

thanthungiya wirib
DEM:PROX dog

'he finished then, he turned into a rock, that dog' (DD, GV08-01)

Another context in which *-arra* in its reflexive form occured in the 'transformation' reading was to describe a boy pretending to be a big man, in (5-60).

(5-60) gujugu=marraj **ga-rra-ji** **jarlig**
big=SEMBL 3sg-PUT-REFL.PRS child

'the child pretends to be big' (Orig. Transl. putimon mijelb 'put himself on') (DP, fieldnotes 1996)

A second reading of *-arra*, which is always easy to identify from context, is '(conventionally) call[95] (by a word)', as illustrated in (5-61).

(5-61) fish poison? bilij, bilij yirr-**arra**-m \
barringtonia.acutangula b.a 1pl.excl:3sg-PUT-PRS

'fish poison? *bilij, bilij* (tree species) we call it' (IP, E18090)

As example (5-62) clearly shows, the 'entity named' is encoded as the Undergoer, and the 'name' is represented by an absolutive noun phrase which is not cross-referenced on the verb. The speaker is reminiscing about her childhood, describing the reaction of people in the camp when she and her classificatory sister were brought back after having spent some time on another station.

(5-62) "burriny-ngantha-m jalig jirram dilidilibman"
3pl:3du-BRING-PRS child two light.coloured

yirrinyi na, dilidilibman bun-**karra-ny**=yinyag \
1du.excl NOW light.coloured 3pl:1-PUT-PST=1du.excl.OBL

'"they are bringing the two light-coloured children!" — Us two, they called us "light-coloured"' (i.e. part-Aboriginal) (IP, GV09-02)

95 Expressions of this type have to be distinguished from both the bestowal of a proper name on a person, and the mention of a proper name. The former is expressed with an idiomatic complex verb, *bag ganima*, lit. 'break hit'. The latter is expressed by a specific coverb, *nij* 'call a name' (cognate with the nominal *jinij* 'name') which exclusively combines with *-angu/-mili* 'GET/HANDLE' (see §5.4.2.3 and §6.17).

Both readings have in common that they describe the mapping of one entity onto another. They could therefore be regarded as metaphorical instances of 'induced change of locative relation'. In the 'transformation' reading, an entity is mapped onto the entity that it is transformed into; the latter corresponds to the location in the basic sense. This is captured in the semantic representation S5-4(iia).

S5-4(iia) *-arra-ji* 'PUT-REFL' | x transforms itself (y) into z

In the reading of 'call, name', an entity is mapped onto a word which is employed in a metalinguistic way (i.e. which is mentioned rather than used).[96] Here the 'entity named' corresponds to the entity that changes its locative relation, and the 'name' corresponds to the location. This subsense is represented in S5-4(iib).

S5-4(iib) *-arra* 'PUT' | x (human) conventionally calls y by a word "z"

5.2.4.3 Transfer of a message

A further, possibly related, sense of *-arra* is that of 'transfer of a message'. It is metaphorically related to the basic sense: what is caused to undergo a change in locative relation is not an entity, but a message. This sense is only available in combination with a small set of coverbs of 'transfer of a message', and a further, unclassified, coverb, *yirrg* 'discuss, tell', illustrated in (5-63).

(5-63) ngiyina=nu **yirrg** burrurr-**arra**-m mayi,
DIST=3sg.OBL tell/discuss 3pl:3pl-PUT-PRS man

murrgun burru-yu=ma warrb
three 3pl-BE.PRS=SUBORD be.together

'they are discussing those people with him, the three (people) that are sitting there' (DP, JAM306)

The complex verbs formed with *yirrg* 'tell, discuss' occur in the same construction as the speech framing verb *-yu(nggu)* 'SAY/DO' (§5.6.1.1.1), with the addressee represented as an oblique argument, and the 'subject of conversation' in the absolutive. In contrast, the three coverbs of 'transfer of a message', *yurrg* 'show (by pointing), teach', *thirrang* 'show (by lifting up)', and

96 It has also been suggested that there is a semantic link, in Australian languages, between 'naming' and 'leaving a mark' (as in drawing, cf. §5.2.4.1); see e.g. Wilkins (1993a: 80).

yanggi 'ask', are trivalent. In complex verbs formed with these coverbs, the addressee is encoded as Undergoer, and the 'message' or 'thing shown' may be expressed as an additional absolutive noun phrase, i.e. a third core argument (see §4.1.3).

The trivalent verb *-ngarna* 'GIVE' may also be used in the sense of 'transmission of information' (§5.7.1.2), but is never found with the two coverbs in question. The semantic relationship between verbs of caused change of location ('put') and verbs of caused change of ownership ('give') has been widely noted (see e.g. Lyons 1967, Bowerman 1978). Still, the difference in distribution between the corresponding Jaminjung verbs may not be accidental. With respect to English expressions like *put a question to someone,* Pauwels (1995) provides an explanation for the preference of a metaphorical use of a transfer verb like *put* over *give*:

> (...) the relevant difference is that in the case of *put* the object is not moved into the addressee's domain of control. (...) [A]lthough the speaker relinquishes physical control over the 'object' in doing so, he at the same time challenges the addressee to take it up. (Pauwels 1995: 136)

The same point could not only be made for 'asking', but also for 'showing/teaching'; again, an effort of the addressee is required to integrate the knowledge that is offered.[97] This is captured by the phrasing 'be accessible to Z' – rather than e.g. 'be transferred to Z' – in S5-4(iii).

S5-4(iii) *-arra* 'PUT' __ $\text{Coverb}_{\text{Tr.Mess}}$ x (human) causes y to be accessible to z

5.2.4.4 Induced change of configuration

There are a number of other uses of *-arra,* always in combination with a coverb, that do not fit any of the characterisations given so far. In all of these uses, *-arra* is part of a complex verb which behaves like a simple transitive verb in that it can take only two, not three core arguments. In some of these uses, *-arra* seems to be used in a sense of 'induced change of configuration' (rather than 'induced change of locative relation'), these are treated in this section. In the next section (§5.2.4.5), brief mention will be made of some combinations which do not clearly fall under any of the characterisations proposed for the verb.

In its sense of 'induced change of configuration', *-arra* combines with two types of coverbs. The first group consists of a small number of coverbs which

[97] Incidentally, this view of transmission of information corresponds to the 'broadcast model' proposed for the communicative style of Northern Australian Aborigines by Walsh (1991).

themselves have a semantic component of 'induced change of configuration'; these are listed in §6.12, and include *gardaj* 'sharpen, grind (with a stone)' and its dialectal equivalents, as well as *jardij* 'erect, build' and *yajyaj* 'straighten (wooden implement, e.g. spear)'. These coverbs generally only combine with *-arra*. A typical example of the use of *jardij* 'erect, build' is given in (5-64).

(5-64) barnku yirr-**arra**-nyi **jardij-jardij** \
paperbark 1pl.excl:3sg-PUT-IMPF RDP-erect
'we used to build paperbark huts' (DB, E10153)

The following two examples for the use of *gardaj* 'sharpen, grind' come from the same text (about the various chores of Aboriginal women on stations before the 1960s). They are interesting in that in (5-65a), the grinding stone is construed as an instrument (encoded as a comitative-marked noun phrase), whereas in (5-65b), the stone is construed as a location, encoded as an allative-marked noun phrase). This use confirms the semantic link between 'induced change of locative relation' and 'induced change of configuration'.

(5-65a) en jolk **gardaj** yirr-**arra**-nyi ngayiny-gu, **wagurra-mij**
and salt grind 1pl.excl:3sg-PUT-IMPF meat/animal-DAT stone-COMIT
'and salt we used to grind for meat, with a stone' (IP, GV09-02)

b) en fo solkim ngayiny,
and for salt:TR meat/animal
gardaj=biyang yirr-**arra**-nyi **wagurra-bina** \
grind=NOW 1pl.excl:3sg-PUT-IMPF stone-ALL
'and for salting meat, we used to grind it onto the stone' (IP, GV09-02)

The second type of coverbs that combine with *-arra* in its sense of 'induced change of configuration' encode a change of state. With these coverbs, *-arra* is in direct opposition to other transitive verbs, especially verbs of contact/force (§5.4). While these other verbs are used to form causative expressions which specify the manner in which a change of state is brought about, *-arra* is used with these coverbs only in those rare cases where the manner of causation is not specified. For example, in (5-66a) the speaker presumably used *-arra* 'PUT' because she does not want to suggest that the football player applied any kind of force to himself that caused the breaking of his ankle, as would be the interpretation if one of the verbs of contact/force were used, as in (5-66b).

(5-66a) football-nyunga **bag** ga-**rra**-ja marnal
football-ORIG break 3sg-PUT-REFL.PST ankle
'from (playing) football he broke his ankle' (DB, D01085)

b) majani **bag** burru-**ma** miri
maybe break 3pl:3sg-HIT.PST leg
'maybe they broke his leg' (DB, D13142)

A similar contrast is found even with coverbs that are loans from Kriol. In Text II in the Appendix, a story about how the speaker cured her daughter's broken leg by applying traditional healing methods, the Kriol loanword *fiksim* is used three times to refer to curing the leg. In II/10, the patient tells the white doctors that they would not be able to cure her. The coverb *fiksim* 'cure' is combined here with the verb *-arra* 'PUT', used presumably in the same sense as with *bag* 'break' in (5-66a) above, that is, in the sense of causation by unspecified means. In II/13, however, the same Kriol loan *fiksim* is combined with *-mili/ -angu* 'GET/HANDLE', the verb encoding 'affectedness' and 'contact' (§5.4.2.1). The use of this verb emphasises the continuous involvement of the healer in the actual activity of curing (which is subsequently described in some detail). Since the narrator is the same person who did the healing, she is highlighting her own role in the event. In II/10, on the other hand, the speaker is only interested in the result (or rather, lack of result) of the curing on the part of the white doctors. After she has described the healing process, in II/28 the speaker quotes the doctors who her daughter went to see after she had been cured. Here again, *-arra* 'PUT' is used, in combination with the same coverb, presumably because, to the doctors, only the result of the healing process is visible (and relevant), and not the activity leading to it.

Judging from the (limited) available data, thus, the sense of 'induced change of configuration' is restricted to coverbs that either encode an (induced) change of configuration or an (induced) change of state. This is captured in the specification of the context in S5-4(iv) below.

S5-4(iv) *-arra* 'PUT'
__ $\text{Coverb}_{\text{ChangeConf/State}}$ x causes y to change its configuration

As we have seen, with coverbs that do not themselves encode a change of configuration, i.e. coverbs of change of state, the verb *-arra* 'PUT' is only used in those residual expressions where no verb applies that would specify the manner of causation. It is thus used either when the manner of causation cannot be specified, or when the speaker chooses not to specify it. Much more frequently, causative expressions are formed with one of the verbs of contact/force, especially *-mili/ -angu* 'GET/HANDLE' or *-ma* 'HIT', or, more rarely, with other transitive verbs.

Here a pragmatic principle is invoked for the first time which will be used in several places in this chapter to account for restrictions in the use of verbs. The

principle of Quantity,[98] derived from Grice's First Maxim of Quantity ("Be as informative as is required"), guarantees that the most specific applicable verb in the verb set is used. This would explain why a semantically very general verb, such as *-arra* in its secondary sense, is used only rarely, in residual cases where no other verb seems appropriate.

5.2.4.5 Other uses

In the remaining complex verbs formed with *-arra* 'PUT', it is more difficult to distinguish the semantic contribution of *-arra* from that of the coverb. Coverbs occurring in complex verbs of this type belong to various formal classes; some are coverbs of manner of heating (*murl* 'heat with hot ground or stones'), others are coverbs of indirect force and effect (*buwu* 'blow with the mouth'), of direction of gaze (*ngayirr* 'peep at, have a look at'), of sound emission (*ngarl* 'bark at'), or have remained unclassified (e.g. *dalb* 'light a fire, set fire' and *birdij* 'find'). In addition to its use in canonical complex verbs, it is also used in collocation with the nominal *langa* 'ear'; the resulting expression translates as 'make someone deaf' (see (6-26) in §6.3 for an example).

It is possible to detect a spatial semantic component in most of these complex verbs. For example, *ngayirr* 'peep at, have a look at' is combined with *-arra* 'PUT' rather than *-ngawu* 'SEE' if the location 'looked at' is construed as an Undergoer (see §6.1.3). 'Finding' *(birdij)* could be conceptualised as an 'induced change of locative relation in terms of accessibility with respect to an animate' (cf. English *unearth, bring to light*).

(5-67) majani wirib-ni **birdij** gani-w-**arra** burrag
maybe dog-ERG find 3sg:3sg-FUT-PUT 3pl.OBL
'maybe the dog will find it for them' (goanna)

'Heating with hot ground or stones' *(murl)* involves placement of hot ground or stones on the entity to be heated (see II/17-19 in the Appendix). 'Lighting a fire' *(darlb)* also involves a kind of spatial transfer, namely placing a burning object (e.g. a firestick) onto another, burnable, object (e.g. a pile of firewood; cf. English *set on fire*, German *in Brand stecken, ein Feuer legen*).

(5-68) guyug **dalb** yiny-**garra**-ny
fire light.fire 1du.excl:3sg-PUT-PST
'the two of us lit a fire' (DR, BAR051)

Blowing air with the mouth *(buwu)* could be described as induced change of location of the airstream out of the mouth – and so on.

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98 See §1.4.2.3 for details and references.

(5-69) **buwu** gan-**arra**-m gunbarr,
blow 3sg:3sg-PUT-PRS sore

'she blows on the wound' (of a child that got burnt by the fire) (JM, NUN039)

However, since the coverbs involved form such a heterogeneous set, there is no conclusive evidence for a systematic pattern underlying these expressions synchronically. Moreover, as already indicated, these complex verbs behave like ordinary transitive verbs, and not like *-arra* in its spatial sense of 'caused change of locative relation', since an end location is never overtly expressed by means of a locative argument. For example, in II/17-18 in the Appendix, the placement of hot ground on the patient is described in a separate clause from the 'heating', although in both cases the verb *-arra* 'PUT' is used. With the coverb *buwu* 'blow with the mouth' in (5-69), the location that is 'blown at' is encoded as Undergoer, not as an independent location. Similarly, the entity 'set fire to' is not encoded as a locative argument in (5-68). For the present purposes, therefore, these complex verbs are treated as idiomatic expressions. As was already pointed out in §1.4.1.3 and §5.1.1, conventionalisation is a matter of degree, and one should therefore not be surprised to find a number of highly conventionalised, non-compositional combinations among the complex verbs.

5.2.4.6 *-arra* 'PUT': Summary

The basic sense of *-arra* 'PUT' was characterised in S5-4(i) in §5.2.4.1 as 'x causes y to be in a locative relation with respect to a location '. This can account for the majority of uses of *-arra*, both as a simple and as a complex verb; there is no need to posit a secondary sense for *-arra* in its combination with coverbs of position, direction, and induced change of location. The characterisation captures the fact that *-arra* does not categorise all events that could be described as 'induced motion', but, just like *-irdba* 'FALL', semantically entails the presence of a location with respect to which a figure/theme is caused to be in a locative relation. This also covers cases where the theme does not itself move (see the discussion in §5.2.4.1).

As a simple verb, *-arra* can take on a secondary sense of metaphorical induced change of locative relation, namely the mapping of one entity onto another. In this sense, *-arra* is trivalent. In §5.2.4.2, two subsenses were distinguished. One involves *-arra* in its reflexive form, where it can take on the sense of self-induced transformation of one entity into another entity. The second type of mapping concerns the assignment, licensed by linguistic convention, of a denotatum to a word ('x calls y "z"').

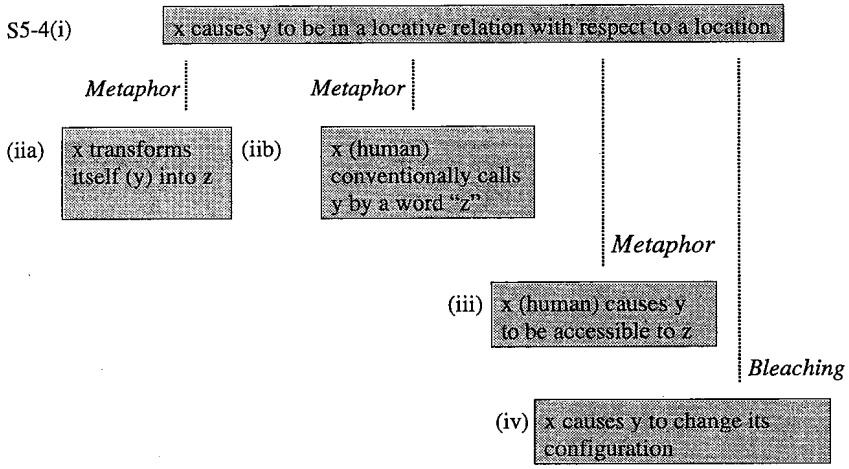
A further metaphorical sense of *-arra* concerns the transfer of a message (an information or request) which is made 'accessible' to an addressee/recipient. This

sense of *-arra* is only attested with a small set of coverbs with meanings like 'tell', 'ask' and 'show' (§5.2.4.3). The resulting complex verbs are trivalent.

A number of bivalent complex verbs formed with *-arra* can be accounted for by positing a semantically bleached sense of 'induced change of configuration' for this verb. This sense arises in combination both with coverbs which themselves have a semantic component of 'induced change of configuration', and with coverbs of (induced) change of state. With the latter group of coverbs, *-arra* enters into meaningful contrasts with other verbs, in signalling that none of the informationally stronger verbs, encoding a specific manner of affecting an entity, are applicable (§5.2.4.4).

The three extended senses are all based on the basic sense of 'caused change of locative relation', either by metaphor or by semantic bleaching; this is represented in Fig. 5-4.

Fig. 5-4. *Lexical network for* -arra *'PUT'*



With a residual class of coverbs, it is not obvious in these cases why *-arra,* rather than another verb, is chosen to categorise the event in question. Although the choice of *-arra* may have originally been motivated by a perceived component of caused change of location, these complex verbs were here considered as idiomatic (§5.2.4.5).

Its productivity as a verb of caused change of locative relation, both as a simple verb and with a large class of coverbs, and its use in idiomatic combinations, some of which have a high frequency of occurrence, make *-arra* 'PUT' one of the most frequent verbs, with a frequency of nearly 7% in the text count.

5.2.5 Verbs of location, possession, and change of locative relation: Summary

At the beginning of this section, it was argued on the basis of formal evidence that the four verbs *-yu* 'BE', *-muwa* 'HAVE', *-irdba* 'FALL', and *-arra* 'PUT' are semantically related, in that they all, at least in their basic sense, have a semantic component of locative relation. The evidence comes from the compatibility of all four verbs with locative-marked noun phrases representing a location, and from complex verbs involving positional coverbs which can also be formed with all four verbs; here the coverbs themselves encode the spatial configuration of a figure with respect to a location. This semantic relationship was made explicit in the semantic characterisations proposed for each of the verbs. The characterisations of the basic, spatial senses of each of the verbs are summarised again in Fig. 5-5 below.

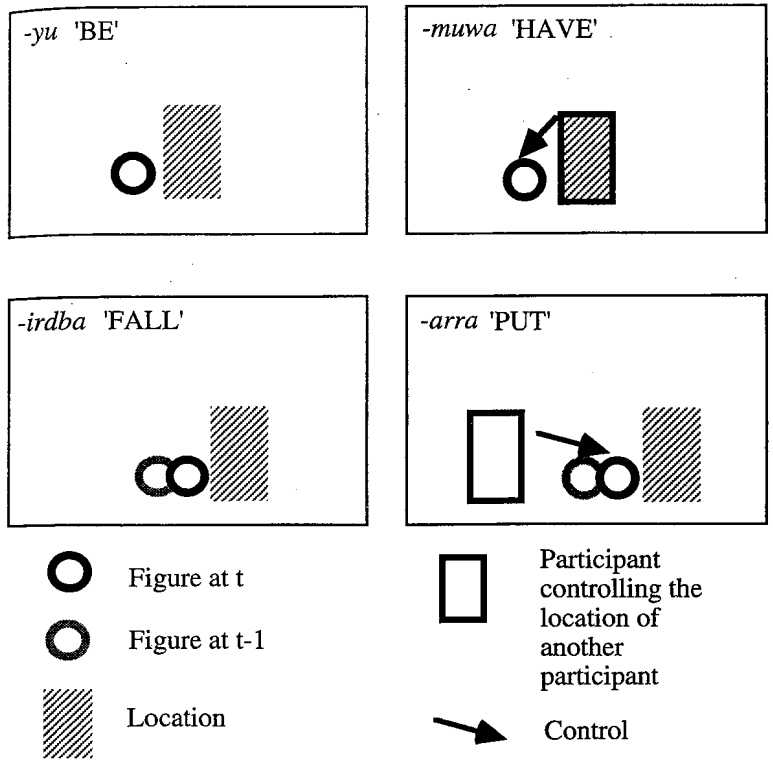
Fig. 5-5. *Basic senses of the verbs of location, possession, and locative relation*

S5-1(i)	*-yu* 'BE'	x is located at a location	S5-2	*-muwa* 'HAVE'	x is located at y y controls the location of x
S5-3	*-irdba* 'FALL'	x comes to be in a locative relation with respect to a location	S5-4(i)	*-arra* 'PUT'	x causes y to be in a locative relation with respect to a location

Both *-yu* 'BE' and *-muwa* 'HAVE' encode the static location of a figure with respect to a location. The verb *-muwa* 'HAVE' (at least prototypically) has an additional component of control; that is, the location/'possessor' is at the same time the controller of the locative relation. Both *-irdba* 'FALL' and *-arra* 'PUT', in their basic senses, encode a change of locative relation, but *-arra* 'PUT' has an additional component of causation, i.e. an additional, agentive participant. Both of these verbs are not verbs of motion, but only encode the transition from 'not being in a particular locative relation', to 'being in a locative relation'. As has also been illustrated, this does not mean that they cannot be used to encode real-world events that do involve motion.

The distinctions can also be graphically represented as in Fig. 5-6. The representation of the transition, for the verbs of change of locative relation, was already introduced for *-irdba* 'FALL' in §5.2.3.

Fig. 5-6. *Graphic representation of the basic senses of the verbs of location, possession, and locative relation*



All four verbs are semantically compatible with stative positional coverbs, which specify a type of locative relation. Positional coverbs regularly form stative expressions with *-yu* 'BE' and *-muwa* 'HAVE', inchoative expressions with *-irdba* 'FALL', and causative expressions with *-arra* 'PUT'. Both *-muwa* 'HAVE' and *-arra* 'PUT' are in addition compatible with bivalent stative coverbs of 'holding' which have a component of control of one participant over the configuration of another. Only *-irdba* 'FALL' and *-arra* 'PUT' can be combined with dynamic coverbs of change of location, provided these are compatible with reaching an end location. Only *-arra* 'PUT' can form complex verbs with bivalent, dynamic coverbs of induced change of locative relation.

Except for *-muwa* 'HAVE', all of these verbs also have secondary senses and/or are used in idiomatic complex verbs. The most important one, in terms of frequency, is the – cross-linguistically common – secondary function of *-yu* 'BE' as an auxiliary verb with nominal predicates and stative coverbs, and with

coverbs of continuous activity. The verb *-arra* 'PUT' has several metaphorical secondary senses; one is 'transformation', another is 'conventional naming', and a third (which only arises with a small number of coverbs) is 'transfer of a message'. Another sense that is only available with coverbs is 'induced change of configuration'. In addition, *-arra* 'PUT', as well as *-irdba* 'FALL', form some idiomatic complex verbs that still reflect their basic sense of 'change of locative relation'.

5.3 Verbs of locomotion

There are seven verbs of locomotion in Jaminjung: the two intransitive verbs *-ijga* 'GO' (§5.3.2) and *-ruma* 'COME' (§5.3.3), the two transitive verbs of accompanied locomotion *-uga* 'TAKE' (§5.3.4) and *-anthama* 'BRING' (§5.3.5), and the three other transitive verbs *-unga* 'LEAVE' (§5.3.6), *-arrga* 'APPROACH' (§5.3.7), and *-wardagarra* 'FOLLOW' (§5.3.8). The properties common to all verbs of locomotion are discussed in §5.3.1.

Only two of the verbs, *-ijga* 'GO' and *-uga* 'TAKE', have secondary senses. With coverbs of change of state, *-ijga* 'GO' forms complex verbs in an inchoative change of state reading (§5.3.2.2), and with nominal predicates and coverbs of continuous activity, it is used as an auxiliary verb (§5.3.2.3). The verb *-uga* 'TAKE' has the metonymic extensions of 'permanent accompaniment' (§5.3.4.2), 'remembering and hearing' (§5.3.4.3), and 'applying force with the body weight' (§5.3.4.4), as well as some other uses briefly discussed in §5.3.4.5.

5.3.1 General properties of verbs of locomotion

5.3.1.1 Definition of 'locomotion'

'Locomotion' is defined here as 'self-propelled motion along a path', and thus corresponds closely to Talmy's (1975, 1985) 'translational motion'. The term 'self-propelled' in the definition refers to motion that is construed as taking place without an external source of energy. This typically, but not necessarily, involves animate entities. In addition, natural forces like water or wind, as in (5-70), inanimates moving by virtue of a natural force (e.g. floating on running water, cf. ex. (5-91) in §5.3.2), and (unsurprisingly) motor vehicles, can also be construed as 'self-propelled'.

(5-70) **jajaman** **luba** ga-**ngga** yinawula, juyagu
wind big 3sg-GO.PRS DIST:DIR downstream
'(we can't hear anything), a strong wind is going in that direction, downstream' (JM, CHE196)

The expression 'motion along a path' distinguishes locomotion from internal motion, that is, movements of an entity without change of location (e.g. 'shiver'), on the one hand, and from change of location, or more precisely, change of locative relation, on the other hand. 'Motion along a path' should be taken to mean that the moving entity is conceptualised as occupying $n > 2$ locations at $n > 2$ moments in time (cf. Langacker 1990: 155f.). That is, there is a sequence of more than two locations such that the location taken up at each point in time is different from the previous location. This sequence of locations defines a path; a sequence of only two locations does not constitute a 'path' in the use of the term adopted here, but only a 'change of location'.

In Jaminjung, a clear formal distinction is made between locomotion as defined above, and both internal (non-translational) motion and change of location, neither of which are expressed with verbs from the locomotion class: Internal motion is typically expressed by complex verbs formed with *-yu(nggu)* 'SAY/DO' (§5.6.1.2). Change of location, or more precisely, change of locative relation, is expressed by *-irdba* 'FALL' and *-arra* 'PUT', as already shown in §5.2.3.1 and §5.2.4.1.

5.3.1.2 Argument structure of locomotion verbs

All locomotion verbs (in their locomotion sense) behave in a similar way with respect to argument structure, since they are all compatible with a specification of the source and the direction of motion. The source location may be encoded by an ablative-marked noun phrase, the direction of motion either by an unmarked locational, directional-marked, or an allative-marked noun phrase.[99] Of course there are differences between the intransitive and the transitive locomotion verbs in the number of core arguments they allow.

Source and goal arguments are illustrated in (5-71) to (5-73) for *-ijga* 'GO', *-uga* 'TAKE', and *-unga* 'LEAVE', respectively.

[99] Recall that for *-arrga* 'APPROACH', the fact that the direction of motion is already encoded as the Undergoer argument does not preclude its – occasional – overt specification by a directional or allative-marked noun phrase; this was discussed in §4.2.2.1.2.

(5-71) yinyju-**ngunyi** ngarrgina ngaba ga-**jga**-ny buru +
PROX-ABL 1sg:POSS brother 3sg-GO.PST return

+ M- Myatt-**bina** na,
<false.start> <place.name>-ALL NOW

'from here my brother went back to Myatt then' (DM, E19612) (recorded by Mark Harvey)

(5-72) warrgayin=nyanying gan-**uga** gugu-**giyag** larrman-**bina**
far=properly 3sg:3sg-TAKE.PST water-ABL dry-ALL

'she took it right away from the water onto the dry (land)' (a woman dragging along a sawfish that she has caught) (DR, NGA002)

(5-73) gurang **wanaja**=warra gan-**ngunga**-ny=yirrag,
old.man where:DIR=DOUBT 3sg:1-LEAVE-PST=1pl.excl.OBL

manamba majani:,
upstream maybe

'the old man, I don't know where he went, leaving us, maybe upstream'; (lit.: 'the old man, I don't know where to he left us, maybe upstream') (DB, E02038)

All locomotion verbs thus regularly occur in an allative and ablative case frame; this is a property that they share with the dynamic verbs of change of locative relation, *-irdba* 'FALL' and *-arra* 'PUT'. A major difference between these and verbs of locomotion, though, is that with *-irdba* 'FALL' and *-arra* 'PUT', the (end) location can also be encoded as a locative noun phrase. Locative noun phrases with locomotion verbs, on the other hand, either specify the location of the whole motion event, as in (5-74), or a means of transport, as in (5-75).[100]

(5-74) warnda-**g** walnginy ga-**ngga**
grass-LOC walk 3sg-GO.PRS

'it walks in the grass' (DP, MJ, JAM149)

(5-75) warrgayin na-w-**ijga** diwu-ngarna-**ni**
far 2sg-FUT-GO fly-ASSOC-LOC

'you've got a long way to go on the plane' (DJ, MYA035)

[100] There is one exception to this generalisation; this concerns complex verbs formed with the coverb *burduj* 'move up' and a locomotion verb (see §5.2.3.1).

5.3.1.3 Locomotion verbs with coverbs of manner and path

The clearest diagnostic for verbs of locomotion is that all of them, but no other verbs,[101] may combine with coverbs of manner of motion. This is illustrated in (5-76) for the coverb *yugung* 'run' with most of the locomotion verbs (for *-ijga* 'GO' see IV/25).

(5-76a) buru **yugung** ga-**ram** \
return run 3sg-COME.PRS

'she comes running back' (JM, E15129)

b) jalig **yugung** gan-**uga** yarrajgu
child run 3sg:3sg-TAKE.PST afraid

'she ran away with the child, (being) afraid' (lit: 'she took the child away, running') (PW, D31154)

c) ngarrgina nanbarn **yugung** gan-**ngunga**-ny
1sg:POSS wife run 3sg:1sg-LEAVE.PST

'my wife ran away from me' (lit: 'my wife left me running')

d) di:ja-ni=biya **yugung** gan-**arrga** durd \
teacher-ERG=NOW run 3sg:3sg-APPROACH.PST hold.one

'the teacher then ran up to him (to) pick (him) up' (IP, E09180)

e) janyungbari pigibigi=biya birang **yugung** gani-**wardagarra**-m
another pig=NOW behind run 3sg:3sg-FOLLOW-PRS

'another pig follows it running behind' (Men & Tree 8) (DB, D30058)

Likewise, all locomotion verbs may combine with coverbs encoding a path or a change of location (many of these, however, also combine with verbs of change of locative relation; see §6.5). This is illustrated in (5-77) with the coverbs *burduj* 'move upwards' and *jid / jag* 'move downwards' and a number of locomotion verbs. Note how *-unga* 'LEAVE' (5-77c) and *-arrga* 'APPROACH' (5-77d), unlike their English translation equivalents, behave like the other locomotion verbs in this respect.

(5-77a) **jid**=biyang ba-**rum** miyarra=wung, yanth-irdbaj
go.down=NOW IMP-COME slow=COTEMP IRR:2sg-FALL

'come down slowly now, you might fall' (DB, D14018)

[101] There are some minor exceptions to this generalisation; a very small number of manner coverbs may combine with *-yu(nggu)* 'SAY/DO' (§5.6.1.2.2). In addition, there are some transitive complex verbs formed with coverbs of manner of motion and a non-locomotion verb (see §6.5.1).

b) **jag..** birrarr-**anjama**=biya jamurrugu gugu-bina
go.down 3pl:1pl.incl-BRING.IMPF=NOW below water-ALL
'they used to bring us down then, down to the water' (VP, E09618)

c) **burduj**=biyang waj nga-b-**unga**,
go.up-NOW leave 1sg:3sg-FUT-LEAVE
'I'll leave her going up now' (Orig. Tr.: 'I'm gonna leavim im go up, you know') (DR, D27195)

d) **jid** gan-**arrganthi**-ya=biyang gani-bili
go.down 3sg:3sg-APPROACH-PRS=NOW 3sg:3sg-FUT:GET/HANDLE
'it is approaching it now going down, and will catch it' (hawk -> prey) (DB, D13121)

e) **burduj** gani-**wardagarra**-ny=biya \
go.up 3sg:3sg-FOLLOW-PST=NOW
'it followed her up' (IP, F03468)

5.3.1.4 Locomotion verbs in complex verbs of associated motion

Locomotion verbs may also combine with coverbs which do not themselves have a semantic component of motion (that is, of either manner or path; see §6.5). These coverbs come from the classes of spatial configuration, of 'holding', and of continuous activity, among others. The resulting combinations have two possible interpretations, one simultaneous and one sequential: either the state or activity is ascribed to the figure (or one of the figures) during motion, or it is interpreted as the purpose of the locomotion, i.e. immediately following it. The types of associated motion that can be expressed as complex verbs (i.e. construed as single events) appear quite limited when compared with those in languages with a grammaticalised system of Associated Motion forms like Kaytety or Arrernte (Koch 1984, Wilkins 1991, 1997b).

The most frequent subtype of complex verbs of 'simultaneous associated motion' contains a coverb of spatial configuration or posture which describes the position of the moving figure, as in (5-78) and 5-79), or, with the transitive locomotion verbs *-uga* 'TAKE' and *-anJama* 'BRING', the position of the concomitant (see §5.3.4 below).[102]

[102] An exception is *-unga* 'LEAVE' in combination with coverbs of spatial configura-tion; the reading here is not one of associated motion, since the coverb specifies the position of the entity which is left behind.

(5-78) warlnginy ga-**ngga** **murnunguj** \
walking 3sg-GO.PRS hands.behind.back
'she walks with her hands behind her back' (DP, E17005)

(5-79) gurrurrij-gi ga-**ngga** **gurlurl**
car-LOC 3sg-GO.PRS upright.on.top
'it goes along on the car sitting on top' (toy dog on toy car) (IP, E13705)

In addition to stative coverbs, coverbs of continuous activity – encoding, for example, sound emission – are found with locomotion verbs in an associated motion interpretation, as in (5-80).

(5-80) **durdurdub** ga-**ram**
thunder/roar 3sg-COME.PRS
'it comes here roaring' (e.g. aeroplane, thunder)

Some coverbs of activity, and stative coverbs of spatial configuration, may also combine with a locomotion verb in a 'motion cum purpose' reading. Logically speaking, these receive a sequential interpretation: the coverb encodes the (sub)event (including a configuration or state) which is the purpose of the motion. Nevertheless, these combinations are clearly complex predicates as defined in §3.2, depicting a unitary macro-event. No intonational boundary intervenes between the verb and the coverb, and the complex verbs may exhibit anti-iconic ordering, as in (5-81) and (5-82) (although iconic ordering, resulting in the otherwise dispreferred order of verb – coverb, is more frequent in these cases). Example (5-81) illustrates a positional coverb, *marrug* 'be hidden', and (5-82) illustrates a coverb of continuous activity, *wajama* 'be fishing', in complex verbs with a 'motion cum purpose' interpretation.

(5-81) yalumbarra **marrug** ga-**jga**-ny, yarrajgu, warnda-bina
King.Brown.snake hidden 3sg-GO.PST afraid grass-ALL
'the King Brown went into hiding – (being) afraid – into the grass' (VP, NUN109)

(5-82) ngiya=biya yagbali Nangari **wajama** yirr-**antha**
PROX=NOW place <subsection> fishing 1pl.excl:3sg-TAKE.PRS
Goose Hill.. Junction-bina \
<place.name>-ALL
'this place, we take Nangari fishing to Goose Hill Junction' (IP, EV03005)

Complex verbs with a 'motion cum purpose' interpretation also show the same restrictions on argument structure as all other types of complex predicates (see

§4.3): bivalent coverbs like *durd* 'hold a single entity' in (5-76d) above, and *jarr* 'put down a single entity' in (5-83), do not combine with intransitive, but only with transitive locomotion verbs.

(5-83) ngabuny-**guga** **jarr**
1sg:FUT:2sg-TAKE put.down.one
'I'm going to take you two and drop you off' (DP, RIV038)

Thus, complex verbs of associated motion, as in (5-84), contrast with biclausal constructions as in (5-85), even though they may describe the same or a similar real-world situation.

(5-84) ji buru ga-wu-**rum** **waga** \
3sg return 3sg-FUT-COME sit
'as for her, she is going to come back to sit down' (DB, E02017)

(5-85) ga-**ruma**-ny, yina **waga** ga-**rdba**-ny \
3sg-COME-PST DIST sit 3sg-FALL-PST
'he came, and sat down there' (DM, E19218)

'Motion cum purpose' expressions with coverbs of continuous activity are relatively marginal; they have only been recorded with coverbs encoding conventionalised activities like *wajama* 'fishing' in (5-82) (cf. Engl. *go fishing*).

So far, the seven locomotion verbs have been shown to constitute a formally definable class: they can all occur with source and goal arguments, and combine with coverbs of manner of motion, path, or change of location. Furthermore, locomotion verbs may form complex verbs with an associated motion reading. These common properties will be presupposed in the discussion of the differences between the individual verbs in the subsequent sections.

5.3.2 *-ijga* 'GO'

The intransitive verb *-ijga* 'GO' is the most frequent (13.2% in the text count), and at the same time the semantically most general of the seven locomotion verbs. In addition to its locomotion sense (§5.2.2.1), it also has a change of state sense with certain coverbs (§5.2.2.2), and functions as an auxiliary verb with stative predicates, and with coverbs expressing a habitual or ongoing activity (§5.2.2.3). Only the locomotion sense is available for *-ijga* when used as a simple verb; this is therefore taken to be the basic meaning of this verb.

5.3.2.1 General locomotion

Like the other locomotion verbs, *-ijga* 'GO' always encodes motion along a path, never internal motion or 'functioning' (thus, it is unlike German *gehen* 'go', for instance). It serves as the most general verb of locomotion in not encoding a notion of concomitance, and in being completely unspecified for direction.

Nevertheless, *-ijga* is often interpreted as supplying deictic information: In many contexts, *-ijga* receives a default interpretation as 'away from the deictic centre', as in (5-86) and (5-87). If the motion event described is towards the deictic centre, its counterpart *-ruma* 'COME' (§5.3.3) is normally used.

(5-86) ngabuj-ngabuj-mayan na-**ram** \ ba-**jga** \
RDP-smell-CONT 2sg-COME.PRS IMP-GO
'you come (here) sniffing, go (away from here)!' (imaginary order to a dog) (JM, F04189)

(5-87) yina ga-**jga**-ny manamba, buru ga-**ruma**-ny \
DIST 3sg-GO.PST upstream return 3sg-COME-PST
'she went upstream, and came back' (DB, F01319)

Following Wilkins & Hill (1995), 'motion away from deictic centre' can be regarded as a pragmatic inference, not a semantic entailment of this verb. Under this analysis, *-ijga* is a general locomotion verb which is unspecified with respect to deixis, and it is in opposition to *-ruma* 'COME' on the level of pragmatics only. The choice of *-ruma* 'COME' is conditioned by the pragmatic Q principle, as defined in §1.4.2.3, which requires the most specific expression from the same formal class to be chosen wherever applicable. In other words, because *-ruma* 'COME' is used wherever it is applicable – i.e. wherever motion is towards the deictic centre – the use of *-ijga* 'GO' gives rise to the pragmatic implicature that the motion is not towards the deictic centre (exceptions to this generalisation will be discussed shortly). As we will see, this principle not only serves to describe the functional opposition between *-ijga* and *-ruma* 'COME', but also the relationship between *-ijga* and all other motion verbs.

Textual data, as well as data collected with the 'COME and GO Elicitation Tool' (Wilkins 1993b), support this analysis: *-ijga* is the verb used to describe not only scenes of motion away from the deictic centre, but also scenes where the figure is actually moving towards the deictic centre for some time, but where the overall event cannot be described as motion towards the deictic centre. For example, events of 'passing' are always described using *-ijga*, never *-ruma* 'COME', as illustrated in (5-88), which was said about a car coming towards us on the road.

(5-88) marraj ga-w-**ijga**
go.past 3sg-FUT-GO
'let it go past' (DB, fieldnotes 1999)

In questions where the direction of motion intended by the addressee is at stake, *-ijga* is also used, even where the addressee is moving towards the speaker at the time of utterance (cf. Wilkins & Hill 1995: 230).

(5-89) wanaja na-**ngga**?
where:DIR 2sg-GO.PRS
'where are you going?' (greeting)

Most importantly, *-ijga* is also used to describe undirected motion (e.g. circling or meandering) even where portions of the path may be directed towards the deictic centre. The following is an example for *-ijga* used as a simple verb to describe the undirected motion of birds circling in the air.

(5-90) galbun=gun lubayi ngayin ga-**ngga**
kitehawk=CONTR many meat/animal 3sg-GO.PRS
'many kitehawk animals are circling (there)' (DB, D13116)

The general semantic characterisation proposed in S5-5(i) therefore is not only more elegant than the partly negative characterisation 'a figure moves along a path, not towards the deictic centre', but also more adequate, as it captures all uses of *-ijga* as a locomotion verb. (As pointed out above, the component 'along a path' serves to distinguish translational from non-translational motion.)

S5-5(i) *-ijga* 'GO' x moves along a path

Being the least specific of the locomotion verbs, *-ijga* is the one most frequently chosen in combinations with coverbs encoding all types of manner of motion (see also §6.5.1), including 'running' (IV/25), 'walking' (5-93), 'rolling' (5-92), 'swimming' (see §5.3.3), or 'floating' (5-91).

(5-91) buliki=biya ngiya **bulumab** ga-**yinji** / digirrij-nyunga \
cow=NOW PROX float 3sg-GO.IMPF die-ORIG
'the cows were floating here, dead' (EH, EV03123)

Manner coverbs found with *-ijga* also include coverbs borrowed from Kriol.

(5-92) **rol** ga-**ngga**
roll 3sg-GO.PRS
'it rolls' (battery) (DB, CHE161)

(5-93) yiga b- motika-marnany,
BUT <false.start> car-PRIV
burruwug jid nga-w-**ijga** \
footwalk go.down 1sg-FUT-GO
'since there is no car, I'm going to go down on foot' (IP, E09072)

In addition to its sense of literal locomotion, the general intransitive motion verb *-ijga* is also used to describe the static extension of linear objects, e.g. in (5-94) and (5-95), in a way observed for many other languages.[103]

(5-94) warding janyung ga-**ngga** ngiyinawurla
road another 3sg-GO.PRS DIST:DIR
'one road goes that way' (but we are turning the other way)

(5-95) nguruny gagawuli-bina ga-**ngga**
fine.hair long.yam-ALL 3sg-GO.PRS
'the fine roots go to the yam root' (JM, CHE135)

This could be considered a separate sense of *-ijga*. However, *-ijga* in this use still has a component of path (as shown by its compatibility with path coverbs, and with ablative- and directional- or allative-marked noun phrases), and shows the same syntactic properties as in the uses discussed so far. Therefore it is simply treated as a subsense of the locomotion sense, where the component of 'motion' is replaced with 'extension', as shown in S5-5(i) and S5-5(i)'. (Another locomotion verb, *-wardagarra* 'FOLLOW', also has a comparable subsense; see §5.2.8).

S5-5(i) *-ijga* 'GO' x moves along a path

S5-5(i)' x extends along a path

5.3.2.2 Change of state

The second sense of *-ijga* 'GO' is that of 'change of state'. This is clearly a metaphorical extension of the locomotion sense which is common cross-linguistically (cf. English *go crazy*, Dutch *dood gaan* 'go dead', German *kaputt-gehen* 'break'). The underlying metaphor, recognised in many localist and cogni-

[103] Cf. Langacker's (1986, 1990: 157ff.) 'Subjective Motion', Jackendoff's (1983: 172ff.) GO$_{EXT}$, Talmy's (1996: 243f.) 'Coverage Path'.

tivist approaches,[104] is the representation of a state as a location. Consequently, a change of state can be conceived of as a 'journey' (Lyons 1977: 720) from one state to another. This common metaphor has even led to the adoption of a semantic primitive GO to represent state change (e.g. Langacker 1986: 462f., Jackendoff 1990: 25ff.).

With respect to Jaminjung, such a generalisation has to be treated with some caution, since *-ijga* cannot be analysed as a general inchoative verb. It has a change of state reading only when combined with members of a small and closely defined class of coverbs which themselves encode change of state (see also §6.7). Two of these, *bily* 'burst' and *digirrij* 'die', are illustrated in (5-96) and (5-97).

(5-96) janju=biyang, bottle=malang, **bily** ga-**jga**-ny \
DEM=NOW bottle=GIVEN burst 3sg-GO-PST

'that one then, the bottle, it burst' (Frog Story) (CP, E18204)

(5-97) majani yangarra **digirrij** ga-**jga**-ny
maybe kangaroo die 3sg-GO-PST

'maybe a kangaroo has died' (DB, D13116)

The combination of *-ijga* with Kriol loans such as *juwurlab* 'swell up' in (5-98) shows that complex verb formation with this verb in its change of state sense is definitely productive.

(5-98) ngarrgina juwud **juwurlab** nga-**jga**-ny
1sg:POSS eye swell.up 1sg-GO-PST

'my eyes got swollen' (JM, NUN001)

With coverbs of spatial configuration, on the other hand, it is *-irdba* 'FALL' which has an inchoative function (§5.2.3.1). Inchoatives with predicative nominals are formed with *-yu(nggu)* 'SAY/DO' (§5.6.1.6, §6.4). The inchoative use of *-ijga* 'GO' is thus restricted to coverbs which do not encode a spatial relation, or an internally caused event.

As shown in §6.7, the semantic range of coverbs in the change of state class, formally defined by cooccurrence with *-ijga* 'GO', fully confirms an observation made by Radden (1988: 390f.) with regard to the metaphorical use of a motion verb:

> "(...) the motion verb 'to go' is used to express departure from a normal course of events leading to a change of state. The change of state is characterized by three tendencies which, ideally, coincide. First, it tends to occur suddenly rather than slowly (...).
>
> "Second, the new state reached tends to be complete rather than somewhere in between."
>
> "Third, the new state tends to be undesirable (...)"

[104] E.g. Ikegami (1984), Langacker (1986), Radden (1988), Talmy (1975, 1991), Goldberg (1991, 1995).

These restrictions are captured indirectly in the semantic characterisation in S5-5(ii), since they are a property of the coverbs that are members of the class of change of state (see §6.7). Thus, S5-5(ii) simply represents the change of state as a metaphorical motion along a path, and the end state as a metaphorical goal, in the context of a coverb of change of state.

S5-5(ii) *-ijga* 'GO' __ $\text{Coverb}_{\text{ChOfState}}$ [x moves to a state]

5.3.2.3 Auxiliary function

The verb *-ijga* 'GO' is also found in auxiliary function, both with predicative nominals and coverbs that encode a temporary state, and with coverbs of continuous activity in a productive progressive construction, as well as in 'lexicalised progressives' (see §3.3.1 and §6.3). Its use closely parallels that of *-yu* 'BE' in a similar function (§5.2.1.2). The difference in meaning between the two verbs in these constructions is very subtle, in that *-ijga* often receives a habitual or generic interpretation compared to the more frequent and semantically unmarked *-yu* 'BE'. The examples below illustrate this contrast for the stative coverb *yarrajgu* 'afraid' (5-99), and the coverb of continuous activity *thawaya* 'be eating' (5-100) (see §3.3.1 and §6.3 for further examples).

(5-99a) gurrany **yarrajgu** yina mayi ga-**ngga**
NEG afraid DIST man 3sg-GO.PRS

'that man is not afraid (generally)' (DP, JAM304)

b) **yarrajgu**=biya ga-**yu** nindu, ba-ngawu
afraid=NOW 3sg-BE.PRS horse IMP-SEE

'the horse is frightened, look!' (IP, E13662)

(5-100a) ... yangarra=ma **thawaya** ga-**ngga**
kangaroo=SUBORD eat 3sg-GO.PRS

'... the one the kangaroo eats' (generic, in the context of the description of a plant species) (IP, E18135)

b) en banana durd gana-ngu, **thawaya** ga-**gba** \
and banana hold.one 3sg:3sg-GET/HANDLE.PST eat 3sg-BE.PST

'... and she picked up a banana, and ate it' (IP, E08232)

However, the use of *-ijga* 'GO', instead of *-yu* 'BE', as an auxiliary verb is not restricted to habitual/generic statements. It can also point to an unusual or prolonged state or activity. Thus, (5-101a), just like (5-101b), is about a specific instance of crying, not about habitual crying.

(5-101a) bugu ji=wung **ngilijga** ga-**ngga**!
JUST 3sg=COTEMP cry 3sg-GO.PRS

'just himself (i.e. without cause) he is crying!' (' ... I didn't hit him') (IP, F01556)

b) jalig **ngilijga** ga-**yu** bulgarding-gu
child cry 3sg-BE father-DAT

'the child is crying for his father' (DB, BUL317)

Likewise, (5-102) describes temporary rather than habitual relief of hunger.

(5-102) **dum-bari**=biyang ga-**ngga**, ngarrgina jarlig \
full-QUAL=NOW 3sg-GO.PRS 1sg:POSS child

'she is full now (of food), my child' (ER, FV01076)

It can be hypothesised that this use of *-ijga* arose, by metonymy of the verb, from complex verbs in an associated motion reading (§5.3.1.4.1). Coverbs like *ngajija* 'dance' have a semantic component of manner of motion but are formally coverbs of continuous activity which may combine with either *-yu* 'BE' or *-ijga* 'GO' (see §6.3). These may have provided the bridging context for this variant of the progressive construction (cf. Bybee & Dahl 1989: 79, Ikegami 1984, Lichtenberk 1991: 491): expressions like (5-103a) are potentially ambiguous between an interpretation of actual locomotion simultaneous with the activity, or of habitual/prolonged activity, without entailment of locomotion. Compare (5-103a) with (5-103b), where dancing is encoded as continuous activity without entailment of locomotion.

(5-103a) langiny-burru **ngajija** burr-**ijga**-ny
wood-PROPR dance 3pl-GO-PST

'they danced with a stick'

b) munga-munga bunthu-**yu** **ngajija**
RDP-dance.with.stick 3du-BE.PRS dance

'the two are dancing with a stick' (DMc, CHE416)

A similar observation is made by Reid (1990) in his discussion of a comparable use of both types of verbs in Ngan'gityemerri. He states that a dynamic verb may convey a sense of habitual activity "through this association with renewed activity, in contrast to the single unchanged timespan associated with stative auxiliary selection" (Reid 1990: 244). A very similar analysis is proposed by Wilkins (1989: 243f.) for a 'frequentive' derivation in Arrernte which is also etymologically based on a 'go' verb.

The contrast in meaning between *-yu* 'BE' and *-ijga* 'GO' as auxiliary verbs thus still reflects their basic meaning of stative location and locomotion, respectively. The semantic characterisation of *-ijga* in its auxiliary function given in S5-5(iii) captures the parallels and differences with the auxiliary use of *-yu* 'BE' (§5.2.1.2), whose semantic characterisation is repeated below. The additional feature of *-ijga* 'GO', 'for a long time', intended to cover both the habitual reading and the reading of 'unusually prolonged event', can be derived by metonymy from the component 'move along a path' of the verb in its locomotion sense.

S5-5(iii) *-ijga* 'GO' __ $\text{Coverb}_{\text{State}}$ / __ $\text{Coverb}_{\text{Activity}}$ → x is (involved) in a state / an activity **for a long time**

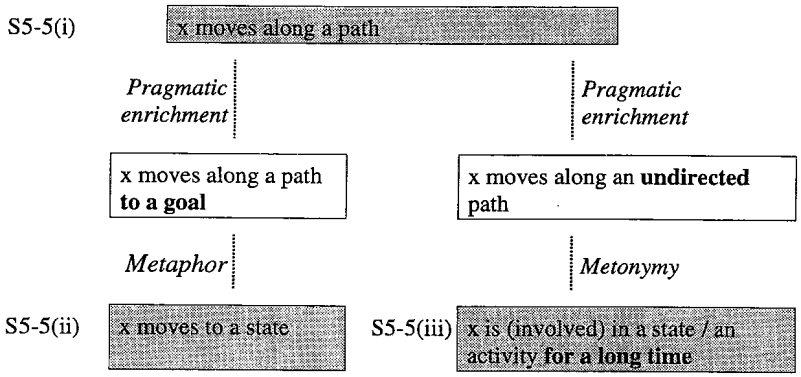
S5-1(ii) *-yu* 'BE' __ $\text{Coverb}_{\text{State}}$ / __ $\text{Coverb}_{\text{Activity}}$ → x is (involved) in a state / an activity

5.3.2.4 *-ijga* 'GO': Summary

The general locomotion verb *-ijga* 'GO' was shown to have three distinct senses: (i) locomotion (with a subsense of static extension of linear objects), (ii) change of state, and (iii) prolonged or habitual state or activity. Only the locomotion reading is available for *-ijga* as a simple verb, as well as in complex verbs with coverbs of manner, path, and some positionals and activities. The specification of a (spatial) source and direction of motion are also only possible with *-ijga* in its locomotion sense. Furthermore, only in its locomotion sense is *-ijga* in opposition with its functional antonym *-ruma* 'COME'; the two verbs contrast – on the pragmatic level – in deictic direction (see §5.3.3). Therefore, the locomotion sense can be taken to be the basic sense of this verb (which is consistent with assumptions generally made in grammaticalisation theory). The change of state reading is only possible with certain coverbs of change of state. The use as an auxiliary verb, signalling prolonged or habitual state or activity, requires a coverb of state or a coverb of activity. All three senses are available for productive use with coverbs borrowed from Kriol.

Although both secondary senses are attested cross-linguistically for motion verbs,[105] the 'change of state' reading seems to contradict a 'prolonged state/activity' reading. This apparent contradiction is solved by recognising that the former is a semantic extension of the directed motion use, and the latter an extension of a non-directed motion use of the same verb (cf. Ikegami 1984: 73). Both of these interpretations are derived by pragmatic enrichment from the basic sense of this verb, which is not specified for direction. The pragmatically enriched interpretations form the basis of the two apparently contradictory secondary senses, one derived by a metaphorical treatment of a state as a location, the other one by a metonymic link from undirected motion to a long-term association with the state or activity that is predicated of the theme. This can be represented as in Fig. 5-7. For the sake of simplicity, the specification of the context for the secondary senses (coverbs of change of state for S5-5(ii) and coverbs of state or activity for S5-5(iii)) is omitted in Fig. 5-7.

Fig. 5-7. *Lexical network for* -ijga *'GO'*



5.3.3 *-ruma* 'COME'

The second intransitive verb of locomotion, *-ruma* 'COME', semantically closely parallels *-ijga* 'GO' in its locomotion sense, but does not have secondary senses (except for a minor metonymic extension). It is also only about half as frequent as *-ijga* 'GO' (6.5% in the text count).

[105] It is perhaps worth noting that another commonly grammaticalised use of a locomotion verb – its use to encode temporal phenomena, e.g. passing of time or future time reference – is absent in Jaminjung and also, to my knowledge, in other Northern Australian languages.

This verb is more specific than *-ijga* 'GO' in that it specifies that the orientation of the locomotion is directed towards the deictic centre. In other words, the two verbs are in a privative opposition semantically. This was established using both spontaneous textual data and elicitation of descriptions of the motion scenes designed by Wilkins (1993b) (see also §5.3.2.1). These data also reveal that the deictic centre does not have to be reached: Motion towards the deictic centre, stopping at a point halfway, is sufficient to warrant the use of *-ruma* (cf. Wilkins & Hill 1995: 224ff.).

Example (5-104) below illustrates the use of *-ruma* as a simple verb, and the contrast between *-ruma* and *-ijga* 'GO' (see §5.2.2.1 for more examples).

(5-104) yawayi, na-**ruma**-ny jaru,
yes 2sg-COME-PST same.way

larrman-ki=wung na-**ram**, marndaj, L
dry-LOC=COTEMP 2sg-COME.PRS all.right

jalang=guj na-**ruma**-ny,
now=FIRST 2sg-COME-PST

buru na-**jga**-ny gugu-mindij na
return 2sg-GO.PST water-TIME NOW

'yes, you came the same way again, in the dry season you come, all right; you only came now (i.e. recently), you had gone back in the wet season (discussing my travels) (JM, F04138/9)

The parallel between *-ijga* 'GO' and *-ruma* 'COME' is further illustrated in (5-105) and (5-106). In (5-105), both verbs function as parts of complex verbs with the same coverb of manner of motion, *liwu* 'swim'.

(5-105) yinju=biyang **liwu** buny-**ijga**-ny log-bina, aa, langiny-bina,
PROX=NOW swim 3du-GO-PST log-ALL ah tree-ALL

rait, wirib=malang **liwu** ga-**ruma**-ny=nu,
right dog=GIVEN swim 3sg-COME-PST=3sg.OBL

"miyarra ba-**rum**" gani-yu=nu jalig=malang \
slow IMP-COME 3sg:3sg-SAY/DO.PST=3sg.OBL child=GIVEN

'here now, the two swam to the log, ah, to the tree; right, the dog came swimming to him; "come carefully" he said to him, the child' (boy and dog in Frog Story) (CP, E18297-300)

In (5-106), both *-ruma* and *-ijga* 'GO' function as parts of complex verbs with a coverb of direction of motion, *burduj* 'move up'.

(5-106) gabardag **burduj** ba-**jga**=ni,
quick go.up IMP-GO=SFOC1

... **burduj**=ma ga-wu-**rum** ngunggu,
go.up=SUBORD 3sg-FUT-COME 2sg.OBL

ngayug=biyang buwu nga-w-irdbaj=ni \
1sg=NOW enter.water 1sg-FUT-FALL=SFOC1

'climb up quickly – when it comes up for you, then I will jump into the water' (quoting children playing 'crocodile' in the swimming pool) (DR, D27153-4)

These examples raise another interesting question: whether and to what extent the deictic centre can be transposed in narratives, as in familiar European languages. Most of my data suggest that transposition is not possible, i.e. the deictic centre is necessarily the place where the speaker is. This is in accordance with the findings of Wilkins (1991) and Wilkins & Hill (1995) for Arrernte, which they link to the importance of absolute orientation in space in both linguistic and extralinguistic behaviour in Aboriginal Australia. The deictic centre was certainly never transposed in conversation about the 'here and now', and my own 'transposed' uses (interferences from my native language) were usually corrected (cf. Wilkins & Hill 1995: 225). In the few mythical narratives about large-scale movements of ancestral beings that I recorded, the relationship of the places in the story whose reference I could determine to the location of the narrator was at least consistent with the hypothesis that the use of *-ruma* 'COME' vs. *-ijga* 'GO' for the movements of the protagonists in those stories was determined by the position of the speaker at the time of narration. However, the use of *-ruma* in both (5-105) and (5-106) can be analysed as a shift in deictic centre to the protagonist of a story in (5-105), and to the addressee in (5-106).

The semantic characterisation proposed for *-ruma* 'COME' in S5-6 below thus parallels the representation given for *-ijga* 'GO' in S5-5(i) (§5.3.2.1), but is more specific in that it includes the specification that the direction of motion is towards the deictic centre.

S5-6 *-ruma* 'COME' x moves along a path which is oriented towards the deictic centre

There are only a few exceptions to the completely parallel behaviour of the two intransitive motion verbs: coverbs of 'emerging', like *bul* 'appear, emerge, come out' and *lany* 'rise (of celestial body)' more commonly combine with *-ruma* 'COME' than with *-ijga* 'GO'. (However, this is a tendency rather than a rule, since at least *bul* 'emerge' is attested also with *-ijga* 'GO' in a few cases.) This has a straightforward explanation: emergence from concealment will usually be construed as motion closer to the deictic centre, even if no locomotion in the strict sense is involved. Compare (5-107) and (5-108) below: the same complex verb consisting of the coverb *bul* 'emerge' and the verb *-ruma* describes a scene of coming into view by means of locomotion (as indicated by the use of the ablative case to mark the starting point of motion), and the appearance (in the sense of being more visible at each point in time) of a polaroid photo developing.

(5-107) Nangari=biya **bul** ga-**ruma**-ny yinaya-ngunyi \
<subsection>=NOW emerge 3sg-COME-PST DIST-ABL

'Nangari then came out from over there' (MJ, E04226)

(5-108) miyarra ga-**ram**, **bul**=biyang ga-**ruma**-ny
slow 3sg-COME.PRS emerge=NOW 3sg-COME-PST

'it is coming up slowly, it has come out now' (a polaroid photo which had just been taken) (DMc, TIM009)

This use of *-ruma* is accounted for by the metonymic extension in S5-6. The metonymic link is between motion towards the deictic centre in the basic sense, and coming into view of the deictic centre.

S5-6 *-ruma* 'COME' x moves along a path which is oriented towards the deictic centre

Metonymy

S5-6' x comes into the view of the deictic centre

5.3.4 *-uga* 'TAKE'

The pair of intransitive locomotion verbs, *-ijga* 'GO' and *-ruma* 'COME', have a parallel in the transitive verbs of accompaniment, *-uga* 'TAKE' and *-anJama* 'BRING', which show the same functional opposition. These two verbs have an additional semantic component of accompaniment, and are, correspondingly, bivalent, i.e. have a concomitant as a second participant.

Again, only the member of the pair that is not specified for deictic direction, *-uga* 'TAKE', is polysemous. In addition to its sense of accompanied locomotion (§5.3.4.1), it has a sense of habitual or prolonged accompaniment (§5.3.4.2), with a further metaphorical extension to 'memory' and 'hearing' (§5.3.4.3). Another sense, which is only available with certain coverbs, is 'apply force by using body weight' (§5.3.4.4). Further uses that are not captured by these generalisations are mentioned in §5.3.4.5.

In total, *-uga* occurs in about 3% of the verbal expressions in the text count, which means that it is less frequent than either of the intransitive motion verbs, but more frequent than its deictic counterpart *-anJama* 'BRING', which only has a frequency of around 1%.

5.3.4.1 Accompanied locomotion

The verb *-uga* has the basic meaning of accompanied locomotion, both as a simple verb and as part of some complex verbs. It is important to note that it entails locomotion of the Actor. In this respect the gloss 'take' is potentially misleading, since English *take* only entails motion of the Undergoer (see e.g. Norvig & Lakoff 1987); 'take along' comes closer to the intended translation. The same restrictions on the animacy of the figure hold as for the figure of an intransitive motion verb: it does not have to be animate but has to be construed as capable of locomotion, like running water, or the motor vehicle in (5-109).

(5-109) yuguyugung-ngarna-ni gan-**antha** ngayin
RDP:run-ASSOC-ERG 3sg:3sg-TAKE.PRS meat/animal
'the truck is carrying the animal' (Men & Tree 1.12.) (LR, D22015)

The term 'accompaniment' is better paraphrased as 'spatial contiguity'. The spatial contiguity may be one of actual physical contact ('carrying', 'pulling'; typically with inanimate Undergoers), as in (5-110), or simply one of continued co-presence (typically with animate Undergoers), as in (5-111).[106]

(5-110) wanaja=warra ganu-w-**uga** guyug thanthiya
where:DIR=DOUBT 3sg:3sg-FUT-TAKE firewood DEM
'I don't know where he will take the firewood' (MJ, JAM073)

(5-111) gan-b-**uga** mangarra-wu nguyung-di
3sg:1sg-FUT-TAKE food-DAT husband-ERG
'he will take me for (bush) food, (your) husband' (LD, LEN151)

This range of uses is reminscent of that of *-muwa* 'HAVE', and indeed it is possible to argue that *-uga* adds to the meaning of *-muwa* 'HAVE' the component of locomotion. Like all other locomotion verbs, *-uga* combines freely with coverbs of manner and direction of motion (see §5.3.1). Rather frequently, *-uga* also forms complex verbs with coverbs of spatial configuration, which specify

106 A peculiarity of the the argument structure of *-uga* 'TAKE' is that the participant that is encoded as Undergoer may at the same time be lexically represented by a noun phrase marked with comitative case instead of an absolutive noun phrase (see §4.2.2.1.2 for discussion and examples).

the configuration of the concomitant figure, rather than of the moving figure. In this respect, it parallels *-muwa* 'HAVE' (see §5.2.2)

(5-112) **gurlurl** gan-**antha** \
upright.on.top 3sg:3sg-TAKE.PRS
'it takes it sitting upright' (toy truck -> toy dog) (Orig. Transl. 'dog sitting up on the truck') (IP, E13700)

Just like *-muwa* 'HAVE', *-uga* is also found with bivalent coverbs of 'holding' such as *wurlgba* 'carry on shoulder' in (5-113).

(5-113) ngiyi=biya **wurlgba** gan-**antha** \
PROX=NOW carry.on.shoulder 3sg:3sg-TAKE.PRS
'here it is carrying him away' (reindeer -> boy in frog story) (IP, F03224)

The semantic characterisation proposed for *-uga* in S5-7(i) combines the meaning of the most general locomotion verb, *-ijga* 'GO' (motion along a path) with the meaning of *-muwa* 'HAVE' (see §5.2.2), reflecting the fact that this verb shares properties of both verbs, in particular in the range of coverbs that it combines with.

S5-7(i) *-uga* 'TAKE'

x moves along a path
y is located at x
x controls the location of y

In addition, *-uga* can also combine with bivalent coverbs of induced change of location, e.g. *jarr* 'put down single entity', which neither allow an intransitive locomotion verb, nor a stative verb like *-muwa* 'HAVE' (see (5-83) in §5.3.1.4).

5.3.4.2 Habitual/prolonged spatial contiguity

Under certain circumstances, *-uga* does not entail locomotion, but rather emphasises the permanent nature of an association between figure and concomitant. An example is the expression referring to a marriage relationship in (5-114).

(5-114) nawurlu ngarrgina gan-**antha** ngarrgina-ndi juwarda-di
woman's.Da 1sg:POSS 3sg:3sg-TAKE.PRS 1sg:POSS-ERG cousin-ERG
'my cousin marries my (sister's) daughter' (Orig. Transl.: 'my daughter, my cousin gotim') (DB, BUL050)

The lack of an entailment of locomotion becomes particularly clear in (5-115); the context is the handover of some of the traditional Ngaliwurru country to the traditional owners after a successful land claim.

(5-115) bun-ngarna-ny=biya yirrag \
3pl:1-GIVE-PST=NOW 1pl.excl.OBL

yirr-**anja** na, yirri=biya \
1pl.excl:3sg-TAKE.PRS NOW 1pl.excl=NOW

'they gave it back to us then, we have it now, we' (lit.: 'we take it now') (JM, GV07-04)

In this reading, *-uga* is often translated into Kriol as *got* 'have (got)', as in (5-114) above, and it is also often used interchangeably with *-muwa* 'HAVE', as in the two lines from a continuous text in (5-116).

(5-116) gani-**ma**-na na mulurru-ni \
3sg:3sg-HAVE-PST NOW old.woman-ERG

gan-**uga**=biya \ luba gan-angu \
3sg:3sg-TAKE.PST=NOW big 3sg:3sg-GET/HANDLE.PST

'she kept him then, the old woman, she kept him then, she raised him' (a boy whose mother had been killed) (DM, E19431-3, recorded by Mark Harvey)

In (5-117) and (5-118), likewise, *-uga* 'TAKE' and *-muwa* 'HAVE' are used in similar contexts, expressing a part-whole relationship in both cases.

(5-117) gurdbu gunbarr nga-**ntha**
lower.leg sore 1sg:3sg-TAKE.PRS

'I have a sore on my lower leg' (Fieldnotes Michael Walsh)

(5-118) thanggagu marnal-ni janga gana-**ma**-ya
above ankle-LOC sore 3sg:3sg-HAVE-PRS

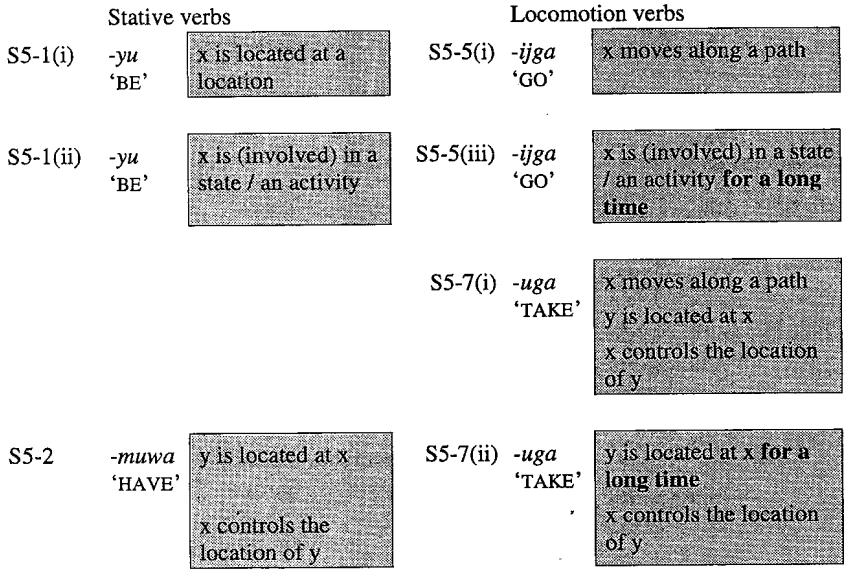
'above the ankle he has got a sore' (person's leg in picture book) (DR, NGA109)

These data suggest that *-uga* is used in a secondary sense where the semantic component of locomotion is bleached to yield a component of habitual/prolonged situation, as shown in S5-7(ii).

S5-7(ii) *-uga* 'TAKE' | y is located at x **for a long time** / x controls the location of y

Fig. 5-8 below shows the parallel between this secondary sense of *-uga* and the secondary sense of *-ijga* 'GO' when used as an auxiliary verb (§5.3.1.3). For both verbs, the semantic component of motion along a path is bleached to the component 'for a long time', accounting both for a habitual interpretation and an interpretation of 'prolonged situation'. Furthermore, Fig. 5-8 repeats the semantic representations for the two stative verbs of location, *-yu* 'BE' and *-muwa* 'HAVE'. When used as an auxiliary verb, *-yu* 'BE' is semantically parallel to *-ijga* 'GO' except that the latter adds the component 'for a long time'. The same relationship holds between *-muwa* 'HAVE' and *-uga* 'TAKE' in its secondary sense. In other words, in this sense *-uga* semantically includes *-muwa* 'HAVE', with the additional specification that the spatial contiguity is prolonged. (Recall that the phrase 'x controls the location of y' should be understood to include cases where x is a whole of which y is a part; see §5.2.2.) This analysis accounts for the near-interchangeability, demonstrated above, of *-uga* in its secondary sense and *-muwa* 'HAVE'.

Fig. 5-8. *Semantic relationships between stative verbs of locative relation and the two locomotion verbs* -ijga *'GO' and* -uga *'TAKE' in their secondary senses*



5.3.4.3 Remembering and Hearing

In a further secondary sense, *-uga* 'TAKE' can be used to express the notion of 'remembering'. In the Jaminjung dialect, in addition, it covers the sense of 'hearing'; Ngaliwurru, on the other hand, has a specific verb *-malangawu* 'HEAR' (see §5.9.3).

As the examples in (5-119) and (5-120) below show, *-uga* can take on the sense of 'remember, know, recall' even as a simple verb. The Undergoer argument in this case can be a name,[107] as in (5-119), a language name, or the word for 'speech, word, language', as in (5-120).

(5-119) gurrany jurriya burrag
NEG know 3pl.OBL

gurrany jinij burr-**antha** yagbali
NEG name 3pl:3sg-TAKE.PRS place

'they don't know, they don't know/remember the names (for the) places' (PW, JAM279-280)

(5-120) gurrany **liiny** nganth-**antha**=rrgu
NEG speech 2sg:3sg-TAKE.PRS=1sg.OBL

'you don't pay any attention to me' (DBit, FRA251)

The coverbs used with *-uga* in the 'remember' reading form a very small set, listed in §6.16. The most frequent of them is *girr*[108] 'remember', illustrated in (5-121).

(5-121) janju baaj **girr** nganju-w-**uga**
DEM speech remember 2sg:3sg-FUT-TAKE

'you will remember the language' (JM, NUN226)

This sense of *-uga* can be regarded as a further, metaphorical, extension of the sense of 'prolonged spatial contiguity' (§5.3.4.2). Thoughts or memories are here metaphorically construed as entities which have a prolonged association with a rational being. The same metaphor can account for English expressions like *keep in mind* (cf. German *behalten).*[109] This metaphor also gives rise to secondary senses of several other Jaminjung verbs, as shown for *-arra* 'PUT' in §5.2.4.2-3, and for *-ngarna* 'GIVE' in §5.7.1.2.

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107 Strictly speaking, the Undergoer in (5-119) is the inalienable possessor of the name, which is associated with the name in a part-whole construction; see §4.2.3.1.

108 *Girr* 'remember' is probably related to *gurru* 'listen', thus further corroborating the link between memory and hearing discussed below.

109 I am indebted to David Wilkins and Stephen Wilson for pointing out these parallels to me.

As already mentioned, in the Jaminjung dialect not only the notion of 'remembering', but also the notion of 'hearing' is covered by the same verb, in combination with the nominal *langa* 'ear' (5-122), or the coverb *malangayij* 'hear, listen', probably related originally to *langa* 'ear' (5-123).

(5-122) **langa** ba-**uga!**
ear IMP-TAKE

'listen!' (said emphatically, to the speaker's daughter who was insisting on being given money although the speaker told her that she didn't have any) (DB, fieldnotes 1999)

(5-123) **malangayij** nganthin-**ngantha**, jalwany-bina
listen 2sg:1sg-TAKE.PRS talking-ALL

'test it – you listen to me, talking' (after being asked to say something to try out the microphone) (DB, FRA017)

A semantic link between 'memory' and 'hearing' is attested all over Australia (Van Valin & Wilkins 1993: 522; Evans & Wilkins 1998). It is supported for Jaminjung by expressions for 'reminiscing' which also involve the nominal *langa* 'ear' (5-124).

(5-124) **langa** nga-**gba** gurrag gurrajgina
ear 1sg-BE.PST 2pl.OBL 2pl:POSS

'I was thinking about you all,' (lit: 'My ear was for you') (VP, NUN085)

Moreover, the Jaminjung coverb *malangayij* 'listen, hear' was also translated into Kriol as both *lisen* 'listen, hear' and *thingkabat* 'think about, consider', as well as 'understand (a language)'. 'Understanding a language' is both being able to hear it and to remember it. Similarly, knowing a place name is recalling from memory the name as it was heard; see (5-119) above.

The intricate link between 'hearing' and 'memory' also becomes apparent in (5-120) above. The collocation of *liiny* 'word, speech' and *-uga* can be interpreted in various ways depending on the context. (5-120) was uttered in a situation where the speaker was acting as if talking to a younger person who did not respond to her orders. It could be translated both as 'you don't listen to me' and 'you don't pay attention to me'. The same collocation was translated as 'believe' by Walsh in (5-125). 'Not believing' is like the refusal to integrate a new utterance into one's memory and to act accordingly in the future.

(5-125) gurrany **liiny** nga-**ntha** ngunggu
NEG speech 1sg:3sg-TAKE.PRS 2sg.OBL

'I don't believe you' (Fieldnotes Michael Walsh)

In all these cases, the notions of 'hearing/listening', 'paying attention', 'focusing one's attention', and 'remembering' appear to be intricately linked. Thus, utterances, names or other signals which can be auditorily perceived, retained in memory and which then provide the basis for further interaction with the source of the signal (e.g. a country or a person) are metaphorically construed as accompanying a rational being. Still, separate subsenses are provided in S5-7(iiia, b) for 'remembering' and 'hearing', in order to capture the fact that the latter only occurs in the Jaminjung dialect, and that the latter is only available with coverbs of hearing or the nominal *langa* 'ear'.

S5-7(iiia) *-uga* 'TAKE' — x (animate) has y in mind

S5-7(iiib) *-uga* 'TAKE' __ $\text{Coverb}_{\text{Hearing}}$ — x (animate) hears y
__ *langa* 'ear'

Neither the direction nor the exact nature of the link between 'remembering' and 'hearing' can be determined on the basis of the available data. The link is metonymic insofar as hearing something is a possible condition for remembering it, but metaphorical insofar as 'remembering' can be thought of as 'mental hearing' (cf. Van Valin & Wilkins 1993: 522). While 'remembering' was characterised above as a metaphorical extension from the sense of 'prolonged spatial contiguity' (§5.3.4.2), this possibly also has a metonymic link to the 'hearing' sense. Utterances like (5-126) can be regarded as a bridging context.

(5-126) gurrany **langa** gan-**antha** wirib
NEG ear 3sg:3sg-TAKE.PRS dog
'the dog has no ears' (i.e. it doesn't obey) (DB, fieldnotes 1999)

The intended interpretation of (5-126) is consistent both with the more literal sense of *langa ganantha* as 'have ears', with *-uga* in the sense of 'prolonged physical contiguity', and the 'hearing' sense of *-uga* (compare (5-125) to (5-122) above).

5.3.4.4 Applying force with the body weight

A very different sense of *-uga* is found, though rarely, with coverbs of change of state (§6.7), impact and change of state (§6.9.1), and pushing (§6.13). With these coverbs, *-uga* enters into opposition with the generic verbs of contact/force (§5.4), which encode information about the shape and/or trajectory of an instrument or body part that is employed to make contact with an affected participant. None of these contact/force verbs, though, covers events where the weight of the whole body (which could also be the 'body' of a self-propelled

inanimate like a car) is employed to apply force. It is this gap that is filled by *-uga* 'TAKE'.

Although real-world situations of someone applying force with his body weight usually involve locomotion of the Actor – a fact which provides the semantic link to the basic sense of this verb – this is treated as a distinct, secondary sense here for several reasons: First, *-uga* never has this sense as a simple verb, second, it never combines with a path specification in this use, and third, it is no longer in functional opposition to *-anJama* 'BRING', since this verb has not been attested in combinations with the same set of coverbs. Most importantly, there is also no strict entailment of locomotion.

The most frequent use of *-uga* in its sense of 'apply force with one's body weight' is in combination with the bivalent coverbs of 'pushing', e.g. *durl* 'push, bump against' (see also §6.13). With these coverbs, *-uga* 'TAKE' yields the reading of 'knock over, run over' (5-127). It is in contrast with both *-arra* 'PUT', which yields 'displace by pushing, push forward', and *-ma* 'HIT', which yields 'knock s.th. off' (not necessarily by applying force with the weight of the whole body).

(5-127) yangarra yirr-irriga,
kangaroo 1pl.excl:3sg-COOK.PST
motika-ni=ma **durl** gan-**uga** \
car-ERG=SUBORD push 3sg:3sg-TAKE.PST
'we cooked a kangaroo that was run over by a car' (CP, E11067-8)

An even clearer example of how *-uga* enters into opposition with the verbs of contact/force involves a coverb of change of state, *bag* 'break'. This coverb is attested with virtually all verbs of contact/force, describing different ways in which something can be broken (see §6.7 for examples). None of the verbs in that set, however, is quite appropriate to describe breaking a fence by running into it, as in (5-128). Again, *-uga* in its sense of 'applying force with body weight' fills this lexical gap.

(5-128) **bag** gan-**uga** barrigi
break 3sg:3sg-TAKE.PST paddock
'it (the bull) broke out of the fence' (comment while watching rodeo video) (IP, NTA001)

The example in (5-129) shows that *-uga* in this secondary sense does not entail locomotion of the Actor (nor of the Undergoer). It describes a static situation, that is, a situation where someone was already sitting on the food.

(5-129) muniny-di **nud** gan-**anja** mangarra
buttocks-ERG/INSTR be.as.weight 3sg:3sg-TAKE.PRS plant.food

'she is squashing the food with her buttocks' (i.e. by sitting on it) (JM/MW, F04386)

The positional coverb *nud* 'be as a weight on something, weigh down' in (5-129) is more usually found with *-arra* 'PUT', giving the reading of 'place something heavy on something else' (e.g. hot stones on meat for cooking in a ground oven). Note also that the verb *-inama* 'KICK/STEP' would normally be used to describe an impact that was caused by sitting down on something, e.g. with the result of breaking it (see §5.4.4). Since, with this coverb, *-uga* is therefore in opposition to both of these other verbs, it is clear that *-uga* is used to indicate that the force is applied with the body weight, but has no entailment that there is movement that leads to the contact. This is represented in S5-7(iv). This also captures the fact that this secondary sense only arises in combination with a coverb. The coverbs combining with *-uga* in this sense do not, however, belong to a single formal class; rather, various coverbs that either encode a kind of contact (forceful or not), such as *nud* 'be as weight on something' and *durl* 'push', and also coverbs encoding a change of state, such as *bag* 'break', are attested in this context. Thus, the nature of the coverb is not further specified in S5-7(iv).

S5-7(iv) *-uga* 'TAKE' __ Coverb x applies force on y by means of x's body weight

This semantic characterisation admittedly fails to show the semantic link to the basic sense of *-uga,* 'accompanied locomotion'. As already indicated, the most typical cases of applying force with one's body weight would involve at least locomotion of the Actor (since that is the usual way to employ one's body weight), as in examples (5-127) and (5-128) above. This, for example, accounts for the contrast between *-uga* and *-mili/ -angu* 'GET/HANDLE' when combined with the coverb *murrurr* 'touch slightly, stroke'. In (5-130a), the Actor actually moves, and comes into contact with the Undergoer with an unspecified part of the body; the complex verb formed with *-uga* yields the interpretation of 'brush against'.

(5-130a) **murrurr** nga-**uga**.
stroke 1sg:3sg-TAKE.PST

'I touched her walking past / I brushed against her' (DP/DBit, E04042)

In (5-130b), on the other hand, the Actor just uses her hands to make contact. Here *-mili/ -angu* 'GET/HANDLE' is used to yield the interpretation of 'stroke'.

b) jalig wuju-ni **murrurr** gan-**angga**-m
child small-ERG/INSTR stroke 3sg:3sg-GET/HANDLE-PRS

'the small child strokes it / pats it' (dog) (DP, E04202)

The semantic link between the 'accompanied locomotion' sense and the sense of 'apply force with one's body weight' sense is therefore of a metonymic nature: Usually, applying force with one's body weight has locomotion of one participant as a subcomponent. The component of locomotion of the second participant, entailed in the basic sense, is replaced by a component of force being exerted on the second participant, which may or may not lead to a displacement from its original configuration.

5.3.4.5 Other uses

A minor use of *-uga* as a simple verb has not been mentioned so far. It can most probably be explained as a calque from English 'take a picture', and is illustrated in (5-131).

(5-131) ganu-wu-ngawu na murag,
3sg:3sg-FUT-SEE NOW shade

nganjin-**kuga** yagbali-ni yirrajgina
2sg:1sg-TAKE.PST place-LOC 1pl.excl.:POSS

'she is going to look at the video now, you took me (i.e. my picture) in our country' (JM, CHE184)

It is also possible that the calquing of 'take a picture' was facilitated by a semantic link between picture or film as a new medium of information storage, and the original use of *-uga* in its 'remember' sense.

A further use of *-uga* with the coverb *warayi* 'insist on something, pester someone' is also not clearly accounted for by any of the four subsenses proposed so far. However, it is possible that *-uga* is used here in its sense of 'remember, have something in mind', since the person that is insisting has the people that she pesters in mind as possible source of a commodity.

(5-132) drangkenbala-ni=malang, ^ngayin-ku, mangarra-wu,
drunks-ERG=GIVEN meat/animal-DAT plant.food-DAT

warayi bun-**ngantha**=yirrag biyang \
insist 3pl:1-TAKE.PRS=1pl.incl.OBL NOW

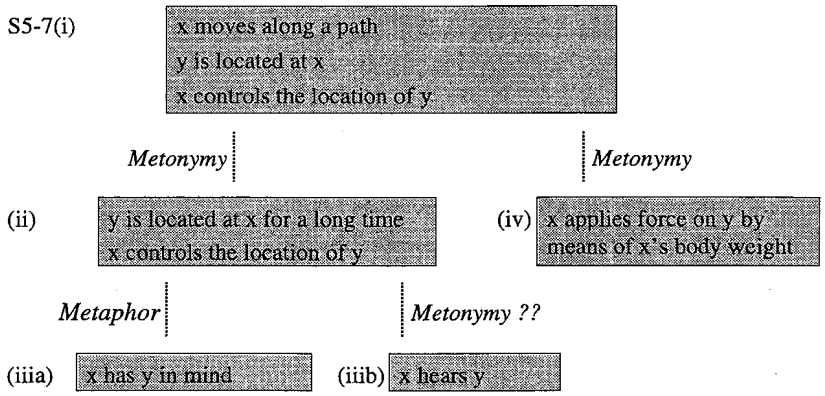
'The drunken people, for meat and for bread, they pester us' (DB, E10220-2)

No semantic representation is offered for the *-uga* 'TAKE' in the minor uses just mentioned.

5.3.4.6 *-uga* 'TAKE': Summary

The general verb of accompanied locomotion, *-uga* 'TAKE', was shown to be multiply polysemous. Its different senses form a radial category, as represented in Fig. 5-9. For the sake of simplicity, the specification of the context for some of the secondary senses (coverbs of hearing for S5-7(iiib), and coverbs from a variety of classes for S5-7(iv)) is omitted here.

Fig. 5-9. *Lexical network for* -uga *'TAKE'*



The basic sense of accompanied locomotion gives rise to two different metonymical readings; in both of these, actual locomotion is backgrounded and the component of spatial contiguity is foregrounded. The metonymic link from the basic sense to sense (ii) is one from accompaniment during an actual locomotion event, to habitual/prolonged spatial contiguity. This sense then has a further, metaphorical, extension to 'remembering', i.e. habitual/prolonged association with a memory (iiia). In Jaminjung, there is a further extension to 'hearing' (iiib); this can be motivated by a semantic link between 'memory' and 'hearing' which is common throughout Australia but whose exact nature is not clear at present, and possibly also by a metonymic link to sense (ii). Ngaliwurru has a simple verb, *-malangawu* 'HEAR', covering sense (iiib).

Sense (iv), 'apply force by means of the body weight', is metonymically associated with the basic sense in that the prototypical extension of the former involves locomotion of the Actor. This sense is only available with a small number of coverbs.

5.3.5 *-anJama* 'BRING'

The second verb of accompanied locomotion, *-anJama* 'BRING', encodes accompanied locomotion towards the deictic centre. It therefore stands in privative opposition to *-uga* 'TAKE', thus paralleling the semantic relationship between the intransitive locomotion verbs *-ruma* 'COME' and *-ijga* 'GO'. The verb *-anJama* usually straightforwardly translates as 'bring', if one keeps in mind that the deictic centre is never (or hardly ever) transposed as it is in English. Not surprisingly, as a simple verb it is very often found in commands, and with a specification of the beneficiary of the 'bringing', as in (5-133).

(5-133) jayiny, gugu ba-**ny**=arrgu!
MoMo/DaCh water IMP-BRING=1sg.OBL
'grandchild, bring me water!' (CP, E09702)

Only in 25% of its occurrences does *-anJama* form part of a complex verb; therefore the types of coverbs attested with this verb are rather limited. In principle, though, it has the same possibilities of complex verb formation as *-uga* 'TAKE' in its locomotion sense (not in its extended senses). It not only combines – like all motion verbs – with coverbs of direction and spatial configuration (see §5.3.1 for examples), but also with bivalent coverbs of 'holding', and with coverbs of induced change of location. The last type of complex verb is illustrated in (5-134), with the coverb *durd* 'hold a single entity', and in (5-135), with the Kriol loan *lodim* 'have s.th. loaded'.

(5-134) wirib wurdu **durd** gan-**anjama**-ny
dog small hold.one 3sg:3sg-BRING-PST
'she brought the puppy' (LD, LEN103)

(5-135) **lodim** gan-**anthama** yirrag \
load:TR 3sg:3sg-BRING.IMPF 1pl.excl.OBL
'packed full it would bring it for us' (plane .—> building material)
(DB, E10214)

The semantic characterisation for *-anJama* in S5-8 combines the characterisations for *-uga* 'TAKE' (accompanied locomotion, see S5-7) and *-ruma* 'COME' (locomotion towards the deictic centre, see S5-2).

S5-8 *-anJama* 'BRING'
x moves along a path which is oriented towards the deictic centre
y is located at x
x controls the location of y

5.3.6 *-unga* 'LEAVE'

The transitive locomotion verb *-unga* 'LEAVE', both as a simple verb and as part of complex verbs, expresses that a figure moves away from another participant, which is encoded as Undergoer. It may often describe the same real-world situations as *-ijga* 'GO' (the most general locomotion verb); this is illustrated in (5-136) for both verbs as simple verbs.

(5-136) gurrany yawurr-**ijga** \ jalig wuju-wuju \
NEG IRR:3pl-GO child RDP-small

gurrany yawun-**ngunga** \
NEG IRR:3pl:1sg-LEAVE

'they won't go (away), the little children, they won't leave me' (MJ, MIG027-28)

In (5-137), both verbs are combined with the same coverb of manner of motion, *dibard* 'jump'. Both (5-137a) and (5-137b) describe the same scene in the beginning of the Frog Story picture book.

(5-137a) malara=biya **dibard** ganuny-**ngunga**-m, ba-ngawu /
frog=NOW jump 3sg:3du-LEAVE-PRS IMP-SEE

'the frog now is jumping away leaving the two, look' (IP, F03035)

b) malara=biyang **dibard** ga-**jga**-ny \
frog=NOW jump 3sg-GO-PST

wang buny-bu-yu=nu \
look.in.vain 3du:3sg-FUT-SAY/DO=3sg.OBL

'the frog now jumped away, the two will look in vain for him' (beginning Frog Story) (IP, F03038)

In (5-138), *-unga* is combined with a bivalent coverb of induced change of location, yielding the reading 'put down and leave'.

(5-138) **jarr** yiny-**ngunga**-ny... murag-ngarna
put.down.one 1du.excl:3sg-LEAVE-PST shade-ASSOC

'we put down the camera and left' (DR, D27017)

As (5-136) to (5-138) also show, the Undergoer of *-unga*, that is, the entity left, can be an animate or inanimate. In a metaphorical use of the verb, the Undergoer may also be an event (see below). Interestingly, though, there is only one instance in the data (see (5-141) below) where a place is encoded as the Undergoer of *-unga,* and this has a strong connotation of 'leave alone'. Where one would say in English, for example, *they left the camp in the morning*, usually the more general intransitive locomotion verb *-ijga* 'GO' is used in Jaminjung,

either as a simple verb, or with a coverb meaning 'get up, rise, take off' (see §6.5.4). Jaminjung *-unga*, thus, is not equivalent to English *leave*. It adds to the meaning of *-ijga* 'GO' not only the notion that the Actor moves away from an Undergoer, but also that it does so purposefully, that is, the purpose is to leave the Undergoer, not just to move on to a different location.

Another difference to English *leave* is that *-unga* does not entail that the Undergoer is the starting point of the motion, or that it is stationary. Rather, *-unga* only entails that the figure moves away from the participant encoded as Undergoer from some point in time onwards. This is because *-unga* is regularly found in combination with the path coverb *marraj* 'move past/through'. The resulting expression, illustrated in (5-139), can be translated as 'overtake', i.e. the figure is interpreted as first moving towards the reference point, but from some point in time moving away from it.

(5-139) wirib-ni-mij **marraj** gan-**unga**-m \
dog-ERG-COMIT go.past 3sg:3sg-LEAVE.PST

'they are going past him together with the dog' (bees[110] and dog moving past boy, in Frog Story) (DR, E01271)

The coverb *waj*, which also has to be glossed as 'leave (behind)', is used to specify that the ground is also the source or starting point of the motion event. This coverb is only found with *-unga*, and frequently reinforces this verb. This use of an (almost) semantically redundant coverb is reminiscent of the appearance of a preverb in English expressions like *lower something down.*

(5-140) jirrama ngiyi **waj** ganurr-**unga**-ny luba=marlang, ngih?
two PROX leave 3sg:3pl-LEAVE-PST big=GIVEN TAG

'these two, he left them behind, the big ones, right?' (boy —> adult frogs, end of Frog Story) (IP, F03321)

The frequent use of *waj* 'leave' partly accounts for the fact that, unlike all other locomotion verbs, *-unga* is far more frequently found in complex verbs than as a simple verb. Only a little more than 20% of its uses are as a simple verb, but in more than one third of all complex verbs formed with *-unga*, the coverb is *waj* 'leave (behind)' (see also §5.10). Another coverb frequently used to reinforce *-unga* is *birang* 'behind'.

The complex verb *waj* + *-unga*, in addition, has a pragmatically enriched reading of 'leave someone/something alone, not interfere with something'. More often than not, this also involves actual locomotion away from the entity in question, as in (5-141).

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[110] Recall that groups of lower animates and inanimates are usually cross-referenced with singular forms.

(5-141) ga-w-iyaj=biya, **waj** yirr-**unga**-m yagbali ngiyiya
3sg-FUT.BE=NOW leave 1pl.excl:3sg-LEAVE-PRS country PROX

'leave it now, we will leave this country' (to someone who claimed to be the traditional owner of a country and complained about people hunting there) (DB, D13042)

However, there is also a metaphorical interpretation, where the Undergoer of the 'leaving' is an event. Here, no locomotion is entailed; the reading is 'give up (doing) something'. The event can either be established contextually, as in (5-142), or by metonymy (e.g. 'leave the alcohol').

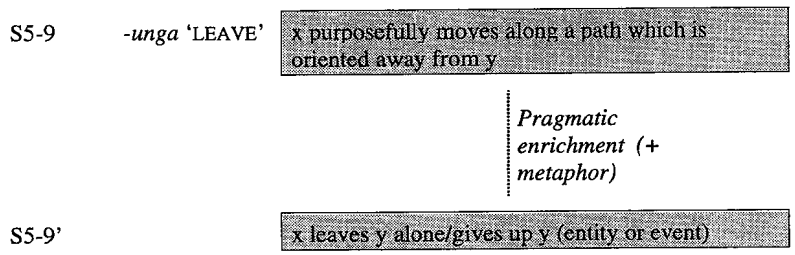
(5-142) gurrany burlug-mayan yiny-angga=biya,
NEG drink-CONT 1du.excl-GO.PRS=NOW

waj yiny-**unga**-ny gayijuwa
leave 1du.excl:3sg-LEAVE-PST long.time

'we two don't drink now, we gave it up a long time ago' (IP, F03712)

The parallel to the reading of *-yu* 'BE' as 'abandon (entity or event)', also illustrated in (5-141), is obvious (see §5.2.1.1). The metaphorical reading of *-unga* is represented as a subsense of the locomotion sense (S5-9) in Fig. 5-10. In its locomotion sense, *-unga* has the component of 'motion along a path' common to all locomotion verbs, but in addition specifies that the path is oriented away from an entity, and that the motion is purposeful. In this subsense, the motion component is construed metaphorically, and in addition the 'source' of the motion may be not just an entity, but also an event.

Fig. 5-10. *Semantics of* -unga *'LEAVE'*



5.3.7 *-arrga* 'APPROACH'

The verb *-arrga* 'APPROACH' is the converse of *-unga* 'LEAVE' in many respects: it encodes the notion that a figure moves not away from, but towards a participant which is encoded as Undergoer. An example for the use of *-arrga* as a simple verb is given in (5-143).

(5-143) nga-b-**arrga** yina babiny-guluwa yirrgbi-wu,
1sg:3sg-FUT-APPROACH DIST elder.sister-KIN2 talking-DAT

'I'm going up to your older sister there for talking' (IP, E08017)

As was the case for *-unga* 'LEAVE', the Undergoer with *-arrga* may be an animate, as in (5-143) above, or an inanimate, and rarely, a place, as in (5-144).

(5-144) ngiya yagbali **buru** yirr-**arrga** \
PROX place return 1pl.excl:3sg-FUT-APPROACH

'we came back to this place' (trip to the station where the speaker spent her childhood) (IP, GV09)

Just like *-unga* 'LEAVE', *-arrga* always describes purposeful motion; the purpose is often overtly indicated, as in (5-143) above. It is also evident in the frequent use of *-arrga*, both as a simple verb and as part of complex verbs as in (5-145) and (5-146), to describe approaching a prey. Example (5-146) also shows that *-arrga* does not entail that the ground is reached. It describes how a crocodile snuck up on the speaker, but was detected before reaching its goal, i.e. in time for the speaker to get away.

(5-145) nganthan **burlgub** gan-**arrganthi**-ya?
what sneak.up 3sg:3sg-APPROACH-PRS

'what is he sneaking up on?' (ER, MIX060)

(5-146) **jinikap** gan-**karrga**
sneak.up 3sg:1sg-APPROACH-PST

'it came sneaking up to me' (a crocodile) (DBil, FRA036)

Like *-unga* 'LEAVE', *-arrga* is often interchangeable with one of the intransitive locomotion verbs. For example, (5-147a) and (5-147b) come from the same story (after a picture book) about the adventures of a little bird who had fallen out of its nest and was looking for its mother. Both examples describe similar scenes and are construed in a completely parallel fashion except for the use of *-ruma* 'COME' in (5-147a) and *-arrga* in (5-147b). These two verbs differ semantically in that *-ruma* 'COME' is monovalent and encodes motion towards the deictic centre, whereas *-arrga* encodes motion towards a second participant. In (5-147a), the information that there is a goal of locomotion is conveyed by an allative-marked noun phrase and an oblique personal pronoun. In (5-147b), the goal of locomotion is part of the verb's meaning, and it is represented both by the U prefix, and by an absolutive noun phrase. (As shown in §4.2.2.1.2, the 'participant approached' could, alternatively, be represented by an allative-marked noun phrase, highlighting its status as the goal of directed motion.)

(5-147a) wurdbaj ga-yinji gujarding-gu nuwina
look.around 3sg-GO.IMPF mother-DAT 3sg:POSS

wirib-**bina** **bul** ga-**ruma**-ny=nu
dog-ALL emerge 3sg-COME-PST=3sg.OBL

'he was looking around for his mother, and came up to a dog' (DR, BAR014-5)

b) wurdbaj ga-jga-ny, gujarding-gu
look.around 3sg-GO-PST mother-DAT

bul gan-**arrga** buliki
emerge 3sg:3sg-APPROACH.PST cow

'he went on searching, for the mother, and went up to a cow' (DR, BAR021-2)

The semantic representation for *-arrga* is given in S5-10.

S5-10 *-arrga* 'APPROACH' x purposefully moves along a path which is oriented towards y

5.3.8 *-wardagarra* 'FOLLOW'

The semantically most specific of the locomotion verbs, *-wardagarra,* quite straightforwardly translates as 'follow'. It expresses that the path of the figure is oriented towards to a second participant, encoded as Undergoer, which is moving in the same direction as the figure (thus, in a way, constituting a second figure). An example for the use of *-wardagarra* as a simple verb is given in (5-148).

(5-148) majani ngayug=gayi nganyi-**bardagarra**
maybe 1sg=ALSO 1sg:2sg-FUT:FOLLOW

'maybe me too, I will come with you' (VP, NUN102)

Two examples of complex verbs formed with *-wardagarra* are given in (5-149) and (5-150). The coverb *jawujawud* 'sneak around' in (5-149) belongs to the class of coverbs of manner of motion.

(5-149) birangunyi **jawu-jawud** gan-**badagarra**-ny, gan-ba
behind:ABL RDP-sneak.around 3sg:1sg-FOLLOW-PST 3sg:1sg-BITE.PST

'it sneakily followed me from behind and bit me' (dog) (IP, D31088)

The coverb *warduj* 'be out of sight' in (5-150) is a positional which combines with *-wardagarra* in a 'motion cum purpose' reading.

(5-150) nganthan=warra gani-**wardagarra**-m **warduj**?
what=DOUBT 3sg:3sg-FOLLOW-PRS out.of.sight

'what on earth is he following, disappearing?' (DB, E02049)

Like *-ijga* 'GO' (see §5.2.1.1), *-wardagarra* can take on a reading of spatial extension. That is, it receives the interpretation that the figure moves along a spatially extended entity, rather than 'following' an entity that is in motion itself. The extension of the second participant can be considerable (e.g. a road), or relatively short. For example, in (5-151), it is a human used as a 'tree' to climb up on by a goanna. The verb *-wardagarra* here combines with a directional coverb, *burduj* 'move up'.

(5-151) ji=binji=biya **burduj** gani-**wardagarra**-ny /
3sg=ONLY=NOW go.up 3sg:3sg-FOLLOW-PST

'only on her it climbed up' (IP, F03486)

There is only one exception in the data to the generalisation that the moving figure has to be animate, and this also receives a 'spatial extension' reading: The moving figure in (5-152) is a bushfire following the growth of spinifex, the most inflammable plant.

(5-152) gani-**wardagarra**-m=biyang malurna
3sg:3sg-FOLLOW-PRS=NOW spinifex

'it follows the spinifex then' (bushfire) (JM, NUN244)

This 'spatial extension' use of *-wardagarra* is treated as a subsense of the locomotion sense, as shown in S5-11 and S5-11'.

S5-11 *-wardagarra* 'FOLLOW' x purposefully moves along a path which is oriented towards y and in the same direction in which y is moving

S5-11' x purposefully moves along a path along which y is extended

5.3.9 Verbs of locomotion: Summary

The Jaminjung verbs of locomotion were shown to constitute a formally and semantically coherent class. They all have the ability to combine with ablative- and allative-marked noun phrases specifying the source and goal of motion, as well as with coverbs encoding path or change of location. The main criterion for distinguishing locomotion verbs from verbs of change of locative relation is their ability to combine with coverbs of manner of motion.

Semantically, all seven locomotion verbs in their basic, locomotion sense (excluding some cases of metaphorical motion, e.g. spatial extension) entail locomotion along a path ('translational motion'). They are distinguished by three semantic components. The first is deixis, i.e. orientation of the path towards the deictic centre, distinguishing *-ruma* 'COME' and *-anJama* 'BRING' from *-ijga* 'GO' and *-uga* 'TAKE', respectively.

The second semantic component is concomitance; this distinguishes the two verbs of accompanied motion, *-uga* 'TAKE' and *-anJama* 'BRING', from the other locomotion verbs.

The third semantic component is orientation of the path with respect to a second participant; this component is shared by *-unga* 'LEAVE', *-arrga* 'APPROACH' and *-wardagarra* 'FOLLOW'. These verbs are normally only used if the motion is purposeful, and the moving figure is therefore animate. The three verbs are distinguished in that the path is oriented away from another participant for *-unga* 'LEAVE', towards another participant for *-arrga* 'APPROACH', and oriented in the same direction as another participant which is also moving for *-wardagarra* 'FOLLOW'. None of the verbs entails that the path is bounded by the second participant or the deictic centre (i.e. that it is reached, or is the starting point), only that it is oriented with respect to it. Neither the shape of the path nor the starting point or end point of a path are lexicalised in the locomotion verbs. This type of information, as well as manner of motion, can only be expressed by coverbs.

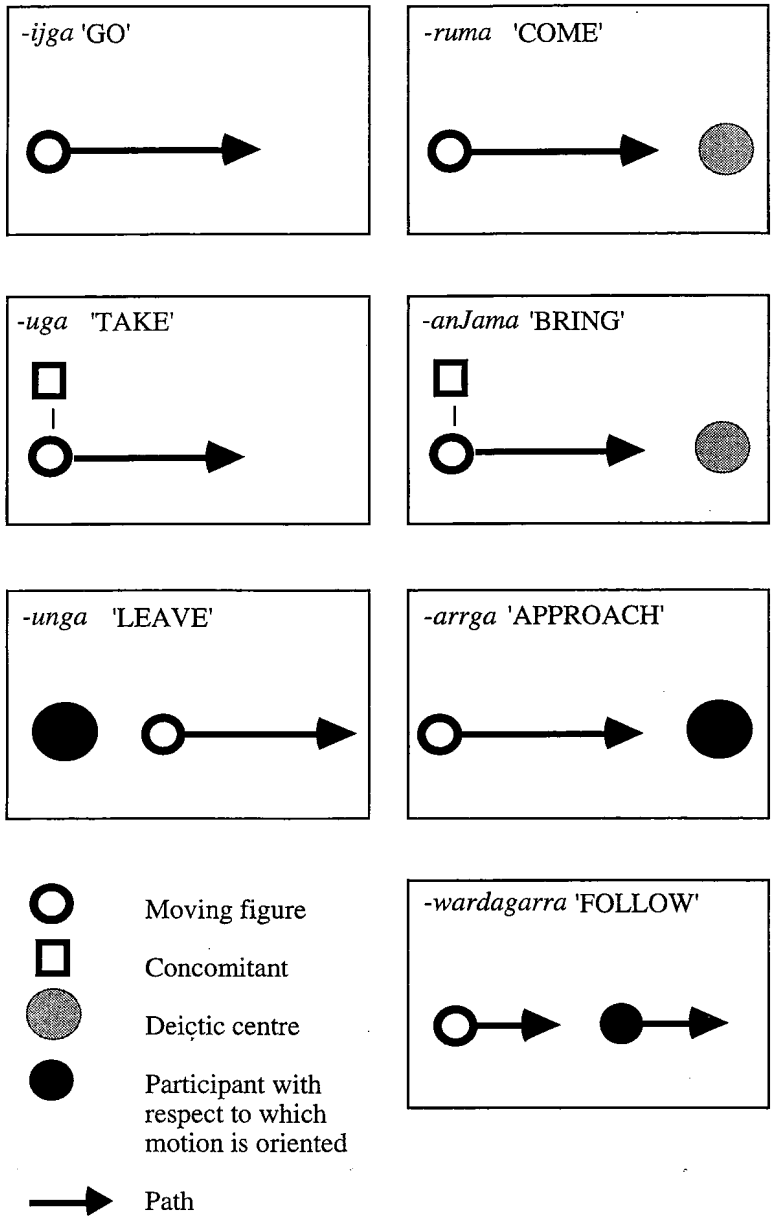
In addition, two of the verbs, *-ijga* 'GO' and *-uga* 'TAKE' also have secondary senses. The intransitive verb *-ijga* 'GO' has a 'change of state' sense and, in addition, is used as an auxiliary verb (see §5.3.2.4 for a summary). The verb of accompanied locomotion *-uga* 'TAKE' has extended senses of 'habitual/ prolonged concomitance', 'memory' and 'hearing', and 'force applied by body weight' (see §5.3.4.6 for a summary). Only the locomotion senses of all seven verbs are repeated in Table 5-1 below.

Table 5-1. *Semantic characterisations of the verbs of locomotion*

Sense	Verb	Semantic Characterisation
S5-5(i)	*-ijga* 'GO'	x moves along a path
S5-6	*-ruma* 'COME'	x moves along a path which is oriented towards the deictic centre
S5-7(i)	*-uga* 'TAKE'	x moves along a path y is located at x x controls the location of y
S5-8	*-anJama* 'BRING'	x moves along a path which is oriented towards the deictic centre y is located at x x controls the location of y
S5-9	*-unga* 'LEAVE'	x purposefully moves along a path which is oriented away from y
S5-10	*-arrga* 'APPROACH'	x purposefully moves along a path which is oriented towards y
S5-11	*-wardagarra* 'FOLLOW'	x purposefully moves along a path which is oriented towards y and in the same direction in which y is moving

The same semantic distinctions can, perhaps with more clarity, be graphically represented, as in Fig. 5-11.

Fig. 5-11. *Graphic illustration of the semantics of Jaminjung verbs of locomotion*



It will be noticed that the most general locomotion verb, *-ijga* 'GO', which only encodes 'motion along a path', is semantically included in all other locomotion verbs. With respect to deixis, it was argued that *-ijga* 'GO' is in privative opposition to *-ruma* 'COME', in that only the latter is semantically specified for deictic direction (analogously for *-anJama* 'BRING' and *-uga* 'TAKE'). The use of the more specific, deictic verbs was accounted for by a pragmatic maxim requiring specificity, as proposed by Wilkins & Hill (1995).

In actual fact, *-ijga* 'GO' is in privative opposition not only with the deictic verbs, but with all other locomotion verbs. Therefore the same Q principle, akin to the Gricean First Maxim of Quantity ("Make your contribution as informative as required"), can be held responsible for the choice of the other specific motion verbs, in order to account for the fact that *-ijga* 'GO' is not simply used in all cases. However, this principle is flexible enough to allow for different construals of the same or similar extra-linguistic situations. In other words, speakers have some choice of being more or less informative, and *-ijga* 'GO' can therefore sometimes be used interchangeably with the more specific non-deictic verbs, as was illustrated in several places in this section. The fact that the non-deictic verbs cannot normally be substituted for the deictic verbs, then, has to be accounted for by a specific enrichment of the Q principle according to which information about orientation towards the deictic centre is always required where applicable.

5.4 Verbs of contact/force

Verbs of contact/force form a set of seven transitive verbs, *-mili/-angu* 'GET/HANDLE' (§5.4.1), *-ma* 'HIT' (§5.4.2), *-ina(ngga)* 'CHOP' (§5.4.3), *-inama* 'KICK/STEP' (§5.4.4), *-ijja / -yaluga* 'POKE' (§5.4.5), *-wa* 'BITE' (§5.4.6), and *-wardgiya* 'THROW' (§5.4.7).

Semantically, these verbs form a coherent class in that they all encode different means of affecting an entity by contact. While *-mili/-angu* 'GET/HANDLE' only encodes affectedness by contact, five of the remaining verbs also have a semantic component of impact, and also distinguish the type of contact area making an impact. The verb of induced motion, *-wardgiya* 'THROW', is included because it shares some formal properties with the other verbs in this set. Two of these verbs, *-mili/-angu* 'GET/HANDLE' and *-ma* 'HIT', are polysemous and in their secondary senses do not entail physical contact.

Formally, the verbs of contact/force are related in that they systematically combine, and are in opposition with one another, with certain coverbs. In particular, they combine with coverbs of change of state, coverbs of contact and effect and coverbs of ballistic motion. A number of semantically more specific coverbs, however, may be restricted to occurrence with only one or two of the verbs in this set.

The examples in (5-153) provide a first idea of the contrasts expressed by these verbs, by showing them in combination with the change of state coverb *digirrij* 'die'. Here, the different verbs of contact/force convey different manners of 'killing' (see also §6.6 and §6.8.1 for further examples).

(5-153a) ngarrg gan-angga-m \ **digirrij** yan-**angu**!
strangle 3sg:3sg-GET/HANDLE-PRS die IRR:3sg:3sg-GET/HANDLE

'he is strangling him, he might strangle him to death' (DP, F02251)

b) jalig-di **digirrij** gani-**mangu** jurlag wagurra-ni
child-ERG/INSTR die 3sg:3sg-HIT.PST bird stone-ERG/INSTR

'the child killed the bird with a stone'

c) en Ngurrgbany=malang gan-**ijga**-ny Jiniminy ^na,
and rainbow=GIVEN 3sg:3sg-POKE-PST bat NOW

digirrij, burrb \
dead finish

'and the Rainbow, it was speared to death then by the Bat, finished' (Dreamtime myth) (DM, EV06123)

d) burru-**wirri**-ji tharrey wirib **digirrij**!
3pl-BITE-REFL there dog die

'The dogs are biting each other to death over there!' (IP, F03645)

The contrast can also be illustrated with the coverb *ngab* 'miss, fail', which appears to be restricted to combination with verbs of contact/force. It cancels the semantic component of contact otherwise entailed by these verbs, i.e. it is used where either an intended contact was not brought about at all, or did not affect the intended entity. This is illustrated here for only three of the verbs.

(5-154a) **ngab** burr-**ina**-m \
miss 3pl:3sg-CHOP-PRS

'they miss it / they fail to hit it' (when trying to shoot a bird with a stone and sling shot) (IP, F01036)

b) wurdij gan-unggu-m, **ngab** gan-**ijja**-ny
throw.spear 3sg:3sg-SAY/DO-PRS miss 3sg:3sg-POKE-PST

'he throws it but missed' (spear) (DP, RIV009)

c) ya, **ngab** gan-**ba**, wirib mulanggirrng-ni \
yes miss 3sg:1sg-BITE.PST dog cheeky-ERG

'yes, it missed me when trying to bite, the fierce dog' (IP, F03640)

The semantic contrasts between the verbs will become clearer in the discussion of the individual verbs to be presented in the following sections.

5.4.1 *-mili/-angu*[111] 'GET/HANDLE'

The verb *-mili/-angu*, in its basic meaning (§5.4.1.1), encodes physical manipulation, that is, one entity affecting another in a way that necessitates contact. (The reader should be aware that this is not fully captured by either of the English glosses 'get' or 'handle'). In addition, this verb has several readings which appear to be metaphorical extensions of the basic meaning: it covers some types of perception (§5.4.1.2), nonphysical interaction (§5.4.1.3), and attempted or failed contact (§5.4.1.4). Some additional, idiomatic uses of this verb are discussed in §5.4.1.5. Not surprisingly given this range of uses, *-mili/-angu* is one of the verbs with the highest frequency both within the class of contact/force verbs, and the class of generic verbs as a whole (7.8% in the text count).

5.4.1.1 Affectedness and contact

5.4.1.1.1 Range of uses

In its prototypical (i.e. most frequent) use as a simple verb, *-mili/-angu* can be translated as 'get' or 'obtain', non-specific as to the manner of obtaining: this could be gathering of food, catching fish or turtle (5-155), buying something at the store (see (5-158) below), receiving something as a gift, or any other manner of obtaining something, such as taking blood samples (5-156).

(5-155) munuggu-wurru-ni yirr-**angga**-m
string-PROPR-ERG/INSTR 1pl.excl:3sg-GET/HANDLE-PRS

'we catch it with a fishing line' (short neck turtle) (DR, CHE201)

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111 The forms *-angu* and *-mili* probably originated as dialectal variants, and are claimed to be just that by some speakers. In actual fact they are used interchangeably by speakers of both dialects with no apparent difference in meaning. In §2.4.2.2 it was suggested that they are on their way to forming one suppletive paradigm.

(5-156) gan-ji-**bili** garrngan;
3sg:1sg-FUT:GET/HANDLE blood

juga gan-**angga**-m ngarrgu
sugar 3sg:3sg-GET/HANDLE-PRS 1sg.OBL

'she is going to take my blood, she takes the sugar for me' (blood sugar test) (MW, CHE299)

A number of complex verbs formed with *-mili/ -angu* likewise have a reading of 'get, obtain'. The coverbs in this case belong to the classes of directional coverbs (e.g. *jag* 'go down'; see (5-197) below for an example), or, like *laburr* 'scoop, fetch' in (5-157), to coverbs of 'grabbing' (see §6.9.2), which themselves specify a manner of obtaining.

(5-157) **laburr** ba-**ngu** mindag gugu
scoop IMP-GET/HANDLE 1du.incl.OBL water

'fetch water for you and me' (DB, D14065)

Complex verbs of this type include expressions for introduced activities such as 'buying', which are formed with Kriol loans used as coverbs.

(5-158) mangarra gurrany guny-**ngangga**-m **bayim**!
plant.food NEG 2du:3sg-GET/HANDLE-PRS buy:TR

'you two don't (i.e. never) buy any food' (IP, F03693)

(5-159) **bukdanimbat** nga-**ngga**-m
book.down:TR:CONT 1sg:3sg-GET/HANDLE-PRS

'I am buying something on credit' (??, KRI032)

Most other complex verbs formed with *-mili/ -angu*, on the other hand, encode an activity involving physical manipulation of an entity. The majority of the coverbs in expressions of this type come from a large class of bivalent coverbs of touch and manipulation, such as *mard* 'touch' (5-160) and *wijwij* 'scrape' (5-161), which combine with *-mili/ -angu* exclusively.

(5-160) gurrany **mard** yanth-**angu**, guyug-burru,
NEG touch IRR:2sg:3sg-GET/HANDLE fire-PROPR

yanth-irna!
IRR:2sg-BURN

'don't touch it, it is hot like fire, you will get burned!' (to child coming too close to fireplace) (ER, MIX014)

(5-161) **wij-wij** gani-**mili**-m guruwuny
RDP-scrape 3sg:3sg-GET/HANDLE-PRS boab.tree

'she rubs the boab nut smooth (in order to then paint it)' (JM, CHE138)

This class of coverbs is augmented by Kriol loans like *reikim* 'rake s.th.' (5-162) or *wajjim* 'wash' (see III/25 in the Appendix), which also combine with this verb.

(5-162) **reikim** nga-**bili**
rake(tr) 1sg:3sg-FUT:GET/HANDLE

'I'm going to rake up' (PW, KRI022)

Other coverbs found with *-mili/ -angu* in its reading of 'physical manipulation' specify a spatial configuration, such as *dibird* 'be wound around s.th.' (5-163), or a change of state such as *bily* 'burst' (5-164), resulting from the manipulation. In complex verbs of this type, *-mili/ -angu* fulfils a function similar to causative verbs or affixes in other languages.

(5-163) **dibird** ba-**mili**-ji wirra
be.wound.around IMP-GET/HANDLE-REFL hair

'tie up your hair' (DP, KNX181)

(5-164) **bily-bily** yurr-**angga**-m
RDP-burst 1pl.incl:3sg-GET/HANDLE-PRS

'we pop it' (pimple) (lit. 'we make it burst')

On the basis of its range of uses, one could argue that *-mili* should be analysed as having two distinct senses, 'get, bring into contact with Actor' (as a simple verb and in some complex verbs), and 'manipulate' (in the majority of complex verbs). Alternatively, these may be regarded as two interpretations which arise from a single sense, depending on the context. The latter possibility will be pursued here.

A potential single sense which is also suggested by the etymology of at least one of the suppletive stem forms of this verb is 'do something with the hands'. The stem *-mili* appears to be cognate with a common Australian word for 'hand', **mala* (e.g. Capell 1979b: 590).[112] However, (5-165) shows that *-mili/ -angu* can also be used with reference to inanimate Actors without hands, like floodwater.

(5-165) wilany-ni **marring** gan-**angu** gumard \
floodwater-ERG bad 3sg:3sg-GET/HANDLE.PST road

'the floodwater destroyed the road' (DP, RIV032)

The Actor does not even have to be conceived of as an entity moving out of its own force. For example, the situation of 'clothes not fitting' is construed as an inanimate Actor (the clothes) bringing an animate Undergoer into the position encoded by the coverb *narrng* 'be stuck', thereby affecting it.

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112 The etymology of the stem form *-angu/-angga* is unclear.

(5-166) mali wujugula, **narrng** gan-**ngangga**-m
cloth/thing small stuck 3sg:1sg-GET/HANDLE-PRS
'the dress is (too) small, it makes me get stuck' (i.e. 'I get stuck in it') (JJ, D18006)

Moreover, activities of animate Actors not involving the hands, such as 'licking'[113] (5-167) or 'kissing', are also described with this verb.

(5-167) **ngalyag** gan-**angu**=biyang jalig
lick 3sg:3sg-GET/HANDLE.PST=NOW child
'it licked the child then' (dog, in Frog Story) (DR, E01236)

The alternative solution, then, is to recognise two rather abstract semantic components for this verb, 'x affects y' and 'x is in physical contact with y'. This covers both the uses where the first participant brings about and then maintains contact with the second participant, and thereby affects it (the 'get, obtain' interpretation), and the uses where the first participant performs some activity that requires ongoing contact with the second participant, and thereby affects it (the 'manipulate' intepretation).

Under this analysis, the fact that *-mili/ -angu* as a simple verb usually receives the interpretation of 'get, obtain' has a pragmatic rather than a semantic reason: If the event in question is not further specified (e.g. by a coverb), the default case of an event that meets both the criteria of affectedness and of contact is one where an entity is affected by simply being brought into contact with the Actor, i.e. by 'getting'. That is, this interpretation is derived by applying a pragmatic principle of "Informativeness" (see §1.4.2.3), which allows a stereotypical reading of a semantically general lexical item, if no more specific reading is invited by the context.

Several facts support this analysis. The crucial piece of evidence is that even as a simple verb, *-mili/ -angu* can be interpreted as 'manipulate', rather than 'get', in the appropriate context. For example, both the verbal context and the nature of the second participant make it sufficiently clear that (5-168b) should not be interpreted as 'get my body', but rather as 'undertake the appropriate activity with respect to my body considering that I am sick', which is rubbing or massaging.

113 Some speakers use *-ma* 'HIT' rather than *-mili /-angu* in combination with *ngalyag*, see §6.9.2.

(5-168a) mayi .. ngarrgina .. majani .. nga-ngardgani-m \
body/person 1sg:POSS maybe 1sg-be.sick?-PRS

b. ban-**ngangu** \ .. ngarrgina mayi \
IMP:2sg:1sg-GET/HANDLE 1sg:POSS body
'I am (lit. my body is) maybe sick, rub my body' (JM, F04170-1)

Similarly, in the context of (5-169a), the verb in (5-169b) is understood as 'scratch', as the appropriate response to itchy skin; this is only made explicit in the following clause (5-169c) by the use of a complex verb with the coverb *garan* 'scratch'.

(5-169a) yarl nga-yunggu-m mayardany
itch 1sg:3sg-SAY/DO-PRS skin
'my skin is itchy' (MW, CHE027)

b) ban-**mili** miyarra
IMP:2sg:1sg-GET/HANDLE slow/careful

c) **garan** ban-**mili**
scratch IMP:2sg:1sg-GET/HANDLE
'scratch me lightly, scratch me' (MW, CHE030-1)

Additional evidence comes from complex verbs formed with *-mili/ -angu* and coverbs of touching, and a subset of coverbs of the 'holding' class, which encode a spatial relationship between Actor and Undergoer (see §6.1.4). The resulting complex verbs, just like e.g. English *touch* or *embrace,* are neutral with respect to an interpretation of 'bringing s.th. into contact (with a resulting spatial relation)', as in (5-170), or 'holding s.th. in the specified position', as in (5-171). These data also support an analysis according to which the verb *-mili/ -angu* itself is non-specific with regard to an interpretation of 'bringing into contact' or 'manipulate'.

(5-170) waga ngaj=nu::, burrb ganu-wu-yu skul,
sit 1sg:FUT:BE=3sg.OBL finish 3sg:3sg-FUT-SAY/DO school
durd nga-**bili**
hold.one 1sg:3sg-FUT:GET/HANDLE
'I'm going to wait for her, and when school finishes, I will pick her up' (IP, E09079)

(5-171) jarnda **durd** ga-**mili**-ji \
hip hold.one 3sg-GET/HANDLE-REFL
'she is holding her hips' (lit. 'she is holding herself (with respect to) the hips') (ER, D15012)

As the basic meaning of *-mili/ -angu*, therefore, I propose the very general representation in S5-12(i).

S5-12(i) *-mili / -angu* 'GET/HANDLE'

x is in physical contact with y with a movable (body) part or instrument
x affects y

The phrase 'with a movable (body) part or instrument' captures the notion of 'manipulation'; even though no movements have to take place (as e.g. in holding), they should be possible in principle. Squashing something by lying down on it can be subsumed under 'affectedness by contact', but is not covered by the meaning of *-mili/ -angu* 'GET/HANDLE'.[114] Even agents with no distinctive parts, like the water in (5-165) and the dress in (5-166) above, have as a characteristic that the part that makes the contact is movable.

5.4.1.1.2 *-mili/ -angu* 'GET/HANDLE' and *-arra* 'PUT' as functional antonyms

The semantic analysis just proposed for the verb *-mili/ -angu* can be further corroborated by contrasting it with another semantically general verb, *-arra* 'PUT' (§5.2.4.1).

The reading 'get, take' is often taken to be the basic meaning for (approximate) translation equivalents of *-mili/ -angu* in other Northern Australian languages, not only because this is the default interpretation for the simple verb, but also because the verb appears to be in direct opposition to a verb of transfer, corresponding to *-arra* 'PUT' in Jaminjung. I will argue that this opposition only holds on the functional level (i.e. on the level of semantics enriched by pragmatics), but that these two verbs are not in direct semantic opposition.

Examples for the clear functional opposition of the two verbs are given in (5-172) (for both verbs as simple verbs) and (5-173) (for both verbs as part of complex verbs). In both (5-172) and (5-173), *-mili/ -angu* receives the interpretation 'get, pick up', i.e. 'bring in contact with agent', while *-arra* 'PUT' is used to describe transfer, 'placing something away from the agent'.

(5-172) nga-**rra**-ny guyug-gi, ba-**ngu**=biya
1sg:3sg-PUT-PST fire-LOC IMP-GET/HANDLE=NOW
'I put it on the fire, take it (out) now'

[114] Some examples, discussed in §5.3.4.4, suggest that *-uga* 'TAKE', in a secondary sense, is used in this case.

(5-173) **durd** nga-**ngga**-m buru **jarr** nga-w-**arra**
grasp 1sg:3sg-GET/HANDLE-PRS return put.down.one 1sg:3sg-FUT-PUT
'I am picking it up and will put it back'

According to the analysis proposed in §5.4.1.1.1 above, 'getting, obtaining' is only one possible, pragmatically enriched interpretation of the more general meaning of *-mili/ -angu*. Likewise, *-arra* 'PUT' does not have a semantic component of 'placing away from the agent', but simply entails that an agent causes an entity to change its locative relation with respect to a location. Again, 'away from the agent' is an inference. In this way, *-mili/ -angu* and *-arra* are in opposition, but on a pragmatic, metalinguistic level, not a semantic level: speaker and hearer know that *-mili/ -angu*, not *-arra*, would normally be used if the end location was the agent itself. If the contrast was semantic, this would be an entailment and not just a default rule. However, *-arra,* and not *-mili/ -angu,* is used in some cases where the end location does coincide with the agent, for example for putting on clothes, as in (5-174).

(5-174) wirlga niwina **bardag** gan-**arra**-m
foot/shoe 3sg:POSS tight.fit 3sg:3sg-PUT-PRS
'she puts on her shoe' (JM, E16428)

Cases like these would be difficult to account for if *-mili* and *-arra* were antonyms, but are compatible with the semantic analyses of these verbs proposed here: Semantically, both verbs are applicable to this situation, *-arra* by virtue of its component of 'caused change of locative relation', *-mili/-angu* by virtue of its component of 'contact'. Invariably, *-arra* is chosen; presumably, the crucial component here is that the clothes end up in a fixed position with respect to the body and are not further manipulated in any way. The interpretation that the clothes are on the agent's body and not on someone else's is again only an inference,[115] in a different context, the same complex verb, just like English *put on,* is interpreted as fixing something to a location other than the agent, as in (5-175).

(5-175) thanthu=gun **bardag** ba-**rra** jag=ma ga-rdba-ny
DEM=CONTR tight.fit IMP-PUT go.down=SUBORD 3sg-FALL-PST
'put on that one that fell down' (DR, CHE080)

The semantic analysis of *-mili/ -angu* 'GET/HANDLE' and *-arra* 'PUT' proposed here is further supported by cases where both verbs contrast with the same coverb, but in a way that is not explained by an antonymic analysis in terms of features like 'towards the agent/away from the agent'. For example, when two

[115] McCawley (1978) makes the same point with respect to one of the Japanese terms for putting on clothing.

speakers were asked for the meaning of the complex verbs in (5-176a) and (5-177a), both formed with the coverb *dirrg* 'tied up', they responded with describing the prototypical scenes (5-176b) and (5-177b), respectively (these have parallels in spontaneous uses of both complex verbs by other speakers).

(5-176a) dirrg gan-**angga**-m
tied.up 3sg:3sg-GET/HANDLE-PRS
'she ties it'

b) yu maitbi tayimap sweg
'you tie up a swag, maybe' (MJ, E04006)

(5-177a) dirrg ba-**rra**
tied.up IMP-PUT
'tie it up!'

b) tharran yu tayimap maiti dog, cheekiwan
'you tie up maybe a cheeky dog' (DP, E04014)

Here, the use of the verb *-mili/ -angu* leads to an interpretation where something is tied up 'with itself', like a swag[116] (5-176), or one's hair (see (5-163) above). The use of the verb *-arra* leads to an interpretation where something is tied to a location, like a boat or a dog (5-177). Both types of 'tying up' can in principle be described in terms of both 'affectedness' and 'physical contact'. However, in (5-177), 'cause to assume a locative relation to a specific location' is present as an additional component, and leads to the choice of *-arra* 'PUT' rather than *-mili/ -angu* 'GET/HANDLE'. This analysis is corroborated by the fact that at least one speaker also spontaneously used *-mili/ -angu* with *dirrg* 'tie up' when referring to tying up a dog. The feature 'cause to assume locative relation' therefore does not necessarily override the other components.

A similar contrast of the two verbs is found with the coverb of change of location *wirriny* 'turn', and the Kriol loan *miksimap* 'mix up'.

(5-178) **miksimap** burr-**arra**-nyi, darni-**bina**:, biri:, wajgany \
mix.up:TR 3pl:3sg-PUT-IMPF pollen-ALL guts honey
'they used to mix it up with pollen, the 'guts' (bee larvae), the honey '
(EH, E18166)

(5-179) **wirriny-wirriny** ba-**rra**
RDP-turn IMP-PUT
'turn them round' (said of bread loaves on a fire) (MJ, C10056)

116 In Australian English, a bundle of mattress and sheets.

(5-180) **miksimap** mind-**angga**-m
mix.up:TR 1du.incl:3sg-GET/HANDLE-PRS
wirriny ba-**ngu** mindag
turn IMP-GET/HANDLE 1du.incl.OBL
'let's mix it up – knead it for you and me' (bread dough) (PW, FRA047-49)

The events described in (5-178) and (5-179) are construed as a caused change of location. In (5-178) – describing the mixing of one substance with another – this is obvious, because the end location is even marked with the allative case. In the first line of (5-180), in contrast, it is not so much the mixing of one substance with another that is referred to, but the blending and kneading of what is, at that stage, already one rather undifferentiated substance, the bread dough. Consequently, the feature of the event that triggers the choice of verb is 'manipulation', i.e. 'affecting a substance by contact'.

Similarly, bread loaves baking on the fire can be turned around, ending up in a different position, which is why *-arra* is used in (5-179). Bread dough, on the other hand, can only be 'turned around in itself', which in Jaminjung is covered by the meaning of the coverb *wirriny*, but in this case the whole event is categorised as ongoing manipulation by the choice of the verb *-mili/ -angu*, as in the second line of (5-180).

We can conclude that, although functionally *-mili/ -angu* often appears as an antonym of *-arra*, the two verbs are not antonyms on the semantic level. Rather, *-mili/ -angu* is used whenever the feature of 'manipulation/contact' is seen as central to the event, while *-arra* is used when placement in a locative relation is seen as central. This corroborates the semantic analysis proposed for these verbs in §5.2.4.1 and §5.4.1.1. The interpretations 'bring something towards the agent' vs. 'put something away from the agent' may arise through pragmatic enrichment of the verbs' meanings.

5.4.1.2 Perception by the lower senses

We now turn to uses of *-mili/ -angu* which do not fit the characterisation proposed so far, and are therefore taken to reflect secondary senses of the verb. The first of these is a sense of 'non-visual/non-auditory perception'.

Tactile perception is covered by *-mili/ -angu* in its basic reading (especially with the coverb *mard* 'touch', see (5-160) above and also §6.8.2.2), since it involves physical contact, and, at least in one possible construal, affectedness of the entity touched.

However, *-mili/ -angu* is also used for other kinds of perception, presumably because 'perception' can be metaphorically characterised as involving a type of

non-physical contact brought about by the perceiver. Excluded are those kinds of perception for which a more specific verb is available, i.e. visual perception, covered by *-ngawu* 'SEE' (§5.8.1), and 'hearing', which is covered by a specific verb, *-malangawu* 'HEAR', in Ngaliwurru (§5.9.3), but by *-uga* 'TAKE' in Jaminjung (§5.3.4.3).

The remaining types of perception include premonitory feeling (5-181), dreaming, temperature perception (5-182), taste, and smell (5-183). Except for premonitory feeling and temperature perception, these are all well attested in the corpus.[117] Note that the reading of premonitory feeling in (5-181) is even available for *-mili/ -angu* as a simple verb; the intended reading is sufficiently specified by the use of the term for the body part which is regarded as the seat of feeling, *burru* 'stomach'. All other expressions involve coverbs specifying the type of perception (see also §6.13); in (5-182), this is the Kriol coverb *bilim* 'feel (tr)'.

(5-181) **burru-ni** nga-**ngu**
belly-ERG/INSTR 1sg:3sg-GET/HANDLE.PST

"majani nganjan=warra ga-yu"
maybe what=DOUBT 3sg-BE.PRS

'I got the feeling with my stomach: "maybe there is something (around here), I don't know what"' (Orig. Transl.: ai bin gittim got mai binji 'I got it with my belly') (DR, NGA117)

(5-182) yinju-ngala yu.. bubub-bari **bilim** nganj-**angga**-m,
PROX-?? you warm-QUAL feel:TR 2sg:3sg-GET/HANDLE-PRS

'here you feel a bit warmer' (JM, F04150)

(5-183) wirib-ni=malang biyang **ngabuj** gan-**angu**=ni
dog-ERG=GIVEN NOW smell 3sg:3sg-GET/HANDLE.PST=SFOC1

'the dog now smelled/sniffed it' (beehive in Frog Story) (CP, E18215)

Tentatively, the semantic characterisation in S5-12(ii) is proposed for this secondary sense of *-mili/ -angu*. Perception is here represented as a type of contact 'through the senses'. The phrase 'lower senses' could also be replaced by 'non-visual/non-auditory senses'. Although it is difficult to capture, in a paraphrase, the commonality between tactile perception, premonitory feeling, and smell, while excluding visual and auditory perception, the encoding of

[117] Temperature perception is more often construed as affectedness by temperature, and expressed with one of the verbs of burning/cooking (§5.5) in the case of heat, and, in the case of cold, with either *-ma* 'HIT' (§5.3.2.2) or *-minda* 'EAT' (§5.8.2), and the nominal *garrij* 'cold' as the Actor.

perception through the lower senses, but not visual and auditory perception, by means of the same verb is consistent with cross-linguistic tendencies (Viberg 1984, Evans &Wilkins 1998).

S5-12(ii) *-mili / -angu* 'GET/HANDLE' — x (animate) is in contact with y through its lower senses

5.4.1.3 Non-physical interaction

In addition to the types of perception mentioned in 5.4.1.2, *-mili/-angu* also extends to another non-physical type of contact; this is best characterised as 'ongoing non-physical interaction'. This sense is only available in complex verbs, mostly with coverbs of social interaction, like *wuru* 'care for' in (5-184), which form a small class. This is the reason why it is treated as a secondary sense rather than a very general basic sense (see §1.4.2.2).

(5-184) Bulla-gi yagbali-ni **wuru** ba-wurr-**angu** \
<place.name>-LOC place-LOC care.for IMP-2pl:3sg-GET/HANDLE

'look after them in Bulla Camp' (DB, E10119)

A number of Kriol loans in the data also belong to this semantic class; some examples are given in (5-185) to (5-187) (another coverb of this type is *lukabtaim* 'look after'; see III/38 in the Appendix).

(5-185) nginthu, Madawu **growimap**=ma nga-**ngga**-m \
PROX <proper.name> grow.up:TR=SUBORD 1sg:3sg-GET/HANDLE-PRS

'this is M. who I am raising' (IP, EV03088)

(5-186) **visitim** nga-**bili** mulurru
visit:TR 1sg:3sg-FUT:GET/HANDLE old.woman

'I will visit my old lady' (JM, NUN003)

(5-187) thanthu=biya .. majani **ti:jim** gana-**mila**
DEM=NOW maybe tease:TR 3sg:3sg-GET/HANDLE.IMPF

'that one now, maybe he was teasing it' (boy -> deer, in Frog Story) (IP, F03199)

Coverbs of state or activity, like *jurriya* 'know/knowledgeable' in (5-188), or *gambaja* 'laugh', may encode the result (or intended result) of a non-physical interaction; the resulting complex predicates receive a causative reading (see also §5.8.3).

(5-188) **jurriya** gun-**ngangga**-m baaj-gu
know 2pl:1sg-GET/HANDLE-PRS speech-DAT
'you teach me language, you make me knowledgeable about language' (VP, NUN139)

In none of the examples given so far is actual physical contact precluded. Arguably, events of caring for someone or raising someone even necessarily involve physical contact for some of the time. However, this is not the criterial feature of the event as a whole, since *-mili/ -angu* is clearly applicable in situations without physical contact. For example, (5-189) was a comment on a videotaped scene showing two people who were not in physical contact at any point in time, so (5-189) clearly describes 'waking someone up by verbal means'.

(5-189) majani=biya **^ngi'iny** gan-**angga**-m, "gud ba-iyaj!"
maybe=NOW waken 3sg:3sg-GET/HANDLE-PRS rise IMP-BE
'maybe she wakes her up, "get up!"' (TEMPEST videos) (IP, E08364)

As the following examples show, the kinds of interaction expressed by complex verbs formed with *-mili/ -angu* may be rather abstract. It is not required that the Actor be volitional or even animate; for example, (5-190) describes a case where a fire frightens a snake.

(5-190) guyug-di=ma **fraitenim** gan-**angu**
fire-ERG/INSTR=SUBORD frighten:TR 3sg:3sg-GET/HANDLE.PST
'when the fire frightened it, (... the snake came out of the hiding)' (VP, NUN111)

Nor is an independently existing Undergoer presupposed, since in example (5-191) the singer is 'sweetening' the song at the same time as producing it.

(5-191) **switenim** nga-**ngga**-m
sweeten:TR 1sg:3sg-GET/HANDLE-PRS
'I'm going to make it sound 'sweet'' (a traditional song which was being recorded) (ER, MIX054)

In the semantic characterisation in S5-12(iii), the intuitive notion of 'interaction' is represented in terms of spatial contiguity (derived by semantic bleaching from the component of physical contact in the basic sense of the verb), and affectedness. Since this sense of *-mili/ -angu* is only available in complex verbs, either the manner of interaction, or its result, are always further specified by a coverb. Since the coverbs may come from various classes, their nature is left unspecified in S5-12(iii).

S5-12(iii) *-mili / -angu* 'GET/HANDLE'
__ Coverb
x is in the same place as y
x affects y

5.4.1.4 Attempted or failed contact

Some other uses of *-mili/ -angu* as part of complex verbs could perhaps be subsumed under an even broader notion of 'interaction'; they involve attempted or failed contact.

This includes complex verbs formed with coverbs of pursuit (§6.9.2). The most frequent of these is *yurl* 'pursue, follow, chase' (which, however, also combines with other verbs of contact/force; see §6.9.2 for examples). Interestingly, the complex verb formed with this coverb and *-mili/ -angu* takes on the behaviour of a locomotion verb, in that it is found with allative-marked goal phrases (5-192a), and with coverbs of manner of motion (5-192b). This suggests that this complex verb has to be treated as an idiomatic, fixed expression.

(5-192a) **yurl** gan-**angga**-m mangarra-**bina**
pursue 3sg:3sg-GET/HANDLE-PRS plant.food-ALL
'it is running after the bread' (horse) (DR, CHE296)

b) **yurl** gan-**angga**-m, **yugung**
pursue 3sg:3sg-GET/HANDLE-PRS run
'he chases him, running' (DB/DP/DBit, FRA220)

On the other hand, the Kriol translation equivalent of 'chase', *jeijim*, also combines with the same verb, which suggests that the choice of the verb is based on a partly productive principle .

(5-193) laik **jeijim**=ma burru-**bili**-ji,
like chase:TR=SUBORD 3pl-FUT:GET/HANDLE-REFL
jalig wurdu-wurdu
child RDP-small
'like when they are about to chase each other, the little kids' (JM, F04242)

The verb *-mili/ -angu* is also used in complex verbs of failed attempt, for example those formed with the adverbial coverb *marlma* 'unable, helpless, clumsy', illustrated in (5-194).

(5-194) **marlma** nga-**ngu**=biyang ngarrgina garlaj
unable 1sg:3sg-GET/HANDLE.PST=NOW 1sg:POSS younger.Br/Si
'I couldn't help my little sister' (DR, D27168b)

Even in this type of expression, *-mili/-angu* appears to be productive, as shown by combinations with Kriol loans such as *miksim* 'miss s.o.' in (5-195).

(5-195) **miksim** mindi-**bili**
miss:TR 1du.incl:3sg-FUT:GET/HANDLE

'we are going to miss her' (i.e. not find her at home when we visit) (JM, NUN214)

The 'attempted contact' reading of *-mili/-angu* is – tentatively – given as S5-12(iv). Again, the class of coverbs that *-mili/-angu* combines with in this sense cannot be clearly delimited, although there are obviously semantic restrictions.

S5-12(iv) *-mili/-angu* 'GET/HANDLE' x attempts to make contact with y
__ Coverb

5.4.1.5 Other uses

Two residual cases cannot be subsumed under any of the senses proposed for *-mili/-angu* so far. A possible explanation for the use of this verb, though, lies in the observation that, already being semantically general, it fills a lexical gap, i.e. it is used in cases where no other verb is applicable.

Thus, *-mili/-angu* not only categorises events of attempted contact, but also events of involuntarily released contact, i.e. of 'dropping, losing'. Here one might instead expect the verb *-arra* 'PUT', the verb of transfer. Indeed, only *-arra* 'PUT' is found with the positional coverb *warduj* 'be lost, be out of sight' in the reading 'misplace, lose s.th.'. However, in combination with a path coverb like *jag* 'go down', *-arra* 'PUT' suggests intentional displacement, as in (5-196).

(5-196) **jag** gan-**arra**-m
go.down 3sg:3sg-PUT-PRS

'he is lowering it' (new benches in a park being lowered from a truck by a crane) (CHE430)

The complex verb consisting of *-mili/-angu* and the same coverb, on the other hand, is neutral in this respect: it can describe bringing something in contact with the Actor, i.e. 'getting s.th. down', as in (5-197) (a use that is consistent with the basic meaning of *-mili/-angu)*, but it can also describe involuntary displacement, i.e. 'dropping, losing', as in (5-198).

(5-197) mulanggirrng **jag** na gan-**angu**,
dangerous go.down NOW 3sg:3sg-GET/HANDLE.PST
wirib-ni=malang,
dog-ERG=GIVEN

'the dangerous one it now got down, the dog did' (beehive, in Frog Story) (CP, E18245)

(5-189) **jag** guny-**angu** bishilain
go.down 2du:3sg-GET/HANDLE.PST fishing.line

'you two lost your fishing line' (JM, E16622)

Paraphrases with Kriol loans such as *lujim* 'lose s.th.' also take *-mili/-angu*, which suggests that this use of the verb is productive to at least some degree.

(5-199) **lujim** nga-**ngu**
lose:TR 1sg:3sg-GET/HANDLE.PST

'I lost him/her' (also metaphorically, by death)

The second problematic case involves the coverb *dibard* 'jump', which usually combines with verbs of locomotion, or with *-irdba* 'FALL', but also forms transitive complex verbs with the reading 'jump s.th.' with *-mili/-angu*. An example is given in (5-200).

(5-200) **dibard** gan-**angu**:.. binka
jump 3sg:3sg-GET/HANDLE.PST river

'he jumped a creek'

If the 'place jumped' is left unspecified, the same complex verb can be used to describe just the point of departure, i.e. 'jumping off' from a location. No other verb seems suitable to express this meaning: the locomotion verbs entail motion along a path, and *-irdba* 'FALL' entails that a ground is reached, and therefore also cannot encode the starting point of the jumping (although both types of verbs may combine with *dibard* 'jump'). The contrast shows nicely in the description of parachute jumping in Text I in the Appendix: *-mili/-angu* is used when the point of leaving the plane is referred to (I/15-18), as opposed to reaching the ground (e.g. I/24-25), or being on the way to the ground (I/8) (see also §5.2.3.1).

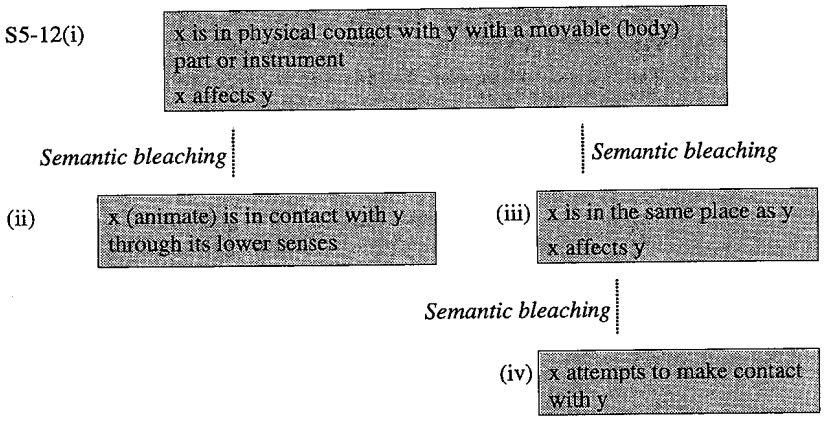
In this case, the use of *-mili/-angu* can probably only be negatively motivated. It fills a gap in semantic space left by the other verbs just mentioned, in that it is employed to make a semantic distinction (between volitional and nonvolitional displacement, on the one hand, and between locomotion or assuming a locative relation, and change of location away from a location, on the other hand) to which no other verb lends itself easily.

No separate sense is proposed for the specific uses of *-mili/ -angu* just illustrated; they are treated as residual cases and idiomatic expressions, until further lexicographic work shows them to be based on a systematic and productive sense of this verb.

5.4.1.6 *-mili/ -angu* 'GET/HANDLE': Summary

Leaving aside the problematic cases discussed in §5.4.1.5, all secondary senses of *-mili/ -angu* 'GET/HANDLE' can be regarded as extensions arrived at by semantic bleaching of the component of physical contact in the basic sense of the verb. These extensions give rise to a 'perception' reading (§5.4.2.2), on the one hand, and a reading of 'affecting by non-physical contact' (§5.4.2.3), with a further extension to 'attempted or failed contact' (§5.4.2.4), on the other hand. This network of polysemous senses is represented in Fig. 5-12.

Fig. 5-12. *Lexical network for -mili/-angu 'GET/HANDLE'*



Admittedly, the differences between these senses are not as clearcut as this representation suggests: It has already been pointed out that at least tactile perception is also covered by the basic sense of *-mili/ -angu,* and that it is not always clear whether *-mili/ -angu* is applied in its interaction sense or in its basic sense in the case of events which may involve periods of physical contact, like 'caring for s.o.' or 'raising s.o.'. Moreover, as shown in §5.4.2.5, *-mili/ -angu,* because of its very general meaning and its high frequency, is sometimes employed to fill a semantic gap left by other verbs, in the sense that it is used in some types of expressions where no other verb appears to be easily applicable. These uses, therefore, are not easily explained as a semantic extension from its basic meaning alone. Still I hope to have shown that the uses of the verb *-mili/ -angu,* rather than being completely unmotivated, cluster mainly in a limited number of linked semantic areas.

5.4.2 *-ma* 'HIT'

While the meaning of the verb *-mili/ -angu* 'GET/HANDLE', discussed in the previous section, centers around the notion of affecting something by ongoing (and not necessarily forceful) contact, four of the five remaining verbs of contact/force encode 'affecting something by impact or force'. Of these, *-ma* 'HIT' is the most generally applicable, while *-ina(ngga)* 'CHOP', *-inama* 'KICK/STEP', *-ijja* 'POKE' and *-wa* 'BITE' are restricted to impact with specific types of instruments. Correspondingly, *-ma* 'HIT' is also the only one of these verbs which is polysemous. In addition to its central sense of 'affectedness by impact' (§5.4.3.1), it is also used in complex verbs that describe complete affectedness, without entailment of contact (§5.4.3.2). Finally, *-ma* is also part of monovalent complex verbs which express 'emerging' or 'exiting' (§5.4.3.3). It comes as no surprise that the semantically general and polysemous verb *-ma* 'HIT' is, with 5.9% text frequency, one of the high-frequent verbs.

5.4.2.1 Affectedness by impact

As a simple verb, and as part of complex verbs with coverbs of force or change of state, *-ma* 'HIT' is typically used to describe hitting with the hand (5-201a), or with a blunt instrument moved radially, e.g. a boomerang or a club. Specifically, *-ma* contrasts with *-ina(ngga)* 'CHOP', which encodes an impact made with the edge of an instrument like a knife or a stone, or with the knuckles/fist.[118] This is illustrated by the minimal pair in (5-201).

(5-201a) gani-**ma**-m jurruny-ni
3sg:3sg-HIT-PRS lower.arm-ERG/INSTR
'he slaps him (he hits him with the flat hand)' (DP, KNX054)

b) ga**na**-m jurruny-ni
3sg:3sg:CHOP-PRS lower.arm-ERG/INSTR
'he hits him with the fist' (DP, KNX053)

A similar direct contrast is illustrated in (5-202), this time between *-ma* and *-ijja* 'POKE' (§5.4.5), the verb used for impact by pointed body parts or instruments moved axially.

(5-202) gani-**ma**=binji gurrany gani-w-**ijja**-na, naib-marnany
3sg:3sg-HIT.PST=ONLY NEG 3sg:3sg-FUT-POKE-IMPF knife-PRIV
'he only hit him, he didn't stab him, no knife' (IP, D31110)

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118 The contrast between the two verbs is less clearcut than this brief discussion suggests; see §5.4.3 for details.

None of these impact verbs entails that the instrument stays in contact with the agent; for example, *-ma* 'HIT' may describe hitting with a thrown boomerang, as in (5-203), or hitting with a boomerang held in hand.

(5-203) miri **bag** burra-**ma**-nyi gurrubardu-ni
leg break 3pl:3sg-HIT-IMPF boomerang-ERG/INSTR
'they used to break its legs with a boomerang' (kangaroo)

Both as a simple verb and as part of complex verbs, *-ma* can describe the impact made by amorphous natural forces such as the wind or the rain in (5-204) and (5-205).

(5-204) gugu-ni gan-**ma**-m
water-ERG 3sg:1sg-HIT-PRS
'rain is wettening me' (= Orig. Transl.) (DJ, MYA020)

(5-205) burdaj-di gurrany **birl** yani-**ma**,
wind-ERG/INSTR NEG blow IRR:3sg:3sg-HIT
'(put a wire on top) so the wind can't blow it off' (making a bough shade) (IP, F03928)

Note, however, that impact made with the whole body of an animate (or another moveable entity like a car), e.g. 'hitting against something with one's body', is either described with the intransitive verb *-irdba* 'FALL' (if the effect on the 'hitter' is concentrated upon, see §5.2.3.1), or *-uga* 'TAKE' in a secondary sense (§5.3.4.4).

The semantic characterisation proposed here for *-ma* in its basic sense is given in S5-13(i). 'Impact', in this characterisation, entails contact, i.e. it should be understood as forceful contact. The component of affectedness here and in other semantic characterisations indicates that the second central participant is not just the location of the contact, but (at least potentially) undergoes a change resulting from the contact.

S5-13(i) *-ma* 'HIT' x makes an impact on y
x affects y

One might object that the characterisation given in S5-13(i) is too broad, and that *-ma* rather means something like 'x affects y by impact with a blunt or unfeatured instrument or body part'. This is because S5-13(i), as the reader will soon see, is also included in the characterisations given for three other verbs of contact/force, *-ina(ngga)* 'CHOP' (§5.4.3), *-inama* 'KICK/STEP' (§5.4.4), and *-ijja* 'POKE' (§5.4.5). That is, these verbs likewise encode 'affectedness by impact with a body part/instrument'. One therefore needs to explain how *-ma*

contrasts with these other verbs, as for example in (5-201) and (5-202), if its meaning is general enough to cover, in principle, all the cases where the other verbs are used.

A possible solution lies in the application of the pragmatic principle of "Quantity" (see §1.4.3), which requires the speaker to select the most specific verb available. In other words, this principle guarantees that *-ma* 'HIT' is only used if the kind of impact is not categorised by any of the other verbs, for example as made with an edge, a pointed end, or the foot.

According to this analysis, the non-specific impact verb *-ma* may receive a default interpretation of 'hit with the flat hand' if no other instrument is specified, especially where it is explicitly contrasted with one of the other verbs, as for example in (5-193) above. But it should also be possible to employ this verb when the specific means of impact is not known, or is irrelevant because only an overall description of the event is intended. This is indeed what we find: *-ma* can receive the general reading 'fight' where the means of fighting is left unspecified; this is in fact the default interpretation for the verb (as a simple verb) in its reflexive/reciprocal form.[119] For example, in a narrative about the fight between a buffalo and a crocodile, first the two animals' individual means of attack are described in (5-206a). In the subsequent clause (5-206b), the scene is given a more general description of reciprocal fighting, using the verb *-ma*, even though it had been explicitly stated that the crocodile was, in fact, biting.

(5-206a) bablu-ni gani-**ma**, yalumburrma-ni gani-**wa**
buffalo-ERG 3sg:3sg-HIT.PST saltwater.crocodile-ERG 3sg:3sg-BITE.PST

b) buny-**ma**-ja
3du-HIT-REFL.PST
'The buffalo trampled[120] it, and the crocodile bit it. The two fought each other.' (From a narrative about the fight between a buffalo and a crocodile, Cleverly 1968: 128)

For many Australian languages it has been reported that the same verb can not only have a reading of 'hit' and 'fight', but also of 'kill',[121] this is also true for

119 The reading of 'fight' is also often reinforced by the use of the coverb *wirrij* 'do violently, argue, fight'; see e.g. V/25-26 in the Appendix.

120 This is the translation suggested by Cleverly; in fact it is not clear what exactly the buffalo is doing in (5-206a). One might suspect that *-inama* 'KICK/STEP' would have been used to describe 'trampling', and *-ijja* 'POKE' would have been used to describe an attack with the horns.

121 This areal feature is even reflected in Kriol, where the verb *killim* can have a reading of 'hit' as well as 'kill' - a phenomenon that gives rise to confusion in court cases in particular.

Jaminjung *-ma*. Extending the argument that has just been made with regard to the reading 'fight', the 'kill' reading could also be regarded as a pragmatic inference, rather than as a separate sense of this verb. This analysis is consistent with the data. A search of the entire database revealed that in the description of 'killing' scenes, the actual death of the patient is specified, in the majority of cases, by one of the coverbs *digirrij* 'die', *ning* 'break in half; finish', or *burrb* 'finish'. These either form a complex verb with *-ma*, or appear in the immediate verbal context.[122] A typical example is (5-207), where the question whether a fish was actually killed is at stake. The first speaker uses *-ma* as a simple verb (5-207c), but modified with the clitic *nyanying* 'properly' which suggests the desired outcome of 'killing'; but the second speaker makes this explicit by supplying the coverb *ning* 'break in half; finish' (5-207d), which is then taken up also by the first speaker 5-207e).

(5-207a) DP: ngardgung ga-yu...
alive 3sg-BE.PRS

b. MJ: yag
fish

c. DP: yag.. gurrany nganthi-**ba**-nyi **nyanying** ..
fish NEG 2sg:3sg-FUT:HIT-IMPF properly

d. MJ: **ning**
break.off/finish

e. DP: **ning**
break.off/finish

'DP: it is alive – MJ: the fish – DP: the fish.. you didn't hit it properly – MJ: finishing it off – DP: finishing it off' (DP, MJ, JAM158)

In a number of cases, however, the verb *-ma* is indeed used as a simple verb with a clear reading of 'kill', even though this is not made explicit in the verbal context. This reading arises only in reference to lower animates, like goannas, snakes, birds, or insects. A typical example is (5-208); the speaker only mentions goanna hunting in passing here, and specifies nowhere in the verbal context that the goannas actually died.

(5-208) that much malajagu gani-**ma** ngarrgina-ni jarlig
that much goanna 3sg:3sg-HIT.PST 1sg:POSS-ERG child

'my son killed that many goannas' (MJ, E04258)

122 An example for a complex verb with the coverb *ning* 'break in half; finish' is III/34 in the Appendix; examples with the coverb *burrb* are IV/47 and V/18-19. An example where *-ma* appears as a simple verb, but where the verbal context makes it very clear that killing took place, can be found in IV/45, from the account of a massacre.

This textual distribution of *-ma* in a 'kill' reading supports the hypothesis that this reading arises by inference, i.e. by default interpretation of a verb with general meaning, rather than constituting a separate sense of the verb: In a hunter/gatherer culture, the prototypical outcome of a forceful impact by a higher animate on a lower animate is the death of the latter.

This analysis is further supported by the fact that *-ma* can be used to describe the prototypical successful outcome of hunting/gathering even where the referent is a plant, not an animal. For example, the procedure of digging for yam may be described in detail by referring to the subevents of digging (using an imperfective complex verb formed with *-yu* 'BE') as in (5-209a), of digging with a stick (categorised by *-ijja /–yaluga* 'POKE'), as in (5-209b), of taking out the root (categorised by *-mili/-angu* 'GET/HANDLE'), as in (5-209c), and so on. But as an overall event it can also be described with *-ma* 'HIT' as a simple verb, as in (5-209d). (However, gathering of plants is simply described with the verb *-mili/-angu* 'GET/HANDLE' when it does not involve digging.)

(5-209a) Nangari gayi **gurrija** ga-**gba**
<subsection> ALSO dig 3sg-BE.PST

'Nangari was also digging' (CP, E09356)

b) gani-**yaluga**-ny \ mangarra \
3sg:3sg-POKE-PST plant.food

'digging (for it) with a stick, (for) the plant' (yam) (VP, E09357-8)

c) mangarra **gub-gub** yirr-**angu**,
plant.food RDP-come.off 1pl.excl:3sg-GET/HANDLE.PST

'we took the plants out' (yam roots) (DR, E09395)

d) mangarra luba yirri-**ma**-m \
plant.food big 1pl.excl:3sg-HIT-PRS

'we "hit/kill" a lot of plants' (yam) (DR, E09412)

All these uses of *-ma* are easily accounted for by assuming that this verb has a general meaning along the lines of S5-13(i), rather than a meaning like 'hit with a blunt instrument' or, even more problematic, a partly negative representation like 'affect by impact in any way that is not with an edge, a pointed end, the teeth, or the foot'. An overextension of this verb to the domains of the other verbs of contact/force, which are semantically more specific, is largely prevented by the pragmatic Q principle that requires specificity when a more specific expression of the same formal class is available. The different readings of 'hit with the flat hand', 'hit with a stick or similar instrument', 'fight' or 'kill' then arise through default interpretation, following the principle of "Informativeness", or else by taking into account the verbal and nonverbal context.

Of course, *-ma* is also compatible with many coverbs that encode a specific type of impact (such as *burrg* 'hit, clap' in (5-224) below, or *barr* 'hit again, smash' in III/10), or the result of an impact (the coverbs of change of state *bag* 'break' in (5-203) and *ning* 'break off, finish' in (5-207)), provided these coverbs do not encode events that are categorised by one of the other verbs of contact/force.

5.4.2.2 Complete affectedness

Under the analysis proposed in §5.4.2.1, it is not too surprising that the semantically general verb *-ma*, rather than one of the more specific verbs of contact/force, has a secondary sense, which is only available with certain coverbs. Here the verb encodes complete affectedness, with no entailment of contact or force.

This is best illustrated with expressions of 'encircling'. For example, the coverb of path *walig* 'move around' may combine with any locomotion verb, but also with *-ma;* in the latter case, the complex verb means 'walk around s.th. completely', with the entity walked around encoded as Undergoer. Expressions like that in (5-210) contrast with complex verbs where *walig* 'move around' is combined with a verb of locomotion (see (6-43) in §6.5.3 for an example).

(5-210) **walig** gani-**ma**-m gurrurrij
around 3sg:3sg-HIT-PRS car
'he walks around the car' (DP, D05052)

Similarly, the positional coverb *dibird* 'be wound around' forms a complex verb with *-ma* which roughly means 'wind (s.th.) around s.th.'.[123] This could refer to an event of bandaging someone, but equally well to a vine winding around a tree, as in (5-211). This example shows very clearly that the verb does not give rise to a reading of impact or force, while (5-210) above shows that *-ma* also does not carry any connotation of negative affectedness.

(5-211) **dibird** gani-**ma**-m walambirr
be.wound.around 3sg:3sg-HIT-PRS creeper.species
'it winds around (a tree), the creeper' (MJ/DBit, KNX040)

The same coverb *dibird* 'be wound around' may also form transitive complex verbs with *-mili/ -angu* 'GET/HANDLE'. This verb, because of its meaning of 'affectedness and contact' (§5.4.1.1), emphasises the actual activity of winding something around something else, in direct contrast to *-ma,* which emphasises

123 German has more appropriate translation equivalents for these complex verbs which also capture the sense of completedness. These are transitive verbs derived with the preverb *um-* 'around, circum-', i.e. *umrunden* and *umwickeln/umwinden,* respectively.

the completedness of the event. This is illustrated in (5-212a) and 5-212b), which were uttered in immediate sequence, and describe the same, videotaped, scene where a little boy was playfully winding a dead goanna round his waist. (5-212a) refers to the winding around in progress, as an activity involving contact, while (5-212b) refers to the completed act of winding around.

(5-212a) **dibird** gana-**ngu**
be.wound.around 3sg:3sg-GET/HANDLE.PST

b) **dibird** ga-**ma**-ji malajagu-ni
be.wound.around 3sg-HIT-REFL goanna-ERG/INSTR
'he wound it around; he 'girths himself' with a goanna'

Just like the positional *dibird* 'be wound around', the coverb of manipulation *yurr* 'rub' combines with *-mili/ -angu* 'GET/HANDLE' to describe the activity of rubbing, as in (5-213a), but with *-ma* 'HIT' to yield the interpretation that something has been rubbed in completely, as e.g. dye on hair in (5-213b), with a specifiable result (blackness).

(5-213a) ngidbud-gi nga-**mili**-ja **yurr**,
night-LOC 1sg-GET/HANDLE-REFL.PST rub
'at night I rubbed myself' (with medicine) (DB, FRA013)

b) **yurr** nga-**ma**-ji wirra mangurrb-bari
rub 1sg-HIT-REFL hair dark-QUAL
'I dye (lit. 'rub') my hair black' (VP, TIM182)

Similarly, some coverbs of continuous activity like *gambaja* 'laugh', or *garrwaja* 'swear', which normally appear in an intransitive construction with the verb *-yu* 'BE', can form transitive complex verbs with *-ma,* in the reading of 'laugh at' and 'swear at', respectively (see (6-27) in §6.3 for an example).

Thus, the coverbs that combine with *-ma* in its secondary sense belong to various classes, and usually may combine with other verbs as well. The resulting complex verbs are of a somewhat more idiomatic nature, in the sense that the coverbs here are only attested with *-ma* 'HIT', and therefore no systematic contrast with other verbs can be established. They include expressions for 'promising someone a wife' (see §6.15.1), for 'recognising' or 'not recognising' (see §6.11), and for 'caring';[124] the last type is illustrated in (5-214). Although expressions like these are harder to motivate, they are not inconsistent with the very general secondary sense 'completely affect s.o./s.th.' proposed for this verb.

124 In fact *wuru* 'care for' was also found once with *-mili* 'GET/HANDLE', which is in line with the 'interaction' reading of this verb (see §5.4.1.1 for an example), but the data are not sufficient to establish a semantic contrast.

(5-214) **wuru** ba-wurru-**ma** ... gamaliwang
care IMP-2sg:3pl-HIT foreigner
'look after the strangers' (Orig. Transl.: yubala look afta im)

There are also some cases where it is not clear whether *-ma* is employed because of a general sense of 'complete affectedness', or in an extension of its basic meaning of 'affect s.th. by impact'. For example, the event described in (5-215) – twisting fibres into a rope by rolling them on the thighs – does not strictly speaking fall under the basic meaning of *-ma,* in that it does not involve impact. However, it does involve actual physical contact between the agent and another entity, and repeated rapid movements, which links it to other events that can be clearly categorised as instances of *-ma* in its basic meaning, such as 'clapping' or 'sweeping'.

(5-215) **wiyung** burra-**ma**-nyi::: meikim laika rope ...
twist.together 3pl:3sg-HIT-IMPF make:TR like.a rope
minyga.. munungu
what's.it.called string
'they twisted it (by rolling it on their thighs) to make it like a rope ... a string' (DP, KNX095)

Another problematic case concerns the use of *-ma* 'HIT' with abstract forces, such as *mirdi* 'sleepiness' in (5-216) or *garrij* '(the) cold' (see (4-34) in §4.2.2.1 for an example), construed as Effectors. Here one could speak either of a metaphorical extension of *-ma* in its basic sense (i.e. metaphorical impact), or regard this also as an instance of *-ma* in its secondary sense of 'completely affect'. In the latter case, this sense would not be restricted to occurrence in complex verbs, but could also be found in collocations of *-ma* with certain nominals.

(5-216) mirdi-ni **gan-ma-m**
sleep-ERG 3sg:1sg-HIT-PRS
'I feel sleepy' (lit. 'sleep hits me') (DB, fieldnotes 1999)

Even allowing for some unclear or idiomatic cases, such as the ones just discussed, it is possible to state that *-ma* 'HIT' has – only in complex verbs – a productive secondary sense along the lines of S5-13(ii). The nature of the coverb is left unspecified, since – as I have demonstrated throughout this section – coverbs from various classes can combine with *-ma* in this sense.

S5-13(ii) *-ma* 'HIT' __ Coverb x completely affects y

Again, the pragmatic Q principle is necessary to explain the rather restrictive application of *-ma* in this sense, since obviously, *-ma* is not used to encode just

any event of complete affectedness. One could argue that eating something up, spearing someone to death, or placing something in a different location certainly also counts as 'completely affecting something'. But even in the rather small set of Jaminjung verbs, there are more specific verbs that encode these events (but do not necessarily entail complete affectedness): *-minda* 'EAT', *-ijja* 'POKE', and *-arra* 'PUT', respectively. Therefore, following the pragmatic maxim "be informative", *-ma* 'HIT' is only used in those residual cases where no other verb applies.

A somewhat problematic case in this respect are some expressions of 'burning'. Even though a more specific transitive verb, *-irriga* 'COOK', exists, some coverbs of cooking and burning form complex verbs not only with this verb, but also with *-ma* 'HIT', e.g. *bud* 'cook on coals' in (5-217), *wawu* 'warm s.th. over the fire', or *bum* 'smoke s.th.'.

(5-217) Nawurla-ni **bud** gani-**ma** ngayiny
<subsection>-ERG cook.on.coals 3sg:3sg-HIT.PST meat/animal
'Nawurla cooked the meat on the coals' (turtle) (DB, TIM045)

In §5.5.2, I will suggest that the use of *-ma* instead of *-irriga* 'COOK' highlights the specific manner of cooking, as encoded by the coverb. Still, this undermines the general validity of the Q principle, since the requirement that the most specific verb should be chosen is relaxed in favour of a more general applicability of the semantically more general verbs. This relaxation would be a condition for the grammaticalisation of this verb into a general transitive verbaliser or completive marker which is indeed attested for corresponding verbs in other languages of the area.[125] This issue is taken up again in §5.10 and §7.1.

5.4.2.3 Emerging

In combination with a semantically closely defined class of coverbs of 'emerging' (with *bul* 'emerge' as the most frequent member), *-ma* 'HIT' takes on a further secondary sense. This should be regarded as a distinct subsense because the resulting complex verbs strictly behave like intransitive verbs: they only take one nominal argument which is in the absolutive, and which represents the emerging figure, e.g. the crocodile in (5-218). Although the verb itself retains its transitive pronominal prefixes, the Undergoer prefix is always in third person singular form, and does not represent a semantic participant (see also §4.2.2.1.3).

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125 E.g. Nyangumarta *pi-* (Geytenbeek 1992), and to some extent the Ungarinyin verb *-wu,* restricted to complex verbs, which is given a general semantic characterisation of 'action of agent on patient' by Rumsey (1982a: 118); both correspond to 'hit' verbs etymologically. This grammaticalisation path has also been reported for verbs of 'hitting' in languages outside Australia, e.g. Zulu (Heine et al.: 1993: 122).

(5-218) yalamburrma **bul** yani-**ma** burrag=burlu
saltwater.crocodile emerge IRR:3sg:3sg-HIT 3pl.OBL=COLL
'a crocodile might come up on them' (people in boats) (DP, E04235)

Example (5-219) shows that complex verbs of this type can describe any kind of 'emerging', not just sudden or violent boundary crossing.

(5-219) **bul** gani-**ma**-m jurrbulung,
emerge 3sg:3sg-HIT-PRS fresh
'fresh plants are sprouting' (VR, D11140)

This curious, restricted intransitive use of *-ma* can be motivated language-internally, in that *-ma* fills a lexical gap left by the other verbs: It has been pointed out repeatedly in §5.2 and §5.3 that Jaminjung maintains a strict distinction between locomotion (i.e. motion along a path), on the one hand, and change of location (or better, of locative relation), on the other hand. In this respect, the intransitive locomotion verbs *-ijga* 'GO' and *-ruma* 'COME' contrast with the verb of change of locative relation, *-irdba* 'FALL'. However, there is an asymmetry in the system in that *-irdba* 'FALL' can only apply to events of assuming a specific locative relation with respect to a location, and therefore does not cover events of leaving a location, or arriving at a non-specific location (see §5.2.3.1). For events of 'emerging', therefore, a different verb is needed to maintain the distinction between locomotion and change of location, and it is this lexical gap in the verb system that is filled by *-ma* 'HIT'. In order to express locomotion, the same coverbs may be combined with locomotion verbs (see also §6.5.5).

With coverbs that themselves have a semantic component of 'emerging', it is difficult to distinguish the semantic contribution of *-ma* from that of the coverb. However, one coverb of direction of gaze (see §6.1.3), *riyi* 'look out from somewhere', is also attested with *-ma* in a resulting interpretation of 'look out from somewhere (by raising one's head from concealment)'.

(5-220) **riyi** gani-**ma**-m gugu-ngunyi
look.out 3sg:3sg-HIT.PST water-ABL
'it looks out of the water' (e.g. crocodile) (DBit, E04051)

One can therefore assume that the verb *-ma* 'HIT' itself takes on a — monovalent — secondary sense of 'emerging'; this however is restricted to coverbs which themselves have a component of 'emerging' or, like *riyi* 'look out from somewhere', can at least be interpreted in this way. This sense is represented in S5-13(iii).

S5-13(iii) *-ma* 'HIT' __ $\text{Coverb}_{\text{Emerge}}$ x emerges

Possibly, a general verb of impact and complete affectedness like *-ma* 'HIT' lends itself to the expression of change of location, since change of location – as opposed to locomotion – necessarily has a component of completion. Alternatively, the 'emerge' sense may be linked to the component of 'punctuality' – contained in the component of 'impact' – in the basic sense of 'affect s.th. by impact'. This may be the reason why this verb is used in combination with coverbs of 'emerging', rather than one of the other high-frequency verbs (e.g. *-mili/ -angu* 'GET/HANDLE', for which it was also suggested in §5.4.1.5. above that it may fill a 'gap' in the verb system). It may also be the reason why comparable expressions are found in a number of other Northern Australian languages, and also in some European languages.[126] However, it remains to be determined whether these can be motivated by similar contrasts within the verb system, on the one hand, and are based on a similar semantic extension of 'hit' to 'complete affectedness', on the other hand, or whether a different explanation can be found for this semantic link.

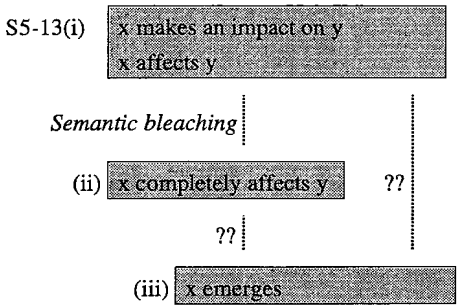
5.4.2.4 *-ma* 'HIT': Summary

The three different senses established for *-ma* 'HIT' in this section are summarised in Fig. 5-13. The postulation of a general basic sense of 'affecting s.th. by impact with a body part/instrument' was justified in §5.3.2.1. It was argued that the readings of 'hitting with the flat hand/a blunt instrument', 'fight' and 'kill', rather than constituting separate senses of *-ma*, can be derived from the basic sense by following both the pragmatic Q principle and the I principle.

Two secondary senses are only available for *-ma* as part of complex verbs. The secondary sense of 'complete affectedness' is derived from the basic sense by semantic bleaching, since only the component of 'affectedness' is retained. As indicated in §5.4.2.3, the nature of the link to the secondary sense of 'emerging' is left unspecified. For Jaminjung, the use of this verb with coverbs of 'emerging' can also be motivated as filling a semantic gap in the expression of change of location.

126 For example, the coverbs translating as 'emerge, arrive, rise (of sun)' and 'emerge from water' in Wardaman (Merlan 1994: 578, 285), the terms for 'flower' in Mayali (Evans to appear: Ch. 8.2), for 'sunrise' in Wagiman (Stephen Wilson p.c.), and for 'rise up to the surface of the water' in Gooniyandi (McGregor 1990: 566) all combine with a verb with a basic meaning of 'hit'. A semantic extension of 'hitting' to 'emerging' also appears to be not completely unnatural cross-linguistically; even in a language as far removed from the Northern Australian linguistic area as German, the verb *ausschlagen* (lit. 'hit out') can be used to refer to the coming into leaf of trees (cf. also Viberg 1999: 100 for a similar expression in Swedish).

Fig. 5-13. *Lexical network for* -ma *'HIT'*



5.4.3 *-ina(ngga)* 'CHOP'

The verb *-ina(ngga)* is much less frequent than *-ma* 'HIT' (its frequency is 1.2%), and semantically more specific, in that it encodes impact made with the edge of an instrument or body part. It is used in this meaning either as a simple verb, as in (5-221), or – more frequently – with semantically compatible coverbs of change of state, or impact change of state, like *ning* 'break off, finish' in (5-222), or *barr* 'smash' in (5-223) below.

(5-221) ...wajgany=biji yirr-**ina**-m, yirri-mindi-ya
sugarbag=ONLY 1pl.excl:3sg-CHOP-PRS 1pl.excl:3sg-EAT-PRS

'(we don't eat that tree), we only chop (it with an axe to get) sugarbag, (and) we eat it' (DB, PLN019)

(5-222) **ning** yanth-**ina** lidburrg-ni \
break.off IRR:2sg:3sg-CHOP axe-ERG/INSTR

'you might kill it with an axe' (echidna) (IP, E08180)

The instruments and body parts that qualify as 'edged' in terms of this verb category include stones (which were of course the traditional material for blades), as in (5-223), but also the knuckles of a closed fist (see (5-224a) below). As with the other verbs of contact/force, the instrument may be overtly specified or left implicit.

(5-223) **barr** gana-m=ngarndi wagurra-ni,
smash 3sg:3sg:CHOP-PRS=SFOC2 rock-ERG/INSTR

gota jangayi \
with.a 'shanghai'

'he hits them with a stone, with the sling shot' (birds) (IP, F01020)

Still, the events categorised by the verb *-ina(ngga)* do not form a completely clearcut category. In particular, the semantically more general verb *-ma* 'HIT', in its basic sense (§5.4.2.1), was in many cases spontaneously used or accepted by speakers in descriptions of the same or a similar real-world event. The only case where the use of the two verbs always leads to a clear difference in interpretation is where the instrument is the hand/lower arm (*jurruny*); here *-ina(ngga)* 'CHOP' is interpreted as 'hit with the fist', while *-ma* 'HIT' is interpreted as 'hit with the flat hand' (see also example (5-201) in §5.4.2.1).

(5-224a) **burrg-burrg**.. gana-m gurlban \ jurruny-ni \
RDP-clap 3sg:3sg:CHOP-PRS ground lower.arm-ERG/INSTR

'she beats the ground with her fist' (in a tantrum) (DP, F01373)

b) **burrg** ba-**ma**-ji miri
clap IMP-HIT-REFL upper.leg

'clap on your thighs' (ER, CHE404)

On the other hand, in the description of cutting or chopping with blades, or hitting with stones, *-ma* 'HIT' was frequently substituted for *-ina(ngga)* 'CHOP'. Compare, for example, (5-225) and (5-226) below with (5-222) and (5-223) above.

(5-225) diny ga-rdba-ny, **gad** burru-**mangu** lidburrg-ni
lie.down 3sg-FALL-PST cut 3pl:3sg-HIT.PST axe-ERG/INSTR

'it fell down, they cut it with an axe' (a tree) (ER, CHE213)

(5-226) jalig-di **digirrij** gani-**mangu** jurlag wagurra-ni
child-ERG dead 3sg:3sg-HIT.PST bird stone-ERG/INSTR

'the child killed the bird with a stone' (using a sling shot) (DR, TIM143)

Similarly, (5-227a) and (5-227b) were suggested by different speakers in the context of providing text for a picture book with turtle cooking photos, and the speakers explicitly claimed that the two verbs were equivalent.

(5-227a) Namirra-ni mud **gana** biri-wu
<subsection>-ERG make.hole 3sg:3sg-CHOP.PST guts-DAT

b) Namirra-ni mud gani-**ma** biri-wu
<subsection>-ERG make.hole 3sg:3sg-HIT.PST guts-DAT

'Namirra bust it open (with a stone) for (= to get out) the guts' (turtle shell) (VP & DB, TIM042)

A similar intra-speaker variation is found with body parts like the head or even the hips, which, somewhat surprisingly, also count as marginal instances of

edged instruments. For example, in commenting on the same video-taped scene where someone hits against a wall with his hip, both *-ina(ngga)* 'CHOP' and *-ma* 'HIT' were used, in immediate sequence, by different speakers.

(5-228) jarnda-ni gani-**ma**-m=biyang
hip-ERG/INSTR 3sg:3sg-HIT-PRS=NOW
'he hits it with his hip' (DB, F02097)

b) jarnda-ni **gana**
hip-ERG/INSTR 3sg:3sg:CHOP.PST
'he hit it with his hip' (Change of State video) (DP, F02098)

On the other hand, there is also evidence for the productivity of categorisation, by the verb *-ina(ngga)*, of clear cases of impact by edged instruments, as illustrated in (5-229). The agent/instrument here is a swing in motion.

(5-229) en thanthu-ni swing,
and DEM-ERG swing
mama ngarrgina ngagaj **bag**[127] **gana** gaburrgad!
MoBr 1sg:POSS back break 3sg:3sg:CHOP.PST yesterday
'and that swing, it "broke" my (classificatory) uncle's back yesterday' (IP, E09223)

Etymological evidence, in this case, also supports an analysis according to which the notion of 'edge' is central to the verb's meaning, in the way captured in S5-14. Jingulu, one of the Barkly languages which are very distantly related to Jaminjungan, has a cognate *nangk-* 'chop with an axe' (Pensalfini 1996).

S5-14 *-ina(ngga)* 'CHOP'
x makes an impact on y with the edge of a body part or instrument
x affects y

Note that a more specific verb, *-wa* 'BITE', is used to describe impact made with the teeth, which might otherwise be subsumed under 'edged body parts'. This case does not have to be explicitly excluded in the semantic characterisation of *-ina(ngga)*, since again we can rely on the pragmatic Q principle that requires the more specific verb to be chosen if applicable.

On the other hand, as shown by examples (5-217) to (5-219) above, we can observe here a tendency for a semantically more specific, infrequent verb to be replaced by the more general, highly frequent verb *-ma* 'HIT'. Obviously, this

[127] The coverb *bag* here has to be understood as 'hurt'; the back was not literally broken. The referent of *mama* '(classificatory) mother's brother' was a child.

tendency undermines the Q principle, which has been invoked several times so far to explain restrictions in the applicability of semantically general verbs. The preference of *-ma* 'HIT' over *-ina(ngga)* could be reinforced by the fact that the boundaries of the category 'edged instrument' may not be very clearcut to start with. Eventually, this could even lead to the loss of the verb *-ina(ngga)* 'CHOP'; this issue will be taken up again in §5.10.

Only in a couple of complex verbs does *-ina(ngga)* receive a non-literal reading; these have to be regarded as idiomatic expressions. The first involves the positional coverb *jubard* 'be shut (in)', which usually forms transitive complex verbs in a causative reading with either *-arra* 'PUT' (§5.2.4.1) or *-ma* 'HIT'. *Jubard* was consistently combined with *-ina(ngga)* to describe the blockage of a waterway by a dam. This obviously does not literally involve impact; however, a dam can be construed as an edged instrument (cf. English *cut off a stream*).

(5-230) manamba barraj **jubard** burr-**ina**
upstream further shut 3pl:3sg-CHOP.PST
'further upstream they blocked it off' (the waterway) (DP, E04255)

The complex verb formed with *birdij* 'find' and *-ina(ngga)*, on the other hand, describes an event that involves neither an edged instrument nor physical contact. This coverb more frequently combines with *-arra* 'PUT' (see §5.2.4.5), without a clear semantic difference, although *-ina(ngga)* is often used to convey the notion of 'finding after pursuit or search', as in III/31 in the Appendix.

5.4.4 *-inama* 'KICK/STEP'

The least frequent of the contact/force verbs (with 0.5% text frequency), *-inama* 'KICK/ STEP', basically encodes impact made with the foot, which can follow a horizontal trajectory (the 'kick' reading), or a vertical trajectory (the 'step on' reading; cf. also the semantic extension of German *treten* 'kick/step'). As a simple verb, the reading is always 'kick' in the available data, as in (5-231); however, I have not been able to explicitly exclude the 'step' reading for the simple verb.

(5-231) ganiny-**nginama**, wirlga-ni \
3sg:2sg-KICK/STEP.IMPF foot-ERG/INSTR
ngunggina-ni garlaj, ngih?
2sg:POSS-ERG younger.sibling TAG
'he used to kick you, with the foot, your younger brother, didn't he?' (DP, E17112)

The 'instrument', i.e. the foot, is very often explicitly expressed, as in (5-231) and (5-232), even though it is presumably semantically redundant (but see

below). In (5-232), the instrument is even encoded in three places: explicitly as a body part nominal, by the verb *-inama* 'KICK/STEP', and by the Kriol loan *kikim* 'kick' functioning as coverb.

(5-232) en.. burr-**inama**-ji **wirlga**-ni barrajung **kikim** \
and 3pl-KICK/STEP-REFL.PRS foot-ERG/INSTR further kick:TR

'and furthermore they kick each other with the foot' (children) (IP, E09285-6)

The reading 'step on' is explicitly conveyed by the coverb *bad* 'cover s.th./step on', which is very frequently found with *-inama*.

(5-233) gurrany **bad** yanth-**inama**, lurr yaniny-gijja
NEG step.on IRR:2sg:3sg-KICK/STEP pierce IRR:3sg:2sg-POKE

'don´t step on it, it might poke you' (nail) (IP, F01115)

The combination of a coverb of ballistic motion, e.g. *bilili* 'slip' in (5-234), with *-inama* also leads to the inference that the motion was caused by stepping on something. This combination is exceptional because usually a monovalent coverb in a resultative reading shares its argument with the Undergoer, not the Actor of a verb of contact/force (see §4.3.2.2).

(5-234) mulurru!, **bilili** nga-**nama**-ny wungurd
old.woman slip 1sg:3sg-KICK/STEP-PST mud

'old lady!, I slipped (by stepping) on the mud!' (JM, CHE098)

So far, the meaning of *-inama* can be represented straightforwardly as in S5-15.

S5-15 *-inama* 'KICK/STEP'

x makes an impact on y with the foot
x affects y

However, this verb shows a curious extension to impact made following a downward trajectory. Thus, *-inama* can describe the impact made with the buttocks by sitting down on something, as in (5-235), or impact made with the head by falling on something head down, as in (5-236). (Recall that both *-ina(ngga)* 'CHOP' and *-ma* 'HIT' may be used for impact made with the same body parts, but following a different trajectory (see §5.4.3)).

(5-235) waga nga-w-irdba nu, nga-w-**inama**-nyi
sit 1sg-FUT-FALL.IMPF 3sg.OBL 1sg:3sg-FUT-KICK/STEP-IMPF

'I was going to sit down on it (in order to break it)' (DP, MJ, CHE424)

(5-236) **barr** g**anama**-ny
smash 3sg:3sg:KICK/STEP-PST

'he hit against the ground head down' (dog falling out of a window with a jar on its head, in Frog Story) (DB, E01228)

Example (5-237) shows that this use of *-inama* is not restricted to body parts; here, the scene described is one of a boy falling over with a bicycle, which lands on his leg. The coverb combining with *-inama* here is a positional, *nud* 'be on something as a weight'.

(5-237) bag ga-rdba-ny miri \
break 3sg-FALL-PST upper.leg

nud **ganama-ny** baijinggel \
be.as.weight 3sg:3sg-KICK/STEP-PST bicycle

'he broke (i.e. hurt) his upper leg; a bicycle landed on it with its weight' (PW/DB, G08-01)

The most likely explanation for this semantic extension is a schematic resemblance of these events with stepping on something: both involve an entity moving on a vertical trajectory. Since *-inama* in its basic sense is neutral as to the orientation of the trajectory of the foot (i.e. can have the interpretation 'kick' as well as 'step'), this semantic extension, which is treated as a subsense here, is based on the pragmatically enriched interpretation of 'step' by semantic bleaching, i.e. loosening the restriction on the instrument. This type of semantic extension is reminiscent of the case of English *climb* discussed by Taylor (1989: 106ff.), following Fillmore (1982). On the basis of a prototypical schema of 'ascending by clambering', either the manner (corresponding to the instrument encoded in the Jaminjung verb) or the trajectory, or both may constitute the criterial semantic component of the verb. The corresponding analysis for *-inama* is represented in Fig. 5-14, and again graphically in Fig. 5-15.

Fig. 5-14. *Semantic extension of* -inama *'KICK/STEP' (I)*

S5-15(i) *-inama* 'KICK/STEP'

x makes an impact on y with the foot
x affects y

Pragmatic enrichment

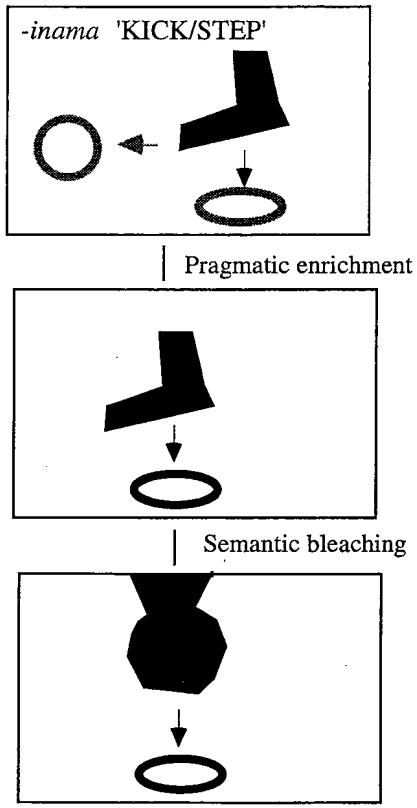
x makes an impact on y with the foot, **moving on a downward trajectory**
x affects y

Semantic bleaching

S5-15(ii) *-inama* 'KICK/STEP'

x makes an impact on y, **moving on a downward trajectory**
x affects y

Fig. 5-15. *Semantic extension of* -inama *'KICK/STEP' (II)*



5.4.5 *-ijja / -yaluga*[128] 'POKE'

Like *-ina(ngga)* 'CHOP' and *-inama* 'KICK/STEP', *-ijja* 'POKE' is semantically quite specific with respect to the shape of an instrument that is involved in contact by impact. In the case of *-ijja*, the contact is made with the (relatively) pointed end of an elongated object. This verb is therefore typically used to categorise events of spearing, stabbing or piercing with appropriate instruments

128 The form *-ijja* is Jaminjung, *-yaluga* is Ngaliwurru; the former will be used as citation form.

(5-238), or poking with a pointed body part such as a finger, a beak, or the nose of an echidna (5-239).[129]

(5-238) naib-di yugung gan-arrga durd ...
knife-ERG/INSTR run 3sg:3sg-APPROACH.PST hold.one

lalarr gan-**ijja**-ny
tear.open 3sg:3sg-POKE-PST

'he ran up to her with a knife and grabbed her, then he stabbed her' (IP, D31104)

(5-239) mhm, jurnku-bina ga-ngga \
anthill-ALL 3sg-GO.PRS

gan-**ijja**-m=biya juwiya-ni=ngarndi,
3sg:3sg-POKE-PRS=NOW nose-ERG/INSTR=SFOC2

'mhm, it goes to the anthill, and pokes it with its nose' (echidna) (IP, F02003-4)

In the appropriate context, e.g. where the context evokes a yam-digging script, the same verb can be interpreted as 'digging with a stick'. Note that *mangarra* 'plant food' in (5-240) is construed as Undergoer of *-ijja* by metonymic extension, since it is the ground, not the yam, that is affected by the use of the stick (on the contrary, a lot of care is taken not to hit the yam root with the stick and thereby damage it).

(5-240) gagawurli-wu \ yirr-ijga-ny \ manamba \
long.yam-DAT 1pl.excl-GO-PST upstream

yirri-**yaluga**::-ny, mangarra luba-luba \
1pl.excl:3sg-POKE-PST plant.food RDP-big

'we went for long yam, upstream, and dug up a lot of food' (VP, E09325-6)

These examples do not exhaust the range of uses of this verb. Even as a simple verb, *-ijja* may also apply to weaving of baskets or bags, as in (5-241), to stringing beads, and, in present day use, also to sewing (5-242) and to writing (5-243).

(5-241) ngayug gurrany jurdug yang-**ijja** \
1sg NEG straight IRR:1sg:3sg-POKE

'I won't weave it the right way' (DP, RIV017)

129 Interestingly, for the sting of mosquitos and other insects, the verb *-wa* 'BITE' is used, not *-ijja*; see §5.4.6 for details.

(5-242) **marrg** nga-**yijja**-ny, **dabelim** nga-**yijja**-ny
tight 1sg:3sg-POKE-PST double:TR 1sg:3sg-POKE-PST

'I sewed it tight' (dress) (JM, NUN037)

(5-243) larriny gan-**ijja**-m, envelope-gi gan-arra-m=ngarndi
paperbark 3sg:3sg-POKE-PRS envelope-LOC 3sg:3sg-PUT-PRS=SFOC2

'she writes a letter, and puts it in an envelope now!' (IP, E08193)

Today, the meaning of *-ijja* is also metaphorically extended to 'shooting with a gun/bullet' at least by some speakers, while others use the semantically more general verb *-ma* 'HIT'.[130] It may also extend to shooting with a stone (as with a sling shot used by children). For example, in (5-244) below, the 'appropriate' verb for hitting with a stone, *-ina(ngga)* 'CHOP', is used to describe the actual impact, while *-ijja* 'POKE' is used to describe the overall shooting event.

(5-244) gan-**ijja**-m=biya julag \ ^barr: **gana**-m \
3sg:3sg-POKE-PRS=NOW bird smash 3sg:3sg:CHOP-PRS

'he shoots birds then, he hits them' (IP, F01014)

Just like *-ma* 'HIT', *-ijja* 'POKE' can also receive the interpretation 'kill' (in this case: 'by means of a pointed instrument/gun') in the appropriate context, even where the end state of death is not made explicit. For example, in the context of hunting game to kill, cook, and eat it, the use of *-ijja* as a simple verb implies killing by means of a spear, in a way comparable to English *shoot* or *spear*, unless this implicature is explicitly cancelled.

(5-245) ga-yinji=biya \ yangarra-ngulung \
3sg-GO.IMPF=NOW kangaroo-PURP

gani-**yaluga**-na,
3sg:3sg-POKE-IMPF

buru gan-anjama, murl-mayan-ku \
return 3sg:3sg-BRING.IMPF roast-CONT-DAT

'He used to go then, for (hunting) kangaroo. He used to spear one, and bring it back, for roasting in a ground oven' (VP/NG, E09720-4)

All uses of *-ijja* as part of complex verbs fall within the semantic range of its uses as a simple verb, in that the event is categorised as impact made with the pointed end of a body part or instrument. Some examples for the use of *-ijja* in complex verbs were already given. Like the other verbs of contact/force, it may combine with coverbs of change of state (like *bag* 'break'; see §6.7 for an

130 Examples of both verbs used by the same speaker in reference to shooting can be found in IV/43-47 in the Appendix.

example), with coverbs of impact and change of state (like *lalarr* 'tear open' in (5-238) above), and with some positional coverbs (like *marrg* in (5-242) above, and *thabba* 'stick out, of elongated object partly inside another object', illustrated in §6.1.1). The semantic characterisation in S5-16 captures the parallel behaviour of *-ijja* and the other verbs of contact/force.

S5-16 ***-ijja*** 'POKE'

x makes an impact on y with the pointed end of a body part or instrument
x affects y

The specific interpretations of *-ijja* discussed here can all be derived by pragmatic enrichment based on the I principle (see §1.4.2.3), through contextual specification of either the instrument in question (knife, spear, digging stick) or the general 'script' (hunting kangaroo, digging yam, basket weaving), or, of course, through specification of manner and/or result of the poking by means of a coverb. Despite its 'semantic versatility', *-ijja* is still one of the less frequent verbs, with 1.7% text frequency.

A note of caution is in order with respect to the semantic characterisation in S5-16. The notion of 'impact' is less crucial than the notion of 'contact with the pointed end of a body part/instrument', since, as I already pointed out, *-ijja* may be used in cases where the degree of impact is questionable, e.g. for 'weaving', 'stringing beads', or 'writing'. This weighting of semantic components may also explain the use of *-ijja* in reference to playing the didgeridoo, illustrated in (5-246), which is marginal in the sense that it was not accepted by all speakers.

(5-246) gulumbung gani-w-**ijja**
didgeridoo 3sg:3sg-FUT-POKE
'he is going to play the didgeridoo' (DP, fieldnotes 1999)

Here, it is still true that an elongated object makes contact with a surface with its pointed end, but there is no component of impact. Alternatively, the airstream could be seen as the 'elongated entity' which is caused to move through another entity.

5.4.6 *-wa* 'BITE'

The verb *-wa* can be quite straightforwardly glossed as 'bite', or more explicitly characterised as 'apply force with the teeth'. Its overall frequency is 1.4% in the text count. Most frequently, *-wa* is used as a simple verb, often in warning of animals that are likely to bite humans, such as dogs, snakes or crocodiles, as in (5-247), or of course in reporting such an event (see Text III in the Appendix for examples).

(5-247) barrajburru-ni yaniny-**ba**, gurrany yanj-ijga gugu-bina
crocodile-ERG IRR:3sg:2sg-BITE NEG IRR:2sg-GO water-ALL
'a saltwater crocodile might bite you, don't go into the water!' (DJ, MYA022)

In my data, this verb also occurs particularly frequently in the context of fishing, in reference to fish biting (or usually, not biting) a bait.

(5-249) gugu waga nga-yu, gurrany gani-**wirri**-m yaag,
water sit 1sg-BE.PRS NEG 3sg:3sg-BITE-PRS fish
majani garrij
maybe cold
'I'm sitting (at the) water, the fish don't bite, maybe it is (too) cold' (VR, JAM234)

As part of complex verbs, *-wa* may combine with the same sets of coverbs that are attested with the other verbs of contact/force. Both a coverb of change of state, *ning* 'break off', and a coverb of ballistic motion, *burrurrug* 'scatter', in combination with *-wa* 'BITE', are illustrated in (5-250).

(5-250) **ning** gani-**wa**, **burrurrug** gani-**wa**,
break.off 3sg:3sg-BITE-PST scatter 3sg:3sg-BITE-PST
'he bit it off, he bit it such that it scattered' (dog –> beehive, in Frog Story) (IP, F03142-3)

A handful of semantically specific coverbs of 'biting' (see §6.9.4) appear to be restricted to combining with *-wa;* one of these is *jang* 'chew' in (5-251). Another one, exemplified in §6.9.4, is *Jung* 'suck'; this is the main reason why 'mouth part' rather than 'teeth' is used in the semantic representation in S5-17 below.

(5-251) **jang** ba-**wa** nu ngayiny
chew IMP-BITE 3sg.OBL meat/animal
'chew the meat for him' (as for a small child) (JJ, D18023)

The meaning of *-wa* 'BITE' can be metonymically extended to cases that do not involve force applied with the teeth, but which describe the experience of a pain that is like a bite. In the first place, it is used to describe the sting of an insect or a scorpion. The text fragment in (5-252) is particularly illuminating, because in reference to a scorpion, the same speaker first uses *-ijja* 'POKE' – the verb 'really' appropriate for impact made with a pointed end – when she discusses the actual body part with which a scorpion inflicts pain (a sting on the tail), but then uses *-wa* 'BITE' when she focusses on the experience of someone 'bitten' (or rather, stung) by a scorpion.

(5-252) mulurung-ni=binji=wung \
buttocks-ERG/INSTR=ONLY=COTEMP

yawayi, **lurr** yaniny-**gijja** ni:l=marraj, o:: \
yes poke IRR:3sg:2sg-POKE needle=SEMBL <interjection>

jalig ngiyinthu=marraj im meikim jik, gitin la hojpidel
child PROX=SEMBL 3sg make:TR sick get.in LOC hospital

gani-**wa** ngiya jalig wuju,
3sg:3sg-BITE-PST PROX child small

'(...) just with its rear end, yes, it can sting you like a needle, oh! A child like this, it makes him sick, go to the hospital. He got bitten, this little child.' (IP, F03399-402)

The metonymic use of *-wa* can extend even further, for example to the experience of tight clothes; an example is given in (5-253). Another context in which *-wa* was used in this reading was to describe the effect of a fatty meal 'biting' the stomach, that is, causing stomach ache; see (4-19) in §4.2.1.3 for an example.

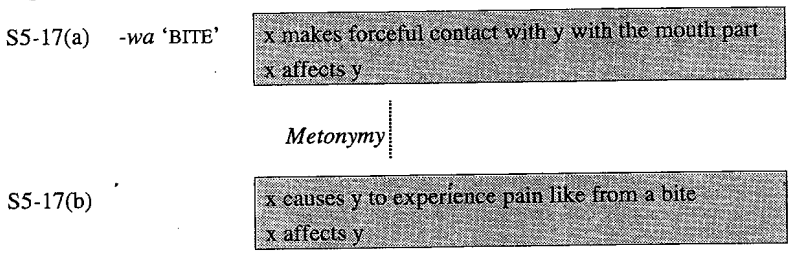
(5-253) gujugu babbang nga-ngu
big more 1sg:3sg-GET/HANDLE.PST

majani gan-**birri**-m
maybe 3sg:1sg-BITE-PRS

'I got a bigger one, maybe it (i.e. this one) 'bites' me' (a tight dress) (DBit, JAM246)

Both the basic sense of *-wa* and its metonymic extension, which is treated here as a subsense, are represented as S5-17 in Fig. 5-16.

Fig. 5-16. *Semantic extension of* -wa *'BITE'*



5.4.7 *-wardgiya* 'THROW'

The verb *-wardgiya* 'THROW', with only 1% text frequency, is one of the less frequent verbs, and it deviates in several respects from the other verbs of contact/force. Semantically, *-wardgiya* is the only verb in this set that does not encode affectedness of an entity through contact and/or impact with another entity. Rather, the type of affectedness encoded by *-wardgiya* is one of induced motion.

Unlike the other verbs in this set, *-wardgiya* also virtually never occurs as a simple verb, although it is recognised in isolation and given the translations 'throw' or 'drop' by speakers. This is related to two phenomena. First, the extension of *-wardgiya* intersects with that of another verb, *-yu(nggu)* 'SAY/DO', which 'bleeds' its range of applications. Second, *-wardgiya* is subject to a tendency which can also be observed for some other relatively specific and infrequent verbs.[131] This is the 'reinforcement' by a coverb which more or less overlaps with the verb semantically; in the case of *-wardgiya* 'THROW', the coverb is *diwu* 'fly; throw'.

The events categorised by *-wardgiya* 'THROW' include (voluntary) 'throwing, throwing over' (5-254) and (involuntary) 'dropping' (5-255). Here, an agentive participant releases contact with an entity, thereby causing it to move along a trajectory determined by gravity, and potentially by the direction of force applied by the agent.

(5-254) manamba **diwu** ba-**wardgiya**
upstream fly/throw IMP-THROW

'chuck it upstream!' (hook with bait) (DB, RIV045)

(5-255) jalig-di yana-ngu=wunju
child-ERG IRR:3sg:3sg-GET/HANDLE.PST=COND

majani **bag** yan-**ardgiya**
maybe break IRR:3sg:3sg-THROW

'if the child got it he might drop and break it' (cup on table) (VP, TIM078)

Examples (5-256) and (5-257) show that only induced motion, not release, is a necessary component of events categorised by *-wardgiya*. Thus, descriptions of (the wind) making waves (5-256), or of a person hitting a goanna against a tree by swinging it by its tail (5-257), also employ the verb *-wardgiya*, with additional specification by coverbs.

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[131] E.g. *-unga* 'LEAVE' (§5.3.6); *-yungga* 'TAKE.AWAY' (§5.7.2), *-manka* 'get angry' (§5.9.8); see further §5.10.

(5-256) **ngalba-ngalbag** gan-**ardgiya**-m gugu burdaj-di
RDP-make.waves 3sg:3sg-THROW-PRS water wind-ERG
'the wind is blowing up the water (into waves)' (MJ, KNX048)

(5-257) buliyag-ngunyi yirr gana-ngga-m
tail-ABL move.out 3sg:3sg-GET/HANDLE-PRS
barr gan-**ardgiya**-m langin-bina
hit.against 3sg:3sg-THROW-PRS tree-ALL
'he pulls it by the tail, and hits it against a tree' (goanna) (Orig. Transl. DR: (...) 'hitim to the tree') (DB, STO044-5)

Examples (5-254) to (5-257) also illustrate the range of coverbs found with *-wardgiya*. These can be roughly divided into three types. The first type comprises coverbs of (induced) change of state (see §6.7 and §6.9.1), like *bag* 'break' in (5-255) and *barr* 'smash, hit against' in (5-257). It is because of its combination with these coverbs that *-wardgiya* is in opposition with the other verbs of contact/force, and has been included in the same subgroup here.

The second type consists of some monovalent coverbs of internal motion (see §6.4.2) or ballistic motion (see §6.6), like *ngalbangalbag* 'make waves' in (5-256) above, *dididi* 'roll', or *lawu* 'spill' in (5-259) below, which with *-wardgiya* form complex verbs in a causative reading.

The third type consists of a small set of bivalent coverbs of 'pushing' and induced ballistic motion (see §6.13 and §6.14), with *diwu* 'fly/throw' (5-254) as the most frequent member. With these coverbs, *-wardgiya* is, in a way, semantically redundant. It is perhaps for this reason that members of this set also combine with the more general 'performance' verb *-yunggu* 'SAY/DO' (§5.6.1.4).

Both *-wardgiya* and *-yunggu* 'SAY/DO', in these types of complex verbs, may be used to describe the same real world events. For example, both verbs, in combination with *diwu* 'fly; throw', were used to describe throwing the hook of a fishing line into the water (compare (5-254) above and (5-263) below), and to describe the same scene – a deer throwing a boy and a dog down a cliff face – in the Frog Story picture book, in (5-258).

(5-258a) **diwu** ganuny-**bardgiya**-ny gugu-g\
fly/throw 3sg:3du-THROW-PST water-LOC
'it threw the two into the water' (Frog Story, Cliff Scene) (DBit, E07196)

b) **diwu**=ma ganuny-**ju**, wirib en jalig\
fly/throw=SUBORD 3sg:3du-SAY/DO.PST dog and child
'the one that threw the two down, the dog and the child' (Frog Story, Cliff Scene) (CP, E18285)

Similarly, both verbs were employed to describe 'spilling', in combination with a coverb of ballistic motion, *lawu* 'spill'.

(5-259a) **lawu** gan-**ardgiya**-m yinawula road-gi
spill 3sg:3sg-THROW-PRS DIST:DIR road-LOC
'it sprinkles it over there on the road' (water truck)

b) **lawu** gani-**yu** ngabulu janju-ni jalig-ni
spill 3sg:3sg-SAY/DO.PST milk DEM-ERG child-ERG
'the child spilled the milk' (DR, NGA053)

Some differences in the distribution of the two verbs, however, point to a semantic difference. The first is that *-yu(nggu)* 'SAY/DO' is clearly preferred in descriptions of aimed throwing. Thus, the goal-directed throwing of spears is, without exception, described with *-yu(nggu)* 'SAY/DO' in combination with *diwu* 'fly/throw', as in (5-260). Compare this with (5-261), a (fictitious) order to a child with a mock spear to throw it away, rather than throw it at someone.

(5-260) mayi-ni **diwu** gani-**yu** garna,
person-ERG fly/throw 3sg:3sg-SAY/DO.PST spear
gan-ijja-ny yangarra
3sg:3sg-POKE-PST kangaroo
'the man threw a spear, and speared the kangaroo' (MMik, MIK135)

(5-261) jimbilang=marlang **diwu** ba-**rdgiya**,
spear=GIVEN fly/throw IMP-THROW
'throw away the spear' (MW, F04244)

Another difference in the distribution of the two verbs is that only *-wardgiya,* but not *-yu(nggu)* 'SAY/DO', is found whenever a goal location (i.e. the end point of the induced motion) is specified, as in (5-258a) and (5-259a) above, and (5-262) below.[132] Moreover, only *-wardgiya* may combine with coverbs of (caused) change of state like *bag* 'break' and *barr* 'smash against' (see (5-255) and (5-257) above), and with positionals like *bayirr* 'be supported' in (5-262).

[132] There are two exceptions to this generalisation in the database, both were by younger (i.e. middle-aged) speakers; the possibility that *-yu(nggu)* is being reanalysed as a general verb of 'throwing' can therefore not be ruled out.

(5-262) **bayirr** nganth-**ardgiya**-ny biya langiny-bina na,
supported 2sg:3sg-THROW-PST NOW wood-ALL NOW
'you threw it over a branch now' (fishing line) (DB, F01301)

These coverbs, just like an overt locative noun phrase, also yield the entailment that the moving entity arrives at a location. For the positionals, this is self-evident. For the coverbs of change of state, this is because the change of state is understood to result from an impact, which could only take place if the moving entity hits another entity.

Finally, only, *-wardgiya,* but not *-yu(nggu)* 'SAY/DO', also occurs in expressions of induced motion without release, where consequently no end location is reached, as in (5-256) above and (5-263) below. The contrast between the verbs in this respect is clearly illustrated in (5-263), which describes both the phases of swinging a bait on fishing line (without releasing it), and the subsequent release. (Recall, however, that *-wardgiya* may also be used to describe the release, as shown in (5-254) above).

(5-263) **birdinyiny** gan-**ardgiya**-m,
rotate 3sg:3sg-THROW-PRS
en **diwu** gan-**unggu**-m
and fly/throw 3sg:3sg-SAY/DO-PRS
'she swings it round and round, and throws it then' (fishing line) (DP, CHE257)

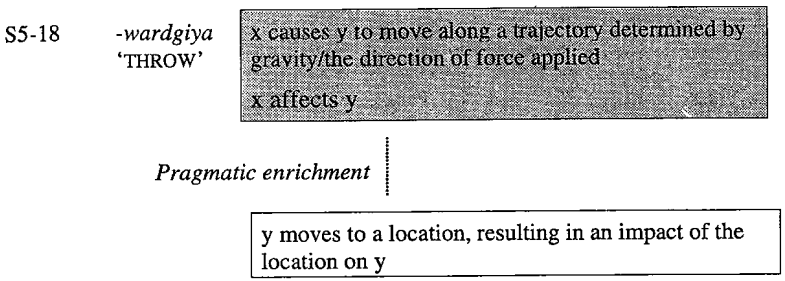
Taken together, these differences suggests that *-yu(nggu)* 'SAY/DO', in combination with coverbs of induced ballistic motion, can only describe the fact of release. This is consistent with the other functions of this verb, e.g. in combination with coverbs of internal motion and of sound emission, and with its general meaning of 'internally cause, and give immediate evidence of, an event' (see §5.6.2).

In contrast, *-wardgiya* 'THROW', as was already shown, does not entail release at all, but does encode caused motion, of a type where the agent does not directly control either the path or the end location of the patient. In this respect, it differs from both the verbs of accompanied locomotion, *-uga* 'TAKE' (§5.3.4) and *-anJama* 'BRING' (§5.3.5), and from *-arra* 'PUT', which, although it only entails caused change of locative relation, may also categorise events of caused motion. However, *-arra* 'PUT' entails that the agent controls the end location (or locative relation) of the patient, while for *-wardgiya* 'THROW', the agent only provides the initial impulse that leads to motion along a trajectory determined by gravity

and/or the direction of the initial force.[133] This is the characterisation proposed for this verb in S5-18 below.

Still, as was also shown above, *-wardgiya* is compatible with the specification of an end point of the trajectory. Only in this context does this verb enter into opposition with *-arra* 'PUT' (e.g. with positional coverbs like *bayirr* 'supported' in (5-262); compare this to (5-6) in §5.2.1). Most importantly, in this case, *-wardgiya* also enters into opposition with the other verbs of contact/force, since like these, it may combine with coverbs of (caused) change of state. The other verbs of contact/force all entail that an agent affects a patient by bringing it into contact with a third participant, the instrument (where the instrument may be a part of, or identical with, the agent). The component of contact, and therefore also the instrument participant, are absent from the semantics of *-wardgiya*, but can be added by one of the coverbs that contribute an entailment of impact (like *bag* 'break' or *barr* 'smash'). In this case, the end location of the moving entity is understood to be the instrument making the contact (as e.g. in (5-257) above). It is only in this pragmatically enriched reading that *-wardgiya* is in opposition to the verbs of contact/force. Fig. 5-17 represents this pragmatic enrichment of the semantics of *-wardgiya*, which is characterised in S5-18.

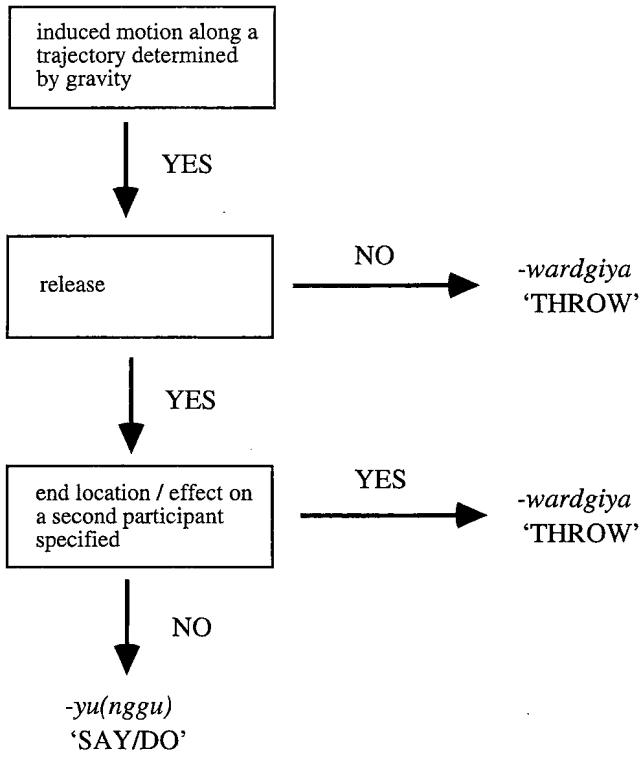
Fig. 5-17. *Semantics of* -wardgiya *'THROW'*



In Fig. 5-18, the contrast between *-wardgiya* and *-yu(nggu)* 'SAY/DO, discussed above, is illustrated in the form of a flow diagram incorporating the features of an event that trigger the choice of one verb over the other.

133 The contrast is less clear for events of 'long-distance' transfer, e.g. 'sending' (*dalag),* or metaphorical transfer, e.g. 'asking' (*yanggi),* which are categorised by *-arra* 'PUT' in Jaminjung/Ngaliwurru. Interestingly, in Ungarinyiny, these events are covered by a verb with a core meaning of 'throw', not the 'put' verb (Saunders 1997: 45ff.).

Fig. 5-18. *The contrast between* -wardgiya *'THROW'* and -yu(nggu) *'SAY/DO'*



5.4.8 Verbs of contact/force: Summary

The verbs of contact/force were shown to constitute a formally coherent class, in that they have the same argument structure and are in systematic opposition with certain coverbs, i.e. coverbs of change of state and, to some extent, coverbs of impact and change of state.

Considering only the basic senses of the verbs of contact/force, most of them are also in semantic opposition, in that they encode contact by impact and affectedness, but distinguish between the type and shape of instruments making the contact.

Only two of the verbs, *-mili/-angu* 'GET/HANDLE' and *-wa* 'BITE', do not have a component of impact, i.e. forceful contact following the motion of an instrument along a trajectory. Rather, in the case of *-mili/-angu* 'GET/HANDLE'

instrument along a trajectory. Rather, in the case of *-mili/-angu* 'GET/HANDLE' (§5.4.1.1), the patient is affected simply by **contact** with a movable (body) part or instrument (usually, but not necessarily with the hands). In the case of *-wa* 'BITE' (§5.4.6), the patient is affected by forceful contact with the agent's **teeth**, or, in a metonymic reading of the verb, by a pain comparable to a bite.

Most of the remaining verbs of contact/force distinguish impact made by different types of instruments, or more precisely, contact areas: an **edge**, including stones and the fist, for *-ina(ngga)* 'CHOP' (§5.4.3), the **foot** for *-inama* 'KICK/STEP' (§5.4.4), and a **pointed end** for *-ijja /-yaluga* 'POKE' (§5.4.5).

The verb *-ma* 'HIT' (§5.4.2) was argued to be an impact verb unspecified as to the type of contact area. It is therefore used in the case of unfeatured, blunt instruments like the flat hand or a stick, but can also receive, by pragmatic enrichment, the interpretations of 'fight' or 'kill' where the exact means of impact is left unspecified.

The direction of the **trajectory** leading to the contact seems to be of relevance for only one of these verbs, *-inama* 'KICK/STEP' (§5.4.4). Although the verb in its basic sense is neutral with respect to the direction of motion of the foot, i.e. between a reading of 'step' and of 'kick', the prototypical downward trajectory of the foot in 'stepping' motivates the use of this verb for impact made following downward motion of an entity.

Finally, *-wardgiya* 'THROW' only encodes induced motion, but receives a reading of 'affectedness by impact' in combination with coverbs of position or (caused) change of state, which presuppose that the motion reaches an end location. With a restricted class of coverbs of ballistic motion, *-wardgiya* 'THROW' is in opposition with *-yu(nggu)* 'SAY/DO', which lexicalises a different aspect of 'throwing', namely release rather than caused motion.

Two of the contact/force verbs, *-mili/-angu* 'GET/HANDLE' and *-ma* 'HIT' are polysemous (and, correspondingly, are also the most frequent verbs in this set). The verb *-mili/-angu* 'GET/HANDLE' has secondary senses of 'perception by the lower senses' (§5.4.1.2), 'non-physical interaction' (§5.4.1.3) and 'attempted or failed contact' (§5.4.1.4) (see §5.4.1.6 for an overview). The verb *-ma* 'HIT' has the additional senses of 'complete affectedness' (§5.4.2.2) and 'emerging' (§5.4.2.3) (see §5.4.2.4 for an overview).

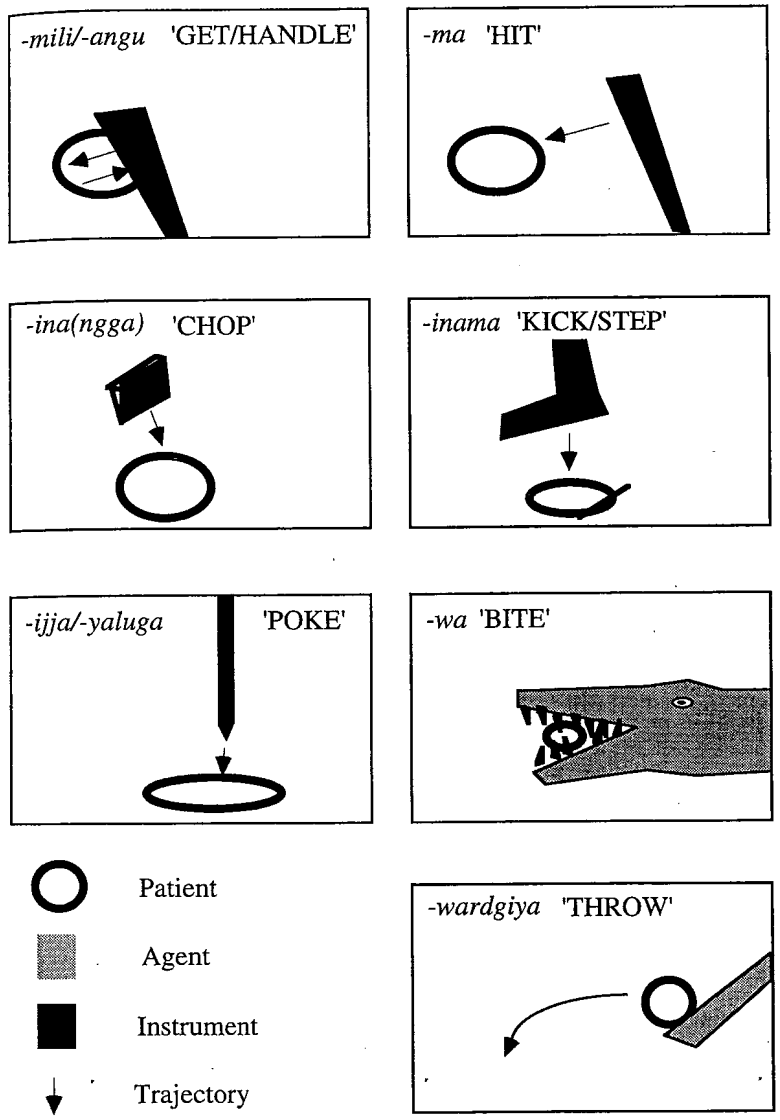
In Table 5-2, only the basic senses proposed for each verb of contact/force are summarised. The same distinctions are graphically illustrated in Fig. 5-19. As indicated in §1.4.2, no claim is made here that either type of representation is completely adequate in capturing the semantic components responsible for the range of uses of the verbs; rather, the propositional and the graphic representations are intended to complement each other.

Table 5-2. *Semantic characterisations of the verbs of contact/force*

Sense	Verb	Semantic Characterisation
S5-12(i)	*-mili / -angu* 'GET/HANDLE'	x is in physical contact with y with a movable (body) part or instrument x affects y
S5-13(i)	*-ma* 'HIT'	x makes an impact on y x affects y
S5-14	*-inangga* 'CHOP'	x makes an impact on y with the edge of a body part or instrument x affects y
S5-15(a)	*-inama* 'KICK/STEP'	x makes an impact on y with the foot x affects y
S5-16	*-ijja* 'POKE'	x makes an impact on y with the pointed end of a body part or instrument x affects y
S5-17(a)	*-wa* 'BITE'	x makes forceful contact with y with the mouth part x affects y
S5-18	*-wardgiya* 'THROW'	x causes y to move along a trajectory determined by gravity/the direction of force applied x affects y

A further comment on these semantic representations concerns the phrase 'body part/instrument' (which for some of the verbs is replaced by a specific body part). This may be treated like a third participant, e.g. be encoded as an Effector in an ergative-marked noun phrase. However, instrument/body part and agent may also coincide. If the entity making the contact is itself the ultimate discernible cause of the event, it is encoded as Actor, in line with the semantics of the Actor construction proposed in §4.2.2.1.1. Examples for agent/instruments are natural forces like water or wind (cf. (5-204) and (5-205) in §5.4.2.1), but also a stick or a screw that pokes someone who inadvertedly steps on it, as in (5-233) (§5.4.4). For practical reasons, the agentive participant is omitted from most of the graphic representations in Fig. 5-19 (except for *-wa* 'BITE' and *-wardgiya* 'THROW'), and only the body part/instrument is represented.

Fig. 5-19. *Graphic representation of the verbs of contact/force*



The verbs of contact/force are also in opposition with other transitive verbs; these are the verbs of cooking/burning, *-irna* 'BURN' and *-irriga* 'COOK', which encode affectedness by heat, and two verbs which encode affectedness in their extended, but not their primary, senses, *-uga* 'TAKE' (in its reading of 'affect by body weight'; see §5.3.4.4) and *-ngarna* 'GIVE' (in its reading of 'directed

action', §5.7.1.4). Moreover, the verbs of contact/force also enter into opposition on a functional, not a semantic level, with certain other verbs. For example, as shown in §5.4.1.2, *-mili/ -angu* 'GET/HANDLE' is often used as a functional antonym of *-arra* 'PUT'.

5.5 Verbs of heating/ burning

Jaminjung has both an intransitive verb of heating/burning, *-irna* 'BURN', and a transitive one, *-irriga* 'COOK'. Their glosses notwithstanding, the two verbs are semantically very similar in that they both encode any kind of affectedness by heat, not just 'cooking' or 'burning'. In this sense, they are also in opposition to the set of verbs of contact/force, which encode affectedness by different types of contact. The transitive verb *-irriga* 'COOK' (§5.5.2) differs from intransitive *-irna* 'BURN' (§5.5.1) in that it is used if there is a human Actor, or another ultimate cause of heat, like the sun. Both verbs have roughly the same frequency, 0.9% and 1.0%, respectively.

5.5.1 *-irna* 'BURN'

The intransitive verb *-irna* translates as both (intransitive) 'cook' and 'burn', but can be even more generally paraphrased as 'be affected by heat'. The – animate or inanimate – participant which is affected by heat is cross-referenced on the verb. Whether it is understood to be positively or negatively affected depends on the context. Thus, with an inanimate participant, the verb can translate as 'cook', with a desired outcome, as in (5-264).

(5-264) ga-w-**irna**=guji \\ juyug \
3sg-FUT-BURN=FIRST ripe/cooked

'let it cook first – (so that it is) cooked' (goanna) (VP, E11269)

It may also translate as 'burn', in the sense of an undesired effect of heat.

(5-265) **digirrij**[134] ga-**rna**-ya mangarra
die 3sg-BURN-PRS plant.food

'the bread is getting completely burnt' (DB, CHE042)

[134] The coverb *digirrij*, lit. 'die', is often used as intensifier, to convey a sense of severe negative affectedness, as in (5-265) and also (5-267); cf. Ameka (in prep.).

With an animate participant, *-irna* translates as 'get warmed' (see III/40 in the Appendix), 'get burnt' (5-266), and – just like corresponding verbs in many other Australian languages – also as 'suffer from thirst' (5-267).

(5-266) gurrany mard yanth-angu, guyug-burru,
NEG touch IRR:2sg:3sg-GET/HANDLE fire-PROPR

yanth-**irna**!
IRR:2sg-BURN

'don't touch it, it is hot like fire, you might get burnt!' (ER, MIX014)

(5-267) gugu-wu **digirrij** ga-**rna**-ya
water-DAT die 3sg-BURN-PRS

'(s)he is really thirsty for water' (DJ, MYA008)

As was shown in §4.2.1.1, *-irna* is the only intransitive verb that can appear in an ergative-absolutive case frame. Since the ergative case generally marks Effectors, not just agents, an ergative-marked noun phrase can represent a heat source, e.g. the sun or a fire, as, for example, in III/50 in the Appendix. The referent of the nominal *guyug* 'fire', though, can not only be construed as the 'heat source', but also as the 'entity affected by heat'. In this case, it is cross-referenced on the verb and optionally encoded as an absolutive noun phrase, as in (5-268). This is because *guyug* is non-specific as to an interpretation as 'firewood' or potential 'fire'.[135]

(5-268) guyug **burrb** ga-**rna**-ya
fire finish 3sg-BURN-PRS

'the firewood burns up', 'the fire stops burning' (there is not enough firewood) (ER, MIX001)

Coverbs that form complex verbs with *-irna* may encode a result of the 'heating', like *digirrij* 'die' in (5-265) and *burrb* 'finish' in (5-268) above. Thus, *-irna* is used quite productively with coverbs of change of state such as *bag* 'break', whenever this change of state is the result of heat (see (6-52c) in §6.7 for an example). The productivity of *-irna* with coverbs of change of state is illustrated in (5-269). Here the verb is spontaneously combined with the Kriol loan *juwurlab* 'swell up' to direct attention to the fact that a lump of tinned corned beef, which had been put on the fire, was rising out of its tin, threatening to fall into the fire.

[135] This is linked to a non-specificity with respect to a reading as 'actual' or 'potential', which is widespread in Australian languages for whole sets of nominals (cf. O'Grady 1960, Dixon 1980: 102f.).

(5-269) **juwurlab** ga-**rna**-ya ngayin
swell.up 3sg-BURN-PRS meat/animal
'the meat is rising up from the heat' (DR, CHE055)

Another example for the productivity of this verb with coverbs of change of state is III/50 in the Appendix. Here *-irna* is combined with the seemingly contradictory coverb *jiwuly* 'cool down'. The complex verb, in context, receives the interpretation of 'ease pain (by application of heat)'.

Since the entity consumed by, or feeding, the fire can fill the slot of the participant 'affected by heat', it is also possible to combine *-irna* with coverbs of heat and light emission (see §6.8.2), which describe not a result of the heating, but the heating process itself; an example is *dili* 'shine, be bright' in (5-270).

(5-270) **dili**=biyang ga-**rna**-ya \\ langiny
bright=NOW 3sg-BURN-PRS wood
'it burns bright now, the stick' (MW, E16082)

Other coverbs found with *-irna* are coverbs of manner of heating (see §6.8.1), like *dag* 'warm self' in III/50, and *bud* 'cook on coals' in (5-271).

(5-271) yawayi, **bud** ga-w-**irna** ngunggu mangarra
yes cook.on.coals 3sg-FUT-BURN 2sg.OBL plant.food
'yes, it will cook for you on the coals, the food (IP, E09298)

The semantic characterisation in S5-19 captures the fact that only affectedness by heat is encoded by *-irna*, and no specific outcome (e.g. a change of state, or consumption by fire) is entailed, although such a result can of course be specified by a coverb.

S5-19 ***-irna*** 'BURN' x is affected by heat

5.5.2 *-irriga* 'COOK'

The transitive verb of 'cooking/burning', *-irriga* 'COOK', is semantically parallel to its intransitive counterpart *-irna* 'BURN' in that it categorises any kind of affecting an entity by heat. In contrast to *-irna*, *-irriga* requires the presence of a participant which can be construed as the ultimate cause – i.e. not just the heat source – of a heating event, and therefore may be encoded as an Actor (cross-referenced on the verb), not just as an Effector (marked with ergative case) (see also §4.2.2.1.1). The Actor with *-irriga* is almost always human, that is, the typical use of *-irriga* is with an interpretation of 'cooking food', as in (5-272).

(5-272) gan-**irriga**=nu jalig-gu ngayin yangarra,
3sg:3sg-COOK.PST=3sg.OBL child-DAT meat kangaroo
Nalyirri-ni
<subsection>-ERG
'she cooked kangaroo meat for the child, Nalyirri did' (DR, NGA092)

An ultimate cause of heat like the sun (but not a fire) may also be encoded as Actor with this verb, as in (5-273).

(5-273) gulban.. wulngan-ni=ma gan-**irriga**-m gulban.
ground sun-ERG=SUBORD 3sg:1sg-COOK-PRS ground
'the ground – when the sun burns the ground' (DR, D27050)

Even with human actors, the use of *-irriga* is by no means restricted to events of 'cooking food'.[136] On the one hand, *-irriga* also covers burning of an animate with the intention of harming it.

(5-274) guyug-di burru-**rriga**=nu, jag-gu \
fire-ERG/INSTR 3pl:3sg-COOK.PST=3sg.OBL go.down-DAT
'they burnt it with fire for her, to (make it) come off' (a leech) (IP, F03441)

On the other hand, speakers employ this verb to describe the traditional healing method of covering an affected body part with hot ground (see II/20-23 in the Appendix), and the traditional way of covering babies with hot ground to make them strong and healthy.

The parallel between the two verbs *-irna* and *-irriga* is reflected in the semantic representation in S5-20; *-irriga* is distinguished from *-irna* only in having an additional participant.

S5-20 ***-irriga*** 'COOK' y affects x by means of heat

As part of complex verbs, unlike *-irna* 'BURN', *-irriga* is not attested with coverbs of heat and light emission, or coverbs of change of state (although possibly the latter is an accidental gap in the data). It is also not used in combination with the coverb *dalb* 'set fire'; *-arra* 'PUT' is used instead (see §5.2.4.5). However, *-irriga* is found with more or less the same set of coverbs of 'manner of heating' as *-irna* 'BURN'.

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136 A cognate coverb of continuous activity, *wirrigaja* 'cook', is restricted to cooking food (see also §2.4.2.1). It is used very frequently (as part of a complex verb) in place of the simple verb *-irriga* 'COOK'.

With a number of these coverbs, we find a curious alternation between *-irriga* and other transitive verbs: *-arra* 'PUT' with *murl* 'apply heat with hot ground or stones' (see §5.2.4.4), and *-ma* 'HIT' (in its sense of 'completely affect s.th.'; see §5.3.2.2) with most of the other coverbs, e.g. *bud* 'cook on coals or hot ashes' or *bum* 'apply smoke'. Speakers claim that these verbs are interchangeable with *-irriga* 'COOK', and indeed sometimes both *-irriga* and the alternative verb appear in exactly the same context. For example, the same real-world situation of 'smoking' a car with smouldering branches for ritual cleansing after a senior man's death was described, by two different speakers, once with *-irriga* 'COOK' and once with *-ma* 'HIT', in combination with the same coverb *bum* 'apply smoke' (see §6.8.1 for examples).

Another example is (5-275), from a procedural text describing the traditional method of preparing a kind of bread from ground waterlily seeds. Here both verbs are combined with the same coverb by the same speaker in immediate sequence.

(5-275) **bud** .. yirra-**rriga**-na=biyang,
cook.on.coals 1pl.excl:3sg-COOK-IMPF=NOW

yawayi, **bud** yirra-**ma**-nyi \
yes cook.on.coals 1pl.excl:3sg-HIT-IMPF

'we used to cook it on the coals then, yes, we used to do it on the coals' (EH, E17342-3)

Other examples in the data, however, suggest that there is a subtle contrast between the use of *-irriga* and the alternative verbs: It appears that *-irriga* 'COOK' is primarily employed if an overall event of cooking is presented within a sequence of other events not directly related to cooking. For example, the 'roasting in a ground oven' event described in (5-276) below is only incidental in a narrative about a fight between the speaker and her sister.

(5-276) nguyung-ngunthu-ni gan-ijja-ny yangarra,
husband-KIN3-ERG 3sg:3sg-POKE-PST kangaroo

murl-murl-mib=biya yirr-agba=murlu,
RDP-roast-CONT=NOW 1pl.excl-BE.PST=COLL

murl yirr-**irriga**=murlu ngayiny
roast 1pl.excl:3sg-COOK.PST=COLL meat/animal

thanthiya yangarra,
DEM kangaroo

nguny ganiy=irrinyi ji \
sulky 3sg:3sg-SAY/DO.PST=1du.excl 3sg

'her husband speared a kangaroo, and we were cooking it in a ground oven; we all cooked that kangaroo meat, (but/when) she sulked at the two of us' (DP, E17089-92)

Similarly, in (5-277), the 'cooking' is contrasted with the next event in sequence, the 'going away'.

(5-277) **bud** ba-**rriga** gabardag, yirri-w-ijga gabugabu
cook.on.coals IMP-COOK quickly 1pl.excl-FUT-GO afternoon

'cook it quickly on the coals, we want to go in the afternoon!' (ER, MIX007)

In procedural texts, by contrast, the same coverbs are more frequently combined with *-ma* 'HIT' (or *-arra* 'PUT', in the case of *murl* 'apply heat with hot ground or stones'). The following example is from a text describing the method of preparing an unidentified, yam-like plant species.

(5-278) (...) **bud** yirra-**ma**-nyi,
cook.on.coals 1pl.excl:3sg-HIT-IMPF

murl yirr-**arra**-nyi barrajjung \
roast 1pl.excl:3sg-PUT-IMPF further

'we used to cook it on the coals, and roast it in the ground oven afterwards' (EH, E18069-73)

It is as if here the use of a semantically more general verb, *-ma* 'HIT' or *-arra* 'PUT', gives the coverb more semantic weight, and thereby serves to highlight the actual method of cooking or heating described by the coverb. Since *-irriga* 'COOK', with coverbs of this type, is more or less semantically redundant, its use highlights the overall nature of the event as one of 'cooking', contrasted with other events in sequence.

Under this analysis, even the order of occurrence of the verbs under repetition in (5-275) above – also a procedural text – may not be accidental. The clauses

preceding (5-275) described the wrapping of the ground seeds in lily leaves, and in this sense, (5-275a) presents the next event as one of 'cooking' in general, in contrast to the other steps in the preparation. The repetition in (5-275b) then emphasises the manner of cooking, specified as *bud* 'cook on coals' (see also §5.4.2.2).

Similarly, in text II in the Appendix, the coverb *murl* 'roast in a ground oven, apply heat with hot stones or ground' is combined with *-arra* 'PUT' when the speaker first introduces the healing method applied to cure her daughter's broken leg in II/18-19. In the subsequent intonation units, the frequent repetition of the treatment is focused upon, and here *-irriga* 'COOK' is used (as a simple verb). Thus, it seems as if the tension between two conflicting pragmatic principles – the use of the more specific verb, following the Q principle, and the use of a more general verb, following the I principle – is exploited for discourse purposes, in that the nature of the event as one of 'cooking' can be foregrounded or backgrounded.

Unlike its intransitive counterpart *-irna* 'BURN', *-irriga* is, in a few cases, used metonymically in a reading of 'inflict pain similar to that of a burn' (cf. a comparable use of *-wa* 'BITE' described in §5.4.6). In one case, *-irriga* was used to describe the effect of hot, bitter food.

(5-279) ngayug=gayi **digirrij** gan-**kirriga** wuju-mirndij
1sg=ALSO die 3sg:1sg-COOK.PST small-TIME

'(children might not eat it, it is bitter when raw,) me too, it "burnt" me terribly when I was little' (IP, E17287-88)

There are also two instances of the use (by different speakers) of *-irriga* for the sting of insects, which is more usually categorised by *-wa* 'BITE'.[137]

(5-280) wirib=marlang biyang yarrajgu ga-ngga \
dog=GIVEN now afraid 3sg-GO.PRS

majani burru-**rriga** \
maybe 3pl:3sg-COOK.PST

'The dog is being frightened now, maybe they stung him' (bees, in Frog Story) (CP, E18256/7)

To summarise, the intransitive verb *-irna*, glossed as 'BURN', and the transitive verb *-irriga*, glossed as 'COOK', were shown to have a general meaning of 'be affected by heat' and 'affect something/someone by heat', respectively. The

[137] A semantic link between these two verbs may be reflected in the (potential) historical relationship between the stem *-irriga* 'COOK' and the present tense stem of *-wa* 'BITE', which is *-wirri*.

range of application of both verbs, which includes events of 'warming', 'cooking', 'burning', 'healing by heat', and (only for intransitive *-irna*) 'suffering from thirst', is not untypical for Australian languages, even those with larger verb systems.

5.6 The polyfunctional verb *-yu(nggu)* 'SAY/DO'

Of all semantically general verbs in Jaminjung and Ngaliwurru, *-yu(nggu)*, glossed as 'SAY/DO', presents the most difficulties for a semantic description. It is found in syntactic constructions with both one and two core arguments, and covers a wide range of seemingly heterogeneous semantic areas: most frequently, it occurs as a verb of speech ('say/make a sound', §5.6.1.1), but it also forms complex verbs with coverbs of internal motion ('move', §5.6.1.2), physical or emotional condition (§5.6.1.3), and coverbs of 'throwing' (§5.6.1.4). In certain contexts, it can also be interpreted as a general performance verb ('do', §5.6.1.5). Moreover, *-yu(nggu)* is also the general inchoative verb with predicative nominals ('become/turn into', §5.6.1.6). A formal peculiarity of *-yu(nggu)* is that, despite being formally transitive, unlike all other transitive verbs it does not occur in a reflexive form.

In spite of this bewildering range of uses, it is not so obvious whether we are dealing here with polysemy, or with a general monosemous sense, which gives rise to different readings in different syntactic constructions and with different coverbs. The presentation of the range of uses in §5.6.1 proceeds as if they were manifestations of polysemous senses. However, in §5.6.2, the possible semantic contribution of the argument structure constructions and/or coverbs, as opposed to the verb itself, will be assessed, and the possibility of a monosemous analysis will be explored from both a language-internal and a comparative perspective. The existence of verbs with similar extensions in a number of other languages (see §5.6.2 for details) clearly shows that we are not dealing with homonymy; this is also ruled out for formal reasons: *-yu(nggu)* 'SAY/DO' follows the same – irregular – conjugation pattern (see §2.4.2), regardless of the function in which it occurs.

5.6.1 Uses of *-yu(nggu)* 'SAY/DO'

5.6.1.1 Speech and sound emission

5.6.1.1.1 Speech Framing

Most frequently, *-yu(nggu)* is used as a simple verb (i.e. without a coverb) in the function of a verb of speech. Unlike other simple verbs, however, it cannot form

an utterance by itself, but has to be accompanied by a representation of the 'speech'. That is, it occurs in a 'framing' construction with a quotation which represents direct speech or, much more rarely, indirect speech. (In fact any kind of sound, not just speech, may be quoted in this way, as was also shown in §4.2.3.2). The speech framing use of *-yu(nggu)* is illustrated in (5-281).

(5-281) "ngi'i wurlug=gung nga-buwa ngayug" \
PROX alone=COTEMP 1sg:3sg-FUT:HAVE 1sg

nga-**yunggu**-m=**burrag**, ngayug-ni,
1sg:3sg-SAY/DO-PRS=3pl.OBL 1sg-ERG

'"I will keep her here by herself, me" I tell them, me' (being protective of a child) (IP, E09275)

As (5-281) shows, the speaker is encoded as Actor, i.e. cross-referenced by the A-prefix on the verb, and optionally represented by a noun phrase which has all the possibilities of case-marking of agents discussed in §4.2.1: it can be appear in absolutive case, but also in ergative case as in (5-281), or ablative case. The addressee of the speech is not necessarily present, and is never cross-referenced on the verb,[138] but is usually encoded by an oblique pronominal clitic, and optionally by a dative-marked noun phrase.

Alternatively, an absolutive noun phrase headed by the nominal *liiny* (Ngali: *baaj*) 'word(s), speech, language' may appear in place of the quotation. Formally, this is a noun phrase rather than a quotation because it is in a paradigmatic relationship with the ordinary interrogative for inanimates, *nganthan* 'what', as in (5-282), in contrast to quotations, which are replaced by the propositional interrogative *warndug* 'do what/how' (see §4.2.3.2).

(5-282) nganthan nga-wu-**yu**=ngunggu **liiny**
what 1sg:3sg-FUT-SAY/DO=2sg.OBL speech

'what should I be telling you, (what) words?' (a question frequently asked of the fieldworker) (DB, FRA002)

Semantically, though, *liiny* 'word(s), speech, language' fulfils the same function as a quotation, representing 'what is said' (in a way, functioning like a 'cognate object').

[138] In this respect Jaminjung exhibits a striking difference to some of its eastern neighbours where the corresponding speech framing verb can have the addressee either as a direct object or as an oblique argument (for Wardaman, see Merlan 1994: 205ff., for Wagiman see Cook 1987: 221, Wilson 1999: 40f.).

5.6.1.1.2 Sound emission and speech acts

As a verb of speech, *-yu(nggu)* accompanies not only quoted speech/sound, or 'cognate objects', but also forms complex verbs with coverbs of sound emission, like *ngarl* 'bark' in (5-283), and with coverbs specifying a type of speech act, like *mirrung* 'tell a lie' in (5-284), or the Kriol coverb *baramaj* 'promise' in (5-285).

(5-283) gurrany **ngarl** gan-**unggu**-m, girrb ga-yu
NEG bark 3sg:3sg-SAY/DO-PRS quiet 3sg-BE.PRS

'it is not barking, it is quiet' (DMc, CHE391)

(5-284) **mirrung**=biji gani-**yu** ngunggu Nawurla
lie=ONLY 3sg:3sg-SAY/DO.PST 2sg.OBL <subsection>

'Nawurla just told you a lie!' (DB, D13061)

(5-285) **baramaj** gani-**yu** lambarra-ni
promise 3sg:3sg-SAY/DO.PST father.in.law-ERG

'he promised it (i.e. to give his daughter), the father in law' (DM, EV06061)

Just as with *-yu(nggu)* in the framing construction, with these complex verbs the speaker is always encoded as A on the verb. If it is lexically present, it is more usually in the absolutive, as in (5-284); the example in (5-285), where it is ergative-marked, is the only exception in the database. Again, an oblique pronominal clitic or a dative noun phrase, representing an addressee, may or may not be present.

It is important to note that coverbs combining with *-yu(nggu)* 'SAY/DO' are in complementary distribution with quoted speech, that is, they are never both found combined with a single verb token. This suggests that they have the same function as quotations, or as an absolutive noun phrase with a nominal meaning 'speech, word': coverbs of sound emission and speech act, too, represent 'what is said'. The implications of this pattern of distribution will be discussed in more detail in §5.6.2 (see also §4.2.3.3).

5.6.1.2 Motion

5.6.1.2.1 Internal motion

Invariably, coverbs of internal motion – i.e. encoding movements of an entity that do not lead to a change of location (cf. §6.4.2) – form complex verbs with *-yu(nggu)* 'SAY/DO', regardless of whether the moving entity is animate or inanimate. Thus, both *mang-mang* 'move knees in and out (as in a dance)' in

(5-286), and *birdinyiny* 'rotate' in (5-287) combine with *-yu(nggu)* 'SAY/DO' in this reading.

(5-286) **mang-mang** ba-**yu** miri yirram
RDP-move.knees.outward IMP-SAY/DO leg two
'move both your knees in and out!' (in women's dance) (DP, C10027)

(5-287) **birdinyiny** gan-**unggu**-m gugu
rotate 3sg:3sg-SAY/DO-PRS water
'the water rotates in a whirl' (DP, RIV027)

The resulting complex verbs of internal motion behave like intransitive verbs in every respect, that is, they can only take one syntactic core argument[139] which is in the absolutive – even though the verb still takes the transitive pronominal prefixes, and the 'mover' is represented by the A prefix.

The 'internal motion' reading of *-yu(nggu)* possibly also accounts for the use of this verb, in complex verbs with an inchoative reading, with coverbs of posture, such as *marrg* 'be tight' in (5-288) (see §6.1.2 for a further example): a change of posture, i.e. a change in the configuration of one´s (body) parts, is a kind of internal motion. Again, the animacy of the entity in question is irrelevant.

(5-288) **marrg** gani-**yu**
tight 3sg:3sg-SAY/DO.PST
'it rolled itself up' (dried pandanus leaf) (DMc)

5.6.1.2.2 Locomotion

While coverbs of internal motion generally and predictably form complex verbs with *-yu(nggu)*, this verb is also found with coverbs from a very small, and apparently lexically restricted, subset of the coverbs of manner of motion (see §6.5.1), and coverbs of direction of motion (see §6.5.3). Manner coverbs otherwise only combine with verbs of locomotion (§5.3); the subset of manner coverbs attested with *-yu(nggu)* consists only of *yugung* 'run', *yawal* 'run (of multiple animates)', and *warrngwarrng* 'walk'. Of these, only *yugung* 'run', illustrated in (5-289), is found in this combination with some frequency.

(5-289) **yugung**=biyang gan-**unggu**-m wagurra-bina,
run=NOW 3sg:3sg-SAY/DO-PRS rock-ALL
'he runs up the rock' (boy in Frog Story) (IP, F03171)

139 Note that (5-286) is no counterexample, since a body part nominal does not constitute a syntactic argument, but enters a part-whole construction with its possessor (see §4.2.3.1).

The subset of directional coverbs attested with *-yu(nggu)* consists only of *burduj* 'move upwards, climb' (5-290), and *wirriny* 'turn'.

(5-290) gurunyung-gi **burduj** gani-**yu**
head-LOC go.up 3sg:3sg-SAY/DO.PST
'it has got up on the "head" (front of the truck)' (Men & Tree: Cow on Truck front) (MJ, MTA017)

Because of the small number of examples, it is not quite clear what triggers the use of *-yu(nggu)* in place of a locomotion verb; speakers claim that they are interchangeable. Complex verbs formed with *-yu(nggu)* can occur with a specification of the end location, as in (5-289) and (5-290), just like complex verbs formed with locomotion verbs, which presumably would not be the case if *-yu(nggu)* was only used where the focus was on the motion of the limbs (i.e. 'racing', 'clambering') rather than the change of location. In every other respect, these complex verbs have the same morphosyntactic properties as the complex verbs formed with coverbs of internal motion, that is, they only allow for a single core argument.

5.6.1.3 Bodily and emotional condition

The verb *-yu(nggu)* also combines with members of a relatively large set of coverbs of bodily or emotional condition. Like coverbs of internal motion, these tend to occur with *-yu(nggu)* exclusively, and form complex verbs which always enter into intransitive syntactic constructions (again, a body part nominal in the absolutive, as in (5-291), is no counterexample).

(5-291) **yarl** nga-**yunggu**-m mayadan
itch 1sg:3sg-SAY/DO-PRS skin
'my skin is itchy'

(5-292) **wangarr** gan-**unggu**-m jarlig, nganthan-nyunga!
mad 3sg:3sg-SAY/DO-PRS child what-ORIG
'the child is/acts mad, for what reason?' (IP, F01500)

This formal similarity to complex verbs with a reading of 'internal motion' is not accidental. It is argued in §6.4 that the boundary between these two classes of coverbs is far from clearcut not only formally, but also semantically, since the temporary bodily or emotional conditions in question have symptoms that are open to observation (e.g. a facial expression, or a certain behaviour), and are often located in a particular body part. Another symptom of bodily or emotional conditions may be the emission of sound. Again, the boundary between the two classes is not clearcut. Some coverbs which might be either grouped under 'bodily condition' or under 'sound emission', and which also combine with

-yu(nggu), are *ngujul* 'cough', *ngajirr* 'sneeze', *dirrng* 'fart', and *daggarrag* 'hiccough' (see also §6.4).

There are also a few occurrences in the data of *-yu(nggu)* combining with a coverb of heat and light emission (see §6.8.2 for examples). Formal links between predicates in this semantic class with predicates of sound emission are also attested cross-linguistically (cf. Levin & Rappaport Hovav 1995: 91).

5.6.1.4 'Throwing'

With a small set of coverbs which either denote ballistic motion (e.g. *lawu* 'spill (intr)' in (5-293)), or induced ballistic motion (e.g. *diwu* 'throw' in (5-294)), the verb *-yu(nggu)* could be translated as 'throw away, release'.

(5-293) **lawu** gani-**yu** ngabulu janju-ni jalig-ni
spill 3sg:3sg-SAY/DO.PST milk DEM-ERG child-ERG

'the child spilled the milk' (DR, NGA053)

(5-294) gurrany ngayug, **diwu'** gan-**thu**, ngardgung=gun,
NEG 1sg fly/throw 3sg:1sg-SAY/DO.PST alive=CONTR

'not me, she threw me off, alive (i.e. unharmed)' (the speaker was carried on her grandmother's shoulders as a child when a goanna attacked them, but she did not get harmed since she was thrown off in time) (IP, F03482)

Unlike all other complex verbs formed with *-yu(nggu),* these expressions of 'throwing' are bivalent, i.e. allow for the expression of two core arguments.[140] As (5-294) clearly shows, the 'thing thrown' is cross-referenced as Undergoer on the verb and can, in addition, be represented as an absolutive lexical argument. The 'thrower', in addition to being cross-referenced as A, may be represented by an ergative noun phrase, as in (5-286).

With these coverbs, the verb *-wardgiya* 'THROW' can often substitute for *-yu(nggu),* but is less restricted in its range of uses in that it can encode induced motion generally, and may combine with a larger set of coverbs. The examination of the contexts for both verbs, undertaken in some detail in §5.4.7, allows the conclusion that only *-wardgiya* 'THROW' semantically entails induced motion along a trajectory, while expressions formed with *-yu(nggu)* only describe the release.

140 One other coverb is attested with *-yu(nggu)* in a construction with two arguments; this is *nyiny* 'forget about, neglect'.

5.6.1.5 Performance

As it turns out, *-yu(nggu)* 'SAY/DO' can also have a much more general reading than has been suggested so far. Combined, for example, with the propositional interrogative coverb *warndug* 'how?, do what?' (5-295), or the corresponding propositional demonstrative *maja/majiya* 'do like that' (5-296), this verb gives rise to a reading of 'performance', corresponding most closely to that of English *do* as a full verb.

(5-295) **warndug**=biya yurru-wu-**yu**,
do.what/how=NOW 1pl.incl:3sg-FUT-SAY/DO

dij=ja yurru-w-iyaj \
stay.overnight=QU 1pl.incl-FUT-BE

'what are we going to do now, are we going to camp out?' (IP, E08160)

(5-296) mung gani-ngawu:::, **"majiya** nga-wu-**yu"** \
watch 3sg:3sg-SEE.PST do.like.that 1sg:3sg-FUT-SAY/DO

'he watched him (painting), "I'll do it like that"' (Orig. Transl.: *(...)* 'imin lukina::t, "now I want to do im like that ^na!"') (DP, E05098)

A reading of 'performance' also accounts for the use of *-yu(nggu)* with coverbs of 'phase', e.g. *burrb* 'finish, do V to all', and with a number of other coverbs which have not been classified, especially Kriol loans. Phases (beginning and end) are usually expressed in Jaminjung by a coverb, with the main event represented by the verb, as in *burrb gani-minda-ny* 'he ate up'/'he finished eating' (see further §6.19). If the verb is *-yu(nggu),* the reading is non-specific, that is, the main event is either metonymically specified by a nominal (*skul* 'school' in (5-297)), or, more usually, left unspecified, as in (5-298).

(5-297) waga ngaj=nu::, **burrb** ganu-wu-**yu** **skul**,
sit 1sg:FUT.BE=3sg.OBL finish 3sg:3sg-FUT-SAY/DO school

durd nga-bili \
hold.one 1sg:3sg-FUT:GET/HANDLE

'I will wait for her, (and when) she finishes school, I will pick her up' (IP, E09079)

(5-298) malju=ma **burrb** gani-**yu**
male=SUBORD finish 3sg:3sg-SAY/DO.PST

he training for.. legal aid ey?

'as for the boy, he has finished (schooling), he is undergoing training for legal aid, right?' (MJ, D01138)

A similar notion of complete performance of an event specified by a coverb, or a subphase of an unspecified or understood event, seems to underlie the use of *-yu(nggu)* with a number of Kriol loans, such as *bridim* 'breed (tr)' in (5-299), and *nakap* 'knock off' in (5-300).

(5-299) buny-**guyu**.. **bri:dim** \ garlwarrang-ni, ... malju-ni \
3du:3sg-SAY/DO.PST breed:TR female-ERG male-ERG
'they bred, the female and male (dingos)' (JM, E03157-8)

(5-300) barung, nathing, **nakap** burru-wu-**yu** mindi
hot.weather nothing knock.off 3pl:3sg-FUT-SAY/DO 1du.incl
'in the hot season, no (work), they will knock off "on you and me"' (stockwork) (JM, NUN237)

In a sense, then, this function of *-yu(nggu)* comprises the functions discussed in §5.6.1.1 to §5.6.1.4. If *-yu(nggu)* is a general performance verb, then speech and sound emission, internal motion, throwing, and perhaps also a bodily and emotional condition, constitute but different kinds of events that are being performed. This issue is taken up again in §5.6.2.

5.6.1.6 Inchoative

The last major function of *-yu(nggu)* is as an inchoative verb ('become, turn into') with unmarked predicative nominals such as *gujugu* 'big' in (5-301) and *wurrgurru* 'devil' in (5-302), and with coverbs of state. The resulting predicative expressions, like most types of complex verbs formed with *-yu(nggu)*, are monovalent, that is, they only take a single core argument which is invariably in the absolutive but cross-referenced by the A-prefix.

(5-301) marlayi nau **gujugu** gani-**yu**,
woman NOW big 3sg:3sg-SAY/DO.PST
'the woman then grew up' (lit.: 'became big', i.e. old enough to be given in marriage) (DP, F02271)

(5-302) **wurrgurru** nganthu-wu-**yu**
devil 2sg:3sg-FUT-SAY/DO
'you will turn into a devil' (ER, NOT059).

In its inchoative function, *-yu(nggu)* also participates in expressions that have been termed 'ambient change inchoatives' by Goddard (1985: 110), with a time of the day as the predicative nominal. In these expressions, there is no overt argument serving as the predication base.

(5-303) **mirdang**=biya ganu-wu-**yu**, darrug
night=NOW 3sg:3sg-FUT-SAY/DO sunset
'it will become night, sunset' (LD, D13130)

In the next section, the semantic links between the different functions of *-yu(nggu)* 'SAY/DO' will be explored in more detail, starting out from the question whether a monosemous analysis is viable.

5.6.2 *-yu(nggu)* 'SAY/DO': Polysemy or monosemy?

So far, we have distinguished six different functions of the verb *-yu(nggu)* 'SAY/DO': (i) as a verb of speech and sound emission, (ii) as a verb expressing certain types of motion, (iii) as a verb used in expressions of bodily and emotional conditions, (iv) as a verb of 'throwing', (v) as a general performance verb, and (vi) as an inchoative verb. Some semantic links, and parallels in morphosyntactic behaviour, between these different uses have already been pointed out in §5.6.1, and will be corroborated in this section by comparative evidence. However, the question is still open as to whether *-yu(nggu)* is really polysemous, or perhaps can be given a monosemous analysis.

A promising starting point in arguing for a monosemous analysis of *-yu(nggu)* is the observation that it can serve as a general verb of performance, as illustrated in §5.6.1.5. It may therefore be possible to argue that it has this function in all of its uses, and that the differences in interpretation can be attributed to the semantic contribution of both the coverbs that *-yu(nggu)* occurs with, and the various morphosyntactic constructions that it is found in. This possibility will be explored in §5.6.2.1.

5.6.2.1 The relationship of verb meaning and constructional meaning: a monosemous account

Tentatively, *-yu(nggu)* can be given the semantic characterisation 'x performs an event E'. According to this characterisation, *-yu(nggu)* has two semantic participants, a performer and a performed event. Now recall that *-yu(nggu)* can never form a predicate by itself, but obligatorily occurs with either a quotation, a 'cognate object', a coverb, or a predicative nominal. It seems plausible that *-yu(nggu)*, as a performance verb, cannot occur without an overt indication of what it is that is performed, and that all these expressions therefore fulfil the same function, of representing the 'performed event'. Obviously, this account is intuitively more plausible for some functions of the verb than for others, and therefore requires a refinement of the notion of 'performance'. Let us again consider the various uses of *-yu(nggu)* in turn, this time starting with the 'performance' use (§5.6.1.5).

The function of a performance verb can easily be linked to the function as speech verb: Verbs that fulfil both functions are very common in Northern Australian languages, and also outside Australia, e.g. in a number of Papuan languages (Foley 1986: 119). This has been linked to the absence of both a linguistic and a cultural distinction between use of language, and other types of behaviour. In other words, speaking can be regarded as just another form of behaviour (cf. Rumsey 1982a: 159; 1990).

Formally, for Jaminjung, the absence of this distinction is not only reflected in the use of the same verb, *-yu(nggu)*. The interrogative coverb *warndug* 'do what', too, may substitute both for quotations and for propositions in general (cf. Munro 1982: 314f.). The expression *warndug yurru-wu-yu?* in (5-295) above can therefore not only read as 'what will we do?' but, in a different context, also as 'what will we say?'. The demonstrative coverb *maja* likewise introduces quotations as well as propositions in general, and non-verbal quotations, e.g. gesture or pantomime (see §4.2.3.2 for examples and a schematic representation). Thus, in Jaminjung, all these types of quotations are framed by the same verb, *-yu(nggu)*, while English has a special use of the verb *go* for quotation of action and non-speech sound (e.g. *I heard it go pop)*, and reserves *say* for quoting speech (although *go* may occur as well).

As shown in §5.6.1.1, *-yu(nggu)* in its function as a speech verb may also take a 'cognate object', *liiny (baaj)* 'speech, word, language'. This does not fall in the same formal category as quotations, since it appears as an ordinary absolutive noun phrase argument and is referred to with the nominal interrogative *nganthan* 'what', rather than the interrogative coverb *warndug* 'do what'. However, one could argue that by virtue of its semantics, *liiny (baaj)* 'speech, word, language' is also allowed in the function of representing the 'event' participant of *-yu(nggu)*, in that it indicates that the event that is performed is some kind of linguistic activity.

Consider next the uses of *-yu(nggu)* as part of complex verbs (other than with the general coverbal pro-forms *warndug* 'do what' and *maja* 'do like that'). Of these, complex verbs formed with coverbs of sound emission, speech act, internal motion, and bodily or emotional condition, were shown in §5.6.1.1 to §5.6.1.3 to have the same morphosyntactic properties, in that they only enter into constructions with a single core argument. Semantic links between these classes have also been pointed out (see also §6.4). In particular, it was claimed that coverbs encoding a bodily or emotional condition are only part of this formal class if the condition also has physical manifestations, like a sound, movement, or facial expression.

Cross-linguistic evidence also confirms the semantic links between these types of expressions. Internal motion, and manifestations of a condition or state, are encoded by complex predicates containing a general speech and/or performance

verb not only in many Northern Australian languages (cf. e.g. McGregor 1998c for Nyulnyul), but also in languages as unrelated as the Papuan langugages Enga (Lang 1975, Foley 1986: 120f.), Yimas (Foley 1991: 334), and Hua (Haiman 1980a: 117ff., 266), the African languages Amharic (Amberber 1995), Ewe (Ameka 1994: 71), Hausa[141] (Wolff 1993: 453) and Zulu (Voeltz 1971), and the Native American Yuman languages of California (Langdon 1977). In a number of these languages, the expressions of a condition or state are of a sound-symbolic nature.

Since coverbs from these classes can encode uncontrolled movements or conditions of animates (like *yarl* 'itch' in (5-291)), or even be predicated of inanimates (like *birdinyiny* 'rotate' in (5-287)), the notion of 'performance' does not appear to be adequate any more. Obviously, agentivity or control cannot be relevant components of 'performance', if this notion is indeed to characterise *-yu(nggu)* in all of its uses.

In an insightful paper on the semantics and syntax of constructions in Yuman languages involving 'say' verbs – which exhibit a range of uses strikingly similar to Jaminjung *-yu(nggu)* – Langdon (1977: 6) suggests that the verb in these constructions is most appropriately characterised as 'give direct, immediate evidence of ...'. This paraphrase can also be applied to Jaminjung *-yu(nggu)*. It characterises the meaning of this verb better than the term 'perform' does, first, because it is neutral as to agentivity or control, and second, because, unlike English *perform, -yu(nggu)* has to be regarded as neutral with respect to telicity.[142] It forms telic complex expressions if the event that is 'given evidence of' is itself bounded (as in the case of an utterance represented by a quotation), but atelic complex verbs with coverbs which are themselves atelic, like the coverbs of bodily and emotional condition.

The meaning of *-yu(nggu)* can also be linked to the notion of 'internal causation', as defined by Levin & Rappaport Hovav (1994, 1995), who introduce it to account for the argument structure properties of a subclass of English verbs. They note that the notion of internal causation subsumes agency, in that verbs like *tremble* or *glitter*, with nonagentive or inanimate arguments, can nevertheless describe

> internally caused eventualities in the sense that these eventualities are conceptualised as arising from inherent properties of their arguments (Levin & Rappaport Hovav 1995: 91)

The notion of 'internal causation' can be used to clarify the notion of 'immediate evidence', since an entity that undergoes a change of state that is not internally

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141 I am indebted to Birgit Hellwig for drawing my attention to the Hausa data.

142 Note however that English *go* in its 'framing' use is also neutral in this respect.

caused, e.g. of breaking, could also be said to give immediate evidence of this event. However, in Jaminjung, just like in the languages investigated by Levin & Rappaport Hovav, predicates of change of state that are not construed as 'internally caused' fall into a different formal class in that they are formed with *-ijga* 'GO' (see also §6.7 and §5.3.2.2).

In S5-21 below, Langdon's characterisation is therefore combined with Levin & Rappaport Hovav's notion of 'internal cause', to characterise the meaning of *-yu(nggu)*. This characterisation comprises the functions of *-yu(nggu)* as a verb of speech ('internally cause, and give immediate evidence of, a sound/utterance'), as a verb of observable bodily or emotional condition ('internally cause, and give immediate evidence of, a condition'), and as a general performance verb with other types of behaviour. It will also be shown below to account for the inchoative function of the verb. The existence of a verb in such a general 'evidential' function is linked by Langdon (1977: 7) to a 'narrative style and world view which demand that only observable behavior is eligible for description'. In other words, some types of conditions are not construed as states ascribed to an entity, but rather as types of behaviour. The same correlation may well hold for Australian languages (cf. Rumsey 1990).

S5-21 *-yu(nggu)* 'SAY/DO'
__ [QUOTATION]E
__ [NSpeech]E
__ [CoverbActivity]E

x internally causes, and gives immediate evidence of, an event E

As is also indicated in S5-21, the 'event' slot in the semantic representation in S5-21 can be filled, first, by a quotation, and second, by a 'cognate' nominal meaning 'word, speech'. This has already been discussed and illustrated in §4.2.3.2 (see in particular Fig. 4-14). Third, the 'event' slot may be filled by a coverb (including the pro-forms *warndug* 'do what?' and *maja* 'do like that'). The possibility that coverbs may have a double status was already explored in §4.2.3.3. On the one hand, coverbs may represent – satiate, as it were – an 'event' participant of the verb. On the other hand, the combination of the coverb and the verb in these cases is an instance of the same canonical complex verb construction as in other complex verbs. This implies that a coverb has its own participant(s), which share(s) argument slots with the participant(s) of the verb. A representation of the argument structure of the resulting expression, with a monovalent coverb of bodily condition and the verb *-yu(nggu)*, can be found in Fig. 4-15 in §4.2.3.3.

The distribution of the two 'propositional' pro-forms (as well as the continous form *-mayan;* cf. §2.3.2.2) provides further evidence that coverbs indeed belong

to the same formal category of 'event expressions' as these forms and quotations.[143] In (5-304), for example, *maja* 'do like that' substitutes for a coverb.

(5-304) burrg-burrg ba-nanggu, maja'-maja ba-nanggu
RDP-clap IMP-CHOP RDP-do.like.that IMP-CHOP
'yes, beat it, hit it like that' (kneading bread dough with knuckles) (IP, F01280)

The semantic characterisation in S5-21 also allows us to also link the inchoative function to the other functions of *-yu(nggu)*. Importantly, the inchoative function of this verb is restricted to internally caused state changes, of the type illustrated in §5.6.1.6, e.g. 'grow', 'become night', or 'turn into a devil'. State changes like 'break' or 'open' – corresponding to what Levin & Rappaport Hovav (1995) term 'externally caused state changes' – are encoded in Jaminjung by complex verbs which are not formed with *-yu(nggu)*, but with *-ijga* 'GO' in its secondary sense of 'change of state' (§5.3.2.2), in combination with a coverb of change of state.

With this restriction of the term 'inchoative' in mind, the difference between the 'inchoative' and the 'manifest condition' reading of *-yu(nggu)* may be attributed to differences between the predicative elements that the verb combines with. The 'inchoative' reading arises with nominal predicates and stative coverbs.[144] Since *-yu(nggu)* 'internally cause, and give immediate evidence of an event' is a dynamic verb, it can only encode the transition to the state which fills the slot of the 'event' participant.[145] Stative expressions with the same predicates, in contrast, are formed with the verb *-yu* 'BE'. Coverbs of bodily and emotional condition, on the other hand, generally only combine with *-yu(nggu)* and no other verb, and therefore have to be regarded not as stative, but as dynamic predicates, on a par with coverbs of sound emission or internal motion. Consequently, there is no way to express a difference, e.g. between inchoative 'I am getting itchy' and stative 'I am itchy'. It is therefore argued that the 'inchoative' function of *-yu(nggu)* also falls under the characterisation in S5-21.[146]

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143 A very similar statement can be found in Rumsey (1982a: 157f., 160); note that 'say' constructions are compared to complex verbs also by Munro (1982: 316).

144 These include coverbs of posture, which were discussed under the 'internal motion' function of *-yu(nggu)* in §5.6.1.2.1; this also reflects the close link between the 'inchoative' use and the 'performance' uses of this verb.

145 The resulting complex expressions will be telic if the event is bounded by reaching the state, but it is possible that they may also be atelic in the same way as the atelic verbs of change of state, like *decay,* identified by Levin & Rappaport (1995: 172). However, this possibility has not been sufficiently explored to date.

146 In terms of argument structure, the status of predicative nominals is less clear, since, unfortunately, I have no data on the pro-form for predicative nominals, i.e. expressions of

This is confirmed by cross-linguistic evidence: for most of the languages mentioned above which allow a 'say' verb in complex verbs that encode 'evidence of an internal condition', this verb is in addition reported to have an inchoative function. Yet other languages, e.g. the Australian language Yankunytjatjara (Goddard 1985: 108ff.), have a verb that does not function as a speech verb, but is used in inchoative function as well as in expressions of behaviour, and physical and emotional condition.

Finally, we need to account for the 'throw' reading of *-yu(nggu)*. Parallels are less frequently found in Northern Australian languages, but a similar use of a 'say/do' verb is attested in Jaru (Tsunoda 1981a: 185). As shown in §5.4.7, *-yu(nggu)* (as opposed to *-wardgiya* 'THROW') cannot serve to express induced motion as such, but only covers release of an entity, after providing it with an impulse. Its reading is therefore more appropriately paraphrased as 'throw away'. At least three semantic links between this reading and other readings of *-yu(nggu)* are plausible. First, 'throwing away' can be regarded as a subtype of limb movement, i.e. internal motion. Second, 'throwing away' is semantically linked to sound emission, which is often metaphorically described as induced motion (cf. for English Rudzka-Ostyn 1988a). Third, verbs of 'throwing away' sometimes take on the (related) functions of completive, resultative, evidential and perfect marking.[147] As I have tried to argue in this section, Jaminjung *-yu(nggu)* is a verb that is used to describe observable behaviour, and in this sense also has an evidential quality.

Still, we need to account for the difference in argument structure between complex verbs of 'throwing', which are clearly transitive, and the other complex verbs formed with *-yu(nggu)*, which only appear in intransitive constructions. The above discussion strongly suggests that this should not be accounted for by positing a separate sense 'throw' for *-yu(nggu)*, with two participants, a 'thrower' and a 'thrown thing'. Rather, 'throwing' straightforwardly falls under the semantic characterisation given in S5-21: the second participant of the verb, as in its other uses, is the event that is performed, or better, 'internally caused and given evidence of'. This is represented by a coverb of induced motion or change of location, which itself contributes a second participant, the 'thing moving'.[148] It

the type 'he became like that'. I strongly suspect that they pattern like coverbs in forming part of a complex predicate with *-yu(nggu)*, while at the same time representing the 'event' participant of the verb.

147 This is the case e.g. in the Australian language Diyari (Austin 1981a: 91), in Korean (Rhee 1996), and in Fore (Scott 1978: 56; Bybee & Dahl 1989: 68). Even in Indo-European languages, an etymological link can be traced between an inchoative verb (cf. German *werden*), and a verb of 'throwing' (cf. German *werfen*): both are based on the same PIE root **wer-* (Grandsaignes d'Hauterive 1948: 238f.).

148 The bivalent coverbs of induced ballistic motion also have a 'thrower' participant, but

is this participant that fills the morphosyntactic slot of the Undergoer argument, since this cannot be filled by the second participant of the verb *-yu(nggu)*, which is a coverb. This analysis has been represented in Fig. 4-16 in §4.2.3.3.

The fact that the 'performer' participant (here interpreted as 'thrower') can be encoded as an ergative noun phrase also falls out from this analysis: recall that ergative marking – i.e. the construction encoding an Effector argument role – requires the existence of a second, affected central participant (§4.2.1.1). The 'event' participant of the verb *-yu(nggu)*, on the other hand, is effected rather than affected, and therefore, by itself, is not sufficient to allow construal of the 'performer' as Effector. Only if there is a second core argument, like the one introduced by the coverb, the 'performer' can be represented as Effector. In other words, the 'performer' participant of the verb (or, in our revised characterisation, the participant internally causing, and giving evidence of, an event) is semantically compatible with both an Effector and a non-Effector role, depending on the nature of the event, and the morphosyntactic encoding of the other participant roles in it.

Interestingly, as a speech framing verb, *-yu(nggu)* also allows ergative-marking of the 'performer/speaker', even though the quotation is not a syntactic core argument and presumably not cross-referenced on the verb. On the other hand, ergative-marking (which is not obligatory with any verb) is even less frequent in this case than with most other transitive verbs. Similar 'mixed transitivity properties' have of course been noted for verbs of speech cross-linguistically (see §4.2.1.3 and references there).

To summarise: I argued in this section that a monosemous account of the polyfunctional verb *-yu(nggu)* 'SAY/DO' is viable. According to the analysis proposed, the semantic invariant contributed by the verb can be paraphrased as 'x internally causes, and gives immediate evidence, of an event'. The differences in interpretation of the expressions formed with *-yu(nggu)* 'SAY/DO' are due to the semantic contribution of the other elements with which the verb combines. These could be a predicative nominal, a quotation, a noun phrase functioning as 'cognate object', or a dynamic or stative coverb, which may or may not contribute an additional participant to the argument structure of the complex verb. The argument structure of the resulting complex predicate may reflect the valency of the coverbs combined with *-yu(nggu)*, and/or the overall degree of 'effectiveness' (or 'semantic transitivity') of the event described.

lawu 'spill' in Fig. 5-21 is monovalent (see §6.6).

5.6.2.2 The delimitation of verb meaning: pragmatics or polysemy?

As with all radically monosemous analyses, a good deal of caution is in order with respect to the analysis proposed in the previous section. Even if *-yu(nggu)* 'SAY/DO' exhibits an invariant semantic component in all of its uses, and differences in interpretation can be attributed to the other predicative elements that it combines with, and the various constructions that it occurs in, it is questionable whether this is sufficient to delimit the range of uses of *-yu(nggu)*, both from a language-internal perspective and a comparative perspective.

From a language-internal perspective, we need to explain why *-yu(nggu)* is not, in fact, used much more generally than it really is, since one could construe a great number of events as instances of 'internally cause, and give immediate evidence of an event'. In principle, therefore, *-yu(nggu)* could serve as a kind of dummy verb in many types of complex verbs.

However, there are a number of possibilities to delimit the unrestricted use of *-yu(nggu)*. These comprise both genuine restrictions, due to the semantics of this verb, and pragmatic preemption, i.e. the 'blocking' of the use of *-yu(nggu)* by the existence of other, semantically more specific verbs.

One of the most important restrictions on the use of *-yu(nggu)*, which is not adequately captured by the characterisation proposed here, is that it is never used to describe events with a patientive or affected or even only highly individuated second participant, that is, the 'prototypical transitive' events of Hopper & Thompson (1980), and 'highly effective' events of Tsunoda (1981b). This is formally reflected also in the fact that *-yu(nggu)* does not have a reflexive/reciprocal form, even though it is a transitive verb in terms of the paradigm of pronominal prefixes it takes.

The majority of other verbs in Jaminjung – i.e. all other formally transitive verbs – are devoted to categorising 'effective' events, distinguishing various forms of affecting an entity by physical contact (verbs of contact force, §5.4), by heat (verbs of heating, §5.5), by changing its locative relation (*-arra* 'PUT', §5.2.4), by transfer or removal of a possession (verbs of change of possession, §5.7), by ingesting (*-minda* 'EAT'; §5.8.2), and so on. Events of perception, although cross-linguistically less prototypically transitive, are also construed in the same way in Jaminjung, and are therefore not categorised by *-yu(nggu)*.

Crucially, even in expressions of speech where the addressee is construed as directly affected, *-yu(nggu)* 'SAY/DO' is not used, but rather one of a number of alternative verbs is used, mostly as part of complex verbs. These are *-ngarna* 'GIVE' (§5.7.1.2) and *-arra* 'PUT' (§5.2.4.2) in their readings of 'transfer of a message/of information', *-ma* 'HIT' in its secondary sense of 'completely affect someone/something' (§5.4.2.2), or *-ngawu* 'SEE' in its reading of 'direct aggressive behaviour towards someone' (§5.8.2.2). In particular, *-ngarna* 'GIVE' is used, in a quotation construction, in reciprocal expressions of telling ('say to each other'), since there is no corresponding form of *-yu(nggu)* (§5.7.1.3). With all of these verbs, but not with *-yu(nggu)*, the addressee can be encoded as Undergoer. The use of *-yu(nggu)* as a verb of speech is therefore, indeed, restricted to events of 'giving evidence of a sound/utterance'. To use a term introduced by Walsh (1991), speaking of the type categorised by *-yu(nggu)* is construed according to a 'broadcast' model, not an interaction model.

The contrast between 'effective' and 'non-effective' events can also be illustrated with expressions of 'throwing'. As shown in §5.4.7, a verb of induced motion, *-wardgiya* 'THROW', is always used if a specific effect of the 'throwing' on the 'thrown thing' is expressed. This could either be a change of location or a change of state. With *-yu(nggu)*, on the other hand, even though the 'thrown thing' is encoded as Undergoer, this participant is not construed as 'affected' in the same sense, since the effect of the 'throwing' cannot be further specified. In other words, complex verbs formed with *-yu(nggu)* can only encode release, i.e. 'throwing away'.

The criterion of 'effectiveness' leaves us with the five intransitive verbs as potential competitors of *-yu(nggu)*. Some of the criteria for verb choice, in this case, are captured by the semantic analysis proposed for *-yu(nggu)* in S5-21. For example, as we have already noted, *-yu(nggu)* is restricted to internally caused state changes, while state changes that cannot be construed as internally caused are expressed with the verb *-ijga* 'GO' in combination with a coverb of change of state (see §5.3.2.2).

In yet other cases, the Q principle – requiring the most specific available verb to be selected – will account for the fact that a verb other than *-yu(nggu)* is used. This is true in particular for locomotion events, which are almost invariably categorised by one of the verbs of locomotion, not by *-yu(nggu)*, even though locomotion is semantically compatible with the characterisation given in S5-21. As shown in §5.6.1.2.2, this boundary is not absolutely watertight, and *-yu(nggu)* may sometimes be used to describe locomotion events. However, the use of *-yu(nggu)* is restricted to the combination with a few coverbs, and the resulting complex verbs therefore have to be regarded as idiomatic.

The same holds for expressions of change of location and locative relation ('inchoative position'), which are usually expressed with *-irdba* 'FALL' (§5.2.3.1) and *-ma* 'HIT' (in its reading of 'emerge'; §5.4.2.3). Moreover, *-irdba* 'FALL' is neutral with respect to internal vs. external cause of the change of locative relation. Again, a certain degree of overlap between the categories can be found; for example, both *-irdba* 'FALL' and *-yu(nggu)* are attested with the coverb *wirriny* 'turn around'. Events encoded by this coverb may be categorised as either 'internal motion' (motion without a change of location), or as change of locative relation.

A similar partial overlap can be found between the extensions of *-yu(nggu)* and *-irna* 'BURN'. The latter, more appropriately characterised as 'be affected by heat' (see §5.5.1), is also neutral as to whether affectedness by heat is internally caused or not. Interestingly, as already indicated in §5.6.1.3 above, some of the coverbs encoding internally caused 'heating' events, i.e. those of heat and light emission, may combine not just with *-irna* 'BURN', but also with *-yu(nggu);* examples are *minyminy* 'be hot (of sun) and *malngarr* 'shine (of sun)' (see §6.8.2 for details). This is not possible for coverbs that describe the manner in which something is affected by heat which is not itself the cause of the heat, e.g. *bud* 'cook on coals' (see §6.8.1).

Finally, we are left with the intransitive verb *-yu* 'BE' as a potential competitor for *-yu(nggu).* Since *-yu(nggu)* has to be characterised as a dynamic verb, it follows that expressions of static location are always formed using *-yu* 'BE. However, *-yu* 'BE' in its function as auxiliary verb (see §5.2.1.2) can also be used to encode dynamic events (*-ijga* 'GO' has a parallel use; see §5.3.2.3). The difference is that complex verbs formed with *-yu* 'BE' or *-ijga* 'GO' as auxiliary verbs are thereby marked as atelic, while complex verbs formed with *-yu(nggu)* are neutral as to telicity. Thus, coverbs that are formally derived from telic predicates by one of the productive and semi-productive 'continuous' suffixes (see §3.3.1 and §6.3) belong to the formal 'activity' class, i.e. are restricted to combining with *-yu* 'BE' or *-ijga* 'GO'. In other words, the semantic component of atelicity here overrides all other components that could play a role in the choice of verb. As shown in more detail in §6.3, the class membership for activity coverbs is not necessarily predictable on a semantic basis. For example, quite a number of expressions of 'speech' are encoded by coverbs of activity, which therefore do not combine with *-yu(nggu).* The general coverb of speech activity, *yirrgbi* (J.)/*jarragab* (Ng.), belongs to this class, as do a number of coverbs encoding sound emission, e.g. *giyayib* 'whisper', *gambaja* 'laugh', *ngilija* 'cry', and *nganya* 'sing'.

There also appears to be some variation in class membership between coverbs of state (which may combine with both *-yu(nggu),* which in this case has an inchoative reading, and *-yu* 'BE'), and coverbs of bodily or emotional condition, which combine with *-yu(nggu)* exclusively (see also §6.4.3). In other words, the boundary between events that are categorised as dynamic, but low in effectiveness, by *-yu(nggu),* and events categorised as states by *-yu* 'BE', is also not clearcut.

This necessarily sketchy account suggests that it may be possible to explain the range of uses of *-yu(nggu),* and at the same time the restrictions on its use, partly by the inherent general meaning of the verb in a monosemous account, and partly by the absence vs. presence of other, more specific verbs. The decisions of speakers that were invoked in the account just given are summarised again in the flowchart in Fig. 5-20.

Thus, we find that the range of uses of *-yu(nggu),* heterogeneous as it may seem at first sight, is by no means unmotivated. One could further explore this account from a cross-linguistic perspective, in order to determine whether the overlapping but different extensions of comparable verbs in other languages may be similarly motivated. Until such comparative research is undertaken, it may be more appropriate, and safer, to capture the meaning of *-yu(nggu)* in a network of functions. In this way, differences in extension between verbs of different languages are more easily accounted for.

Both language-internal and cross-linguistic evidence allow us to draw a very tentative semantic map, a network of related uses, rather than simply listing the uses of *-yu(nggu)* as in §5.6.1. In Fig. 5-21, no attempt is made to formally characterise possible polysemous senses; rather, the nodes in the network are labeled by the semantic areas covered by *-yu(nggu).* All semantic areas are consistent with a general meaning of 'general performance'. Nodes that are closer in space are covered by a single verb in other languages, and/or show similarities in formal behaviour in Jaminjung. The types of semantic links that form the basis for this representation have been discussed in more detail throughout §5.6.2.1. This account also allows us to include semantic areas that are only marginally covered by *-yu(nggu),* such as locomotion, and sound emission, represented as boxes with lighter lines in Fig. 5-21.

Fig. 5-20. *Decisions involved in the choice of* -yu(nggu) *'SAY/DO'*

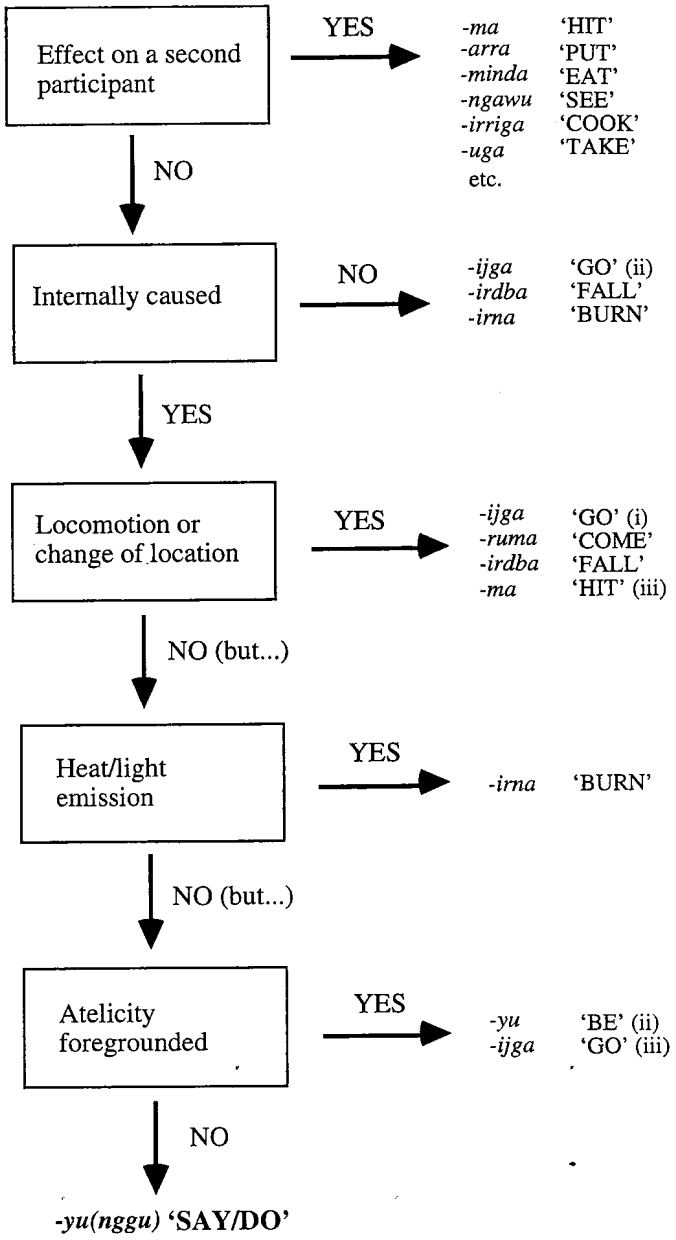
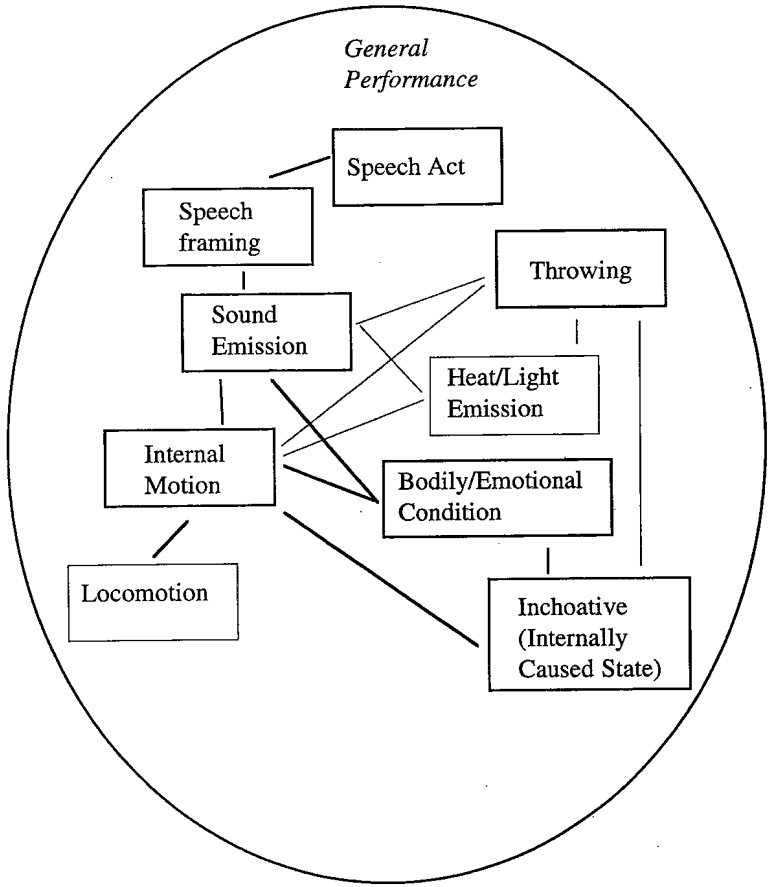


Fig. 5-21. *Possible network of uses of* -yu(nggu) *'SAY/DO'*



5.7 Verbs of caused change of possession

The class subsumed under the label of 'caused change of possession' contains only two verbs. The first is *-ngarna* 'GIVE', which categorises events of transfer of an entity to a recipient, but also has some metaphorical senses (§5.7.1). The second verb, *-yungga* 'TAKE AWAY', is the antonym of the first, and encodes the transfer of an entity away from a possessor (§5.7.2). These two verbs constitute a formally defined class in that they are the only trivalent verbs, that is, the only verbs which allow for three core arguments as simple verbs.

5.7.1 *-ngarna* 'GIVE'

The verb *-ngarna* in its basic sense (§5.7.1.1) can usually be quite straightforwardly translated as 'give'. It is relatively frequent (with a frequency of 2.1% in the text count), and most of its occurrences are as a simple verb. Even as a simple verb, it may receive a metaphorical reading of 'transmission of information' (§5.7.1.2) and 'reciprocal telling' (§5.7.1.3). In combination with certain coverbs of contact and effect, it comes to be used with a secondary sense of 'directed action' (§5.7.1.4), and is in opposition to the verbs of contact/force.

5.7.1.1 Transfer of possession

In its basic sense, *-ngarna* 'GIVE' encodes transfer of an entity into the possession of a recipient. Just as with *-muwa* 'HAVE' (§5.2.2), the distinction between permanent possession and temporary control is irrelevant, and the term 'possession' is used as a shorthand for both. The agent and the recipient are always animate; the entity given could be any kind of inanimate, e.g. food (5-305), or an animate, as in 'giving a wife for marriage' (5-306).

(5-305) mangarra gan-**ngarna**-ny=mindag Nangari-ni
plant.food 3sg:1-GIVE-PST=1du.incl.OBL <subsection>-ERG
'she gave you and me food, Nangari did' (JM, NUN010)

(5-306) ba-wurruny-**ngarna** thanthiya-gurna marlayi
IMP-2pl:3du-GIVE DEM-?? woman
'hand him over (the women), give the two (to him) those women' (IP, F03531)

As example (5-305) and (5-306) show, *-ngarna* allows for an absolutive noun phrase which is not cross-referenced on the verb, that is, for a third core argument, and can therefore be regarded as trivalent (see §4.1.1). Normally, the recipient, not the entity given, is encoded as Undergoer on the verb, and both may additionally be represented by an absolutive noun phrase. Only in the rare cases where the transferred entity ranks higher than, or equally high as, the recipient in the animacy/empathy hierarchy may the argument roles be reversed. An example is (5-306) above; see also §4.2.2.1.2.

The majority of occurrences of *-ngarna* are as a simple verb. Only a few coverbs are attested with *-ngarna* in its basic sense; these include the general, 'adverbial' coverbs *buru* 'return, back' (with the resultant reading 'give back') and *burrb* 'finish, do to all'. The latter, illustrated in (5-307), indicates complete transfer of multiple entities into someone's possession.

(5-307) ngawurru-**ngarna**-ny **burrb**, mununggu ngarrgina
1sg:3pl-GIVE-PST finish string 1sg:POSS
'I gave them all to them, my fishing lines' (JM, E16620)

A coverb of 'giving' (see §6.15.1) which is restricted to cooccurrence with *-ngarna*, and semantically includes the verb, is *juwi* 'hand over, pass' (see §4.3.3.3 for an example). The coverb of ballistic motion *lawu* 'spill, pour' may combine with a number of verbs, including *-arra* 'PUT' and *-ngarna* 'GIVE' (see §6.6). The latter two were used by the same speaker in describing the same real-world situation, in (5-308). With *-arra* 'PUT', the event is construed as one of spatial transfer, as also indicated by the presence of a location argument in (5-308a). The recipient is here only represented as a beneficiary with the oblique pronominal clitic. In (5-308b), through being encoded as the Undergoer of *-ngarna*, the recipient of the 'pouring' is made more prominent, and consequently, the overall event is construed as one of transfer of possession.

(5-308a) **lawu** nga-w-**arra** **gunyag**, birrigud-gi \
spill 1sg:3sg-FUT-PUT 2du.OBL tin-LOC
'I will pour it for you two, in the billycan' (IP, F03725)

b) ngabuny-**ngarna**=biya na:.. **lawu** \
1sg:FUT:2du-GIVE =NOW NOW spill
'I will pour you two (tea)' (IP, F03726)

The semantic characterisation in S5-22(i), of *-ngarna* in its basic sense, incorporates that of *-muwa* 'HAVE' (S5-2, in §5.2.2), with its components of 'spatial contiguity' and 'control'. It also captures the semantic relationship to *-arra* 'PUT' (see S5-4(i) in §5.2.4.1), in that the two verbs have a component of causation and change of locative relation. The verb *-ngarna* has a further restriction in that two of its participants, the 'giver' and the 'recipient', have to be animate.

S5-22(i) *-ngarna* 'GIVE' | x (animate) causes y to be located at z (animate), such that z controls y

5.7.1.2 Transfer of information

As a simple verb, *-ngarna* can also be used to express transfer of information. Here it has a function very similar to that of *-arra* 'PUT' in a secondary reading; the latter, however, is only found in complex verbs with coverbs of transfer of a message like *yurrg* 'show, teach' (see §5.2.4.3). The close semantic relationship of both types of expressions clearly shows in (5-309), where both are used as paraphrases of one another in immediate sequence.

(5-309) yagbali nga-**ngarna**-ny
place 1sg:3sg-GIVE-PST

yurrg nga-**rra**-ny
show 1sg:3sg-PUT-PST

'I showed him the country' (DM, Fieldnotes Mark Harvey)

The only coverbs which were found with *-ngarna* in a 'transfer of information' reading are Kriol loans, *lanim* (< Engl. *learn*) 'teach', and *juwum* 'show'. The latter is illustrated in (5-310a); it can also be combined with *-arra* 'PUT' even in the same context, as shown in (5-310b). This suggests that both verbs in their secondary readings overlap semantically (see however §5.2.4.3 for an account of a potential semantic difference).

(5-310a) janju=nud mangurn **juwum** burrarra-**ngarna**-ny bulawula
DEM=COLL2 white.person show:TR 3pl:3pl-GIVE-PST painting

'that lot of whitefellows, they showed them the paintings' (DR, D27120)

b) **juwum**=biyang .. burr-**arra**-ny .. ngiyinthu ngayiny .. birini
show:TR=NOW 3pl:3sg-PUT-PST PROX animal stingray

'they showed them that animal, the stingray' (rock art) (DR, D27116)

It is not so clear whether the reading 'show' in these examples really constitutes a secondary sense of *-ngarna*. One could argue that *-ngarna* here has a sense of metaphorical transfer: the information transferred is metaphorically treated as the 'entity given', and can in addition be metonymically encoded (for example, *yagbali* 'place, country' in (5-309) stands for 'information about the country'). On the other hand, in Jaminjung and Ngaliwurru culture – as in many other Aboriginal societes – knowledge and ownership (in the sense of control) are intricately linked, especially with respect to country. In this case there is no

clearcut difference between 'showing country' and 'giving country' (in the sense of transferring control over the country). The same argument could be made for the transfer of knowledge of a language, as expressed in (5-311).

(5-311) mulululrru bun-**ngarna**-m baaj
RDP:old.woman 3pl:1sg-GIVE-PRS speech

'the women teach me language' (VP, NUN140)

However, a notion of transfer of control is absent in (5-312), where the 'entity transferred' is a body part of the 'giver', and *-ngarna* simply translates as 'show, present'.

(5-312) jirrama mangurn, tharda bunthu-yu,
two white.person face.away 3du-BE.PRS

ngagaj bunthuny-**ngarna**-m \
back 3du:2sg-GIVE-PRS

'(there are) two men, they are turning their backs, they show you their backs' (Men & Tree 3.7) (MMc, D21)

The fact that *-ngarna* can have this reading as a simple verb could also be taken as evidence that the uses illustrated in (5-309) to (5-312) fall under its basic sense of 'giving'. The question will have to be left open here, as there are not enough occurrences in the data of *-ngarna* in this function to allow definite conclusions about the possible range of uses. The potential secondary sense is tentatively represented in S5-22(ii).

S5-22(ii) *-ngarna* 'GIVE' | x (animate) transmits y (information) to z (animate)

5.7.1.3 Reciprocal telling

A similar problem arises with regard to a different but related function of *-ngarna*. This is its use as a speech framing verb with a quotation or the interrogative coverb, illustrated in (5-313) and (5-314)

(5-313) "jawug mind-angga", burru-**ngarna**-ji barraj
short.time 1du.incl-GO.PRS 3pl-GIVE-REFL further

'"let's go for a short time", they say to each other then' (IP, F01216)

(5-314) **warndug**=warra buny-**ngarna**-ja?
do.what/how=DOUBT 3du-GIVE-REFL.PST

'I don't know what they were telling each other' (IP, E08323)

Here, *-ngarna* 'GIVE' has an analogous function to *-yu(nggu)* 'SAY/DO' in one of its uses (§5.6.1.1.1). A closer look at the data reveals that the verbs (in this function) are in complementary distribution: *-ngarna* functions as a speech framing verb only in its reflexive/reciprocal form, and thereby regularly substitutes for *-yu(nggu)* 'SAY/DO', which does not have a reflexive/reciprocal form, in order to encode events of reciprocal 'telling'. This use of *-ngarna* is therefore not only semantically motivated, as an instance of metaphorical transfer of speech/information, but also formally, by a gap in the verb system. This is represented in S5-22(iii) as another secondary sense of *-ngarna*, which is conventionally restricted to the reflexive/reciprocal forms.

S5-22(iii) *-ngarna-ji* 'GIVE-REFL' x/z (animates) say "y" to one another

5.7.1.4 Directed action

Relatively infrequently, *-ngarna* 'GIVE' occurs in a further secondary sense, which is restricted to complex verbs. These are reminiscent of English constructions of the type *give something a wash*. The role of the English nominal specifying the action is, in Jaminjung, fulfilled by a coverb. In both this use and the use described in §5.7.1.3, *-ngarna* parallels the general performance verb *-yu(nggu)* 'SAY/DO' whose 'event' participant can also be expressed by a coverb as well as a quotation.

A typical example of this use of *-ngarna* is (5-315a), involving the coverb *lurr* 'pierce'. The interpretation here is conative, i.e. the action of 'piercing' is described as being directed at someone with no resulting impact. With coverbs of this type, *-ngarna* is in opposition to the verbs of contact/force (§5.4), which, like *-ijja* 'POKE' in (5-315b), entail that contact of a specific type has been successfully made, and categorise the event according to the types of instruments or body parts involved in the contact.

(5-315a) **lurr-lurr** buny-**ngarna**-ji .. ni[149]-langiny-ni
RDP-pierce 3du-GIVE-REFL CL-wood-ERG/INSTR
'the two are poking at each other with a stick' (JM, F04353)

b) **lurr** nga-**yijja**-ny derl-derl-ngarna-ni
pierce 1sg:3sg-POKE-PST RDP-draw-ASSOC-ERG/INSTR
'I pierced it with a pencil' (paper) (JM, NUN046)

149 The speaker uses a noun from Nungali here, a closely related language with noun class prefixes (see §1.2.1).

The interpretation of complex verbs of this type is not necessarily conative. Rather, the semantic component which appears to be common to all of them is 'affect by indirect means'. For example, in (5-315a), just as in (5-316), the Actor affects the Undergoer by a mere threat of contact.

(5-316) **junggaj**=biya nga-**ngarna**-ny \
hunt.away=NOW 1sg:3sg-GIVE-PST
'I hunted it away' (dog) (JM, F04193)

On the other hand, complex verbs formed with *-ngarna* also describe scenes where the Actor affects the Undergoer by contact brought about indirectly, with the help of a medium like an airstream (*buwu* 'blow'; see (4-71) in §4.3.3.2 for an example), or water (*wurlmaj* 'splash water'; see §6.11 for an example). Coverbs encoding such kinds of 'indirect effect' (§6.11) therefore form complex verbs with *-ngarna* 'GIVE' almost exclusively (alternatively, *-ma* 'HIT', the semantically least specific of the contact/force verbs, is also used with some of them). Another example can be found in V/23 in the Appendix; here *-ngarna* is combined with the Kriol loan *julumab* (from Australian English *sool up*) 'incite someone to do something, set someone against someone else'. Here, too, indirect (i.e. non-physical) influence is the central component.

A contrast between indirect and direct affectedness, which is reflected in a contrast between the verbs *-ngarna* 'GIVE' and *-mili/-angu* 'GET/HANDLE', is presented in (5-317). The Kriol loan *hambag* is a multi-purpose word, used to describe any kind of 'nuisance' or interference with something. In (5-317a), it combines with *-ngarna* to describe a scene in the Frog Story picture book where a dog jumps up at a bee hive without touching it. In (5-317b), the verb encoding affectedness by contact, *-mili/ -angu* 'GET/HANDLE', is used with the same coverb, in reference to a little girl playing with the steering wheel in my car, clearly an event of physical interference.[150]

(5-317a) gurrany janju.. wajgany **hambag** yanji-**ngarna**:
NEG DEM honey humbug IRR:2sg:3sg-GIVE
'don't muck around with that beehive!' (boy to dog, in Frog Story) (DR, E01256)

150 These differences are not as clearcut as this brief discussion suggests, since *-mili/-angu* 'GET/HANDLE' also has a sense of non-physical interaction (§5.4.1.3). For some data, the context is not sufficiently clear to allow one to tell if *-ngarna* is in fact interchangeable with, or used in contrast to, this verb in complex verbs of the type just illustrated. Since *-ngarna* in this function is relatively rare, more textual data are needed to resolve the issue.

b) **hambag** gan-**angga**-m=nu
humbug 3sg:3sg-GET/HANDLE-PRS=3sg.OBL
'she is mucking around with it "on her"' (ER, MIX012)

In the expressions in (5-315a) to (5-317a), an event is metaphorically substituted for the entity transferred, in a way comparable to the English construction with *give* referred to above. The coverb thus fills a participant slot of the verb, in the way outlined in §4.2.3.3 and §4.3.3.2 (see in particular Fig. 4-25). In S5-22(iv) below, this is represented by the 'event' variable E. Consequently, this type of complex verb behaves syntactically like a bivalent simple verb, that is, it allows for two core arguments, while *-ngarna* as a simple verb allows for three core arguments. Moreover, since the coverb specifies the kind of effect on the 'recipient', the coverb itself has to be bivalent (just like the bases of deverbal nouns that can enter the English construction of the type *give a kiss).* The coverbs fulfilling these requirements all seem to belong to the classes of contact and effect (§6.9) or indirect effect (§6.11); this is also captured in the representation in S5-22(iv).

For English expressions of the type *give a kiss,* the semantic contribution of *give* has been described by Newman (1996: 201ff.) as 'schematic interaction'. Dixon (1991: 349f.) argues that the metaphorical recipient of the event in these expressions is presented as affected by the event. He also suggests an additional component of 'volitional action' (see also Newman 1996: 203), which means that the agent has to be animate. All these observations also hold for *-ngarna* 'GIVE' in its secondary sense, and have been incorporated in the semantic characterisation in S5-22(iv). Note that the selectional restriction on the metaphorical 'recipient' is loosened in comparison with the basic sense of this verb, since it can be animate or inanimate.

S5-22(iv) *-ngarna* 'GIVE' [__ $\text{Coverb}_{\text{Contact/Effect}}$]E — x (animate) directs event E at z
[__ $\text{Coverb}_{\text{IndirectEffect}}$]E — x affects z

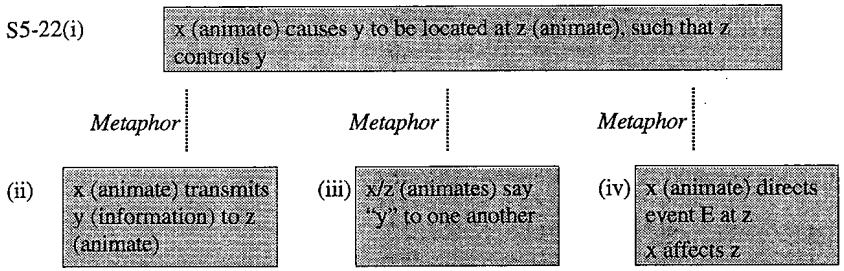
The characterisation in S5-22(iv) allows for the conative interpretation, as well as an interpretation whereby an effect is achieved by non-physical means (e.g. verbal means, or threat), or an interpretation whereby physical contact between two entities is brought about indirectly, e.g. by splashing water or blowing air.

Similar uses of a corresponding verb are also reported for other languages in the area, e.g. Ungarinyin (Saunders 1997: 42f.). Note that the examples given above – especially (5-315) and (5-316) – clearly show that the verb in this usage has no benefactive connotation. Interestingly, a benefactive use of *-ngarna* – although cross-linguistically widely attested for 'give' verbs – is, to my knowledge at least, completely absent in Jaminjung.

5.7.1.5 *-ngarna* 'GIVE': Summary

The polysemous senses of *-ngarna* 'GIVE' are summarised in Fig. 5-22.

Fig. 5-22. *Lexical network for* -ngarna *'GIVE'*



The basic sense of *-ngarna* corresponds to 'transfer of an entity into the possession of an animate' (§5.7.1.1). In this sense, it usually occurs as a simple verb, and with a few coverbs of 'giving'. All secondary senses are metaphorical, in that speech/information or events are metaphorically treated as the entity transferred. The reading of 'transfer of information' of *-ngarna* as a simple verb could also be regarded as a specific interpretation of its basic sense, rather than as a metaphorical secondary sense. A related sense, of 'tell, utter', is restricted to the reflexive/reciprocal forms of the verb, and a quotation as the metaphorical 'entity transferred'. In this use, *-ngarna* is in complementary distribution with the speech framing verb *-yu(nggu)* 'SAY/DO', which lacks a reflexive/reciprocal form (see §5.7.1.2). This is presumably why *-ngarna* is used in expressions of reciprocal 'telling'. Finally, in a small number of complex verbs, formed with bivalent coverbs, *-ngarna* is found in a further metaphorical reading of 'direct an event at someone/something'. In this use, a coverb specifying the event represents the second participant of the verb, and the resulting complex verbs are bivalent.

5.7.2 *-yungga* 'TAKE AWAY'

The second trivalent verb, *-yungga* 'TAKE AWAY', can be regarded as the antonym of *-ngarna* 'GIVE'. Of the three central participants of *-yungga*, two also have to be animate, but the entity that is transferred is not brought into the possession, but is removed from the possession of the second animate participant. No single English translation equivalent captures both the meaning and the valency of *-yungga*: the gloss 'take away' that is used here does not capture the fact that the participant that something is taken away from has to be expressed as a core argument (as the U prefix on the verb) with *-yungga,* nor that it has to be animate. The alternative gloss 'rob', which does convey these

restrictions, has an additional evaluatory component which is absent from *-yungga*.

Unlike its antonym *-ngarna* 'GIVE', *-yungga* 'TAKE AWAY' is, with 0.2% text frequency, a very marginal verb. Its marginal status is also reflected in the fact that, unlike *-ngarna*, *-yungga* is never found as a simple verb. Almost all of its occurrences are with a single coverb which appears to have the same meaning as the verb, *birrg* 'take something away from someone', as illustrated in (5-318) and (5-319). As these examples show, the 'taking away' events covered by *-yungga* range from the most everyday occurrences (a playful fight between children) to the serious offence of eloping with another man's wife.

(5-318) garrngan **birrg** ganiny-**jungga**-ya wamajngarna-ni
blood take.away 3sg:2sg-TAKE.AWAY-PRS mosquito-ERG
'the mosquito is stealing your blood' (DP, CHE250)

(5-319) majani janyung-ni **birrg** ganiny-bi-**yungga**,
maybe other-ERG take.away 3sg:2sg-FUT-TAKE.AWAY
'maybe someone else will rob you of her' (a wife) (IP, F03542)

The semantic contribution of *-yungga* can be evaluated separately from that of the coverb *birrg* only in the rare cases where the verb combines with other coverbs, e.g. the 'adverbial' coverb *burrb* 'finish, do V to all' in (5-320). The reading of the resultant complex verb is still 'take s.th. away from s.th.', and it still allows for three core arguments.

(5-320) **burrb** bun-**yungga**-ny marlayi-ni,
finish 3pl:1sg-TAKE.AWAY-PST woman-ERG
minyga=warra bilij
what's.it.called=DOUBT ashes
'they took all of it from me, the women did, what's it called, ashes'[151] (ER, MIX051)

Only two other coverbs are attested with *-yungga*: One is (not surprisingly) *bunug* 'steal, take something illicitly'. The other, illustrated in (5-321), is *gub* 'come out, come off'.

(5-321) mali **gub** ngany-**ungga**-ny
thing come.off 1sg:2sg-TAKE.AWAY-PST
'I took your clothes off you' (Fieldnotes Michael Walsh)

[151] Ashes from certain trees are a valued commodity, since they can be mixed with chewing tobacco.

The meaning component common to all these complex verbs can be identified as the semantic contribution of the verb *-yungga*, which is something like 'take away something from a person'. The coverb *birrg*, with which this verb usually collocates, completely or almost completely overlaps with it semantically. This is consistent with a tendency for (some) low-frequency verbs to be 'reinforced' by coverbs with which they overlap semantically (see also §5.10). In S5-23, *-yungga* is represented as the semantic antonym of *-ngarna* 'GIVE' (see S5-22(i) in §5.7.1). Unlike *-ngarna* 'GIVE', though, *-yungga* 'TAKE AWAY' is not attested in a secondary sense.

S5-23 *-yungga* 'TAKE AWAY' x (animate) causes y to be removed from its location at z (animate), and from the control of z

5.8 Other major verbs

The remaining verbs form a heterogeneous set, comprising a verb of visual perception, *-ngawu* 'SEE' (§5.8.1), a verb of ingestion, *-minda* 'EAT' (§5.8.2), and a verb of 'making', *-(ma)linyma* 'MAKE' (§5.8.3). A number of additional low-frequency, marginal verbs, some of which are restricted to the Ngaliwurru dialect, are discussed briefly in §5.9.

5.8.1 *-ngawu* 'SEE'

The verb *-ngawu* 'SEE' is restricted to expressions of visual perception (§5.8.1.1), with a minor metonymic extension to 'aggression' (§5.8.1.2). Visual perception is thus singled out from other sensory modalities, which are not categorised by specific verbs (with the exception of 'hearing' in Ngaliwurru, see §5.9.3). In both uses, *-ngawu* behaves like other transitive verbs, that is, the perceiver/aggressor is encoded as Actor, and the stimulus as Undergoer. It is one of the more frequent verbs, with a frequency of 4.5% in the text count.

5.8.1.1 Visual perception and direction of gaze

In a typological approach to perception verbs, one can distinguish between uncontrolled perception (e.g. 'see'), controlled perception (e.g. 'look at'), and stimulus-based (or source-based) perception (e.g. 'X looks old') (Viberg 1984). However, in many Australian languages, this distinction is not made, at least not for verbs of 'seeing' and some other perception verbs (Evans & Wilkins 1998). In Jaminjung, too, the verb of visual perception, *-ngawu,* can have both the 'uncontrolled' interpretation, as in (5-322), where the speaker describes the

experience of noticing blood on one of her grandchildren, and the 'controlled' interpretation, e.g. 'examine someone's blood' in (5-323).

(5-322) garrngan=biya nga-**ngawu**=nu=ngarndi, birang \
blood=NOW 1sg:3sg-SEE.PST=3sg.OBL=SFOC2 behind

'(I went down for my child then, and that child was lying down.) Then I saw the blood on him, behind (on the back of his head)' (IP, E09185)

(5-323) garrngan gan-**ngawu**
blood 3sg:1sg-SEE.PST

'she looked at my blood (pressure)' (nurse) (DP, FRA247)

Secondary predicate constructions are used as the functional equivalents of 'source-based' construction of the type 'X looks big'; again, this is typical for Australian languages (Evans & Wilkins 1998: 15). In (5-324), the nominal *gujugu* 'big' can be interpreted as a secondary predicate on the person seen, which specifies the characteristic that is perceived.

(5-324) gujugu na buru nga-w-uga,
big NOW return 1sg:3sg-FUT-TAKE

nuwina-bina femili, burru-wu-**ngawu** **gujugu** na,
3sg:POSS-ALL family 3pl:3sg-FUT-SEE big NOW

'as a big (girl) I will take her back then, to her family, they will see her as a big (girl) then' (or: 'she will look big to them') (ER, V97/1040-41)

Since Jaminjung does not have complement clauses, several strategies are employed to encode a stimulus that is an event (rather than an entity). The stimulus event may be expressed in a juxtaposed finite clause, indicated by bracketing in (5-325).

(5-325) gan-bu-ngawu=ma [ngayug buwu nga-w-irdbaj], (...)
3sg:1sg-FUT-SEE=SUBORD 1sg enter.water 1sg-FUT-FALL

'when it will see me diving in, (... it will then dive in for me)' (story about 'playing crocodile' in the swimming pool) (DR, D27157-60)

Alternatively, a stimulus event can be encoded as a non-finite subordinate clause – usually just a coverb – which is marked as secondary predicate with allative case (see §2.6.5.3); an example is given in (5-326).

(5-326) jarlig yurru-burru-**ngawu** **[yugu-yugung-bina]** \
child 1pl.incl-FUT:3pl-SEE RDP-run-ALL

'let's watch the children racing' (sports event at the school) (VP, E11020)

Although *-ngawu* occurs as a simple verb more frequently than as part of complex verbs, it is frequently found with coverbs encoding 'direction of gaze' (see §6.1.3), like *mung* 'look at, watch' – by far the most frequent coverb found with *-ngawu* – or *mirrang* 'look up' in (5-327). Here the complex verb combines with a dative noun phrase, yielding the reading 'look for something (by looking up)'. In cases like these, the Undergoer of the verb *-ngawu* is presumably the place looked at (see also (5-329) below).

(5-327) **mirrang** gani-**ngayi**-m wajgan-ku
look.up 3sg:3sg-SEE-PRS sugarbag-DAT

'she is looking up (the tree) for sugarbag' (DMc, TIM048)

Coverbs from other classes are only rarely found with *-ngawu*. Positionals are attested specifying the position of the 'perceiver'; the positional *gurdij* 'stand (still)' in (5-328) is, in addition, combined with a coverb of direction of gaze, *riyi* 'on lookout'.

(5-328) **gurdij** **riyi::** gani-**ngawu** yangarra-ni=marlang \
stand on.lookout 3sg:3sg-SEE.PST kangaroo-ERG=GIVEN

'The kangaroo was standing up and looking out.' (DB, E10072)

A special coverb, *wang*, restricted to occurrence with *-ngawu* and *-yu(nggu)* 'SAY/DO', encodes 'looking in vain for something', i.e. 'looking at a place without seeing what one expects'. As in (5-327) above, the entity that is looked for is not cross-referenced on the verb, but encoded as an oblique pronominal; again, the Undergoer of the verb is presumably the place looked at.

(5-329) yawayi, **wang** yirri-**ngawu** gunyag
yes look.in.vain 1pl.excl:3sg-SEE.PST 2du.OBL

'yes, we were looking in vain for you two' (IP, F03748)

The meaning of *-ngawu* is characterised in S5-24(i) as not only including a semantic component of visual perception, but also a component of 'direction of gaze'. This captures a restriction in the distribution of this verb, in that it is unacceptable in combination with the coverb *ngalinggi* 'look askance', which specifies that the eyes are not directed at the entity in question. The component of 'direction of gaze' also motivates the metonymic secondary sense of *-ngawu*, 'aggressive behaviour', to be discussed below. The paraphrase 'visually perceive' was adopted because it is neutral as to the 'controlled' or 'uncontrolled' reading. It follows from the meaning of the verb that the perceiver has to be animate.

S5-24(i) *-ngawu* 'SEE' x (animate) directs x's eyes at y
x visually perceives y

As a simple verb, *-ngawu* can also be used in the reading of 'visit, come to see someone'. The passage in (5-330) is a message which the speaker asked me to pass on to a friend.

(5-330) gan-bu-**ngawu** yirrag,
3sg:1-FUT-SEE 1pl.excl.OBL

nganthan-nyunga, this long time nyunga na,
what-ORIG ORIG NOW

gurrany nga-**ngawu**,
NEG 1sg:3sg-SEE.PST

'she should (come and) see us, since what, since such a long time ago now I haven't seen her' (NR, V96/3.025-27)

This use is not inconsistent with the characterisation proposed in S5-24(ii), since the reading 'visit' can be derived by pragmatic enrichment of the basic sense of 'visual perception' based on metonymy.

5.8.1.2 Aggressive behaviour

A secondary sense of *-ngawu* is found only[152] in combination with coverbs which themselves encode (non-physical) aggressive behaviour, or behaviour which can be interpreted as negative interaction, such as laughing at someone (see §6.18). The most frequent coverb combining with *-ngawu* in this sense is *wirrij* 'violent, aggressive, angry', illustrated in (5-331) (see also §5.9.8).

(5-331) ya, **wirrij-wirrij** ganurru-**ngayi**-m, jungulug-ni \
yes RDP-angry 3sg:3pl-SEE-PRS one-ERG

'yes, he argues with them, one person does' (IP, F03626)

Another coverb attested with *-ngawu* in this secondary sense is *jirrija* 'jealous' (5-332a), as well as its Kriol equivalent *jarlaj* (5-332b).

(5-332a) ngarrgina: .. garlaj,
1sg:POSS younger.sibling

majani gujang-garni, **jirrija** gan-**ngangayi**-na,
maybe mother-MOTIV jealous 3sg:1sg-RDP:SEE-IMPF

'my younger sister, maybe over mother, she was jealous of me' (DP, E17055-57)

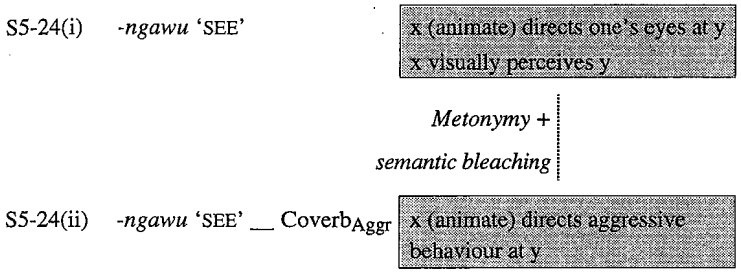
152 In a single case, the verb *-ngawu* also occurred as a simple verb in the reading 'argue'; however, this clause was embedded in a narrative about a fighting couple where the coverb *wirrij* had already occurred several times.

b) **jarlaj** buny-**ngangayi**-ji-na \
jealous 3du-RDP:SEE-REFL-IMPF

'the two were jealous of each other' (Emu and Brolga Story) (DM, E19104, recorded by Mark Harvey)

As already indicated above, the secondary sense of *-ngawu* 'direct aggressive behaviour at s.o.' is motivated by a metonymic link to its basic sense. Visual perception, in the events covered by *-ngawu* in its basic sense, necessarily coincides with the eyes of the perceiver being directed at the stimulus. The 'direction of gaze' component gives rise to a metonymic enrichment, built on a culture-specific interpretation of direct eye contact as aggressive behaviour (or else as sexual advance[153]). The 'perception' component is bleached in the secondary sense. Avoidance of direct eye contact has been reported for several Australian Aboriginal cultures, and it is therefore not surprising that a verb of visual perception takes on a similar secondary sense also in other Australian languages (Evans & Wilkins 1998). The link between the two senses is represented in Fig. 5-23.

Fig. 5-23. *Polysemy of* -ngawu *'SEE'*



Evans & Wilkins (1998) further show that a semantic extension of verbs of visual perception to higher cognition is much rarer in Australian languages than in Indo-European languages. In Jaminjung, *-ngawu* 'SEE' is attested with two coverbs conveying notions of responsibility, *mayimayibba* 'think about someone, worry for someone', and *gulurr* 'feel sorry, feel responsible for someone'. However, these complex verbs came up only in elicitation and not in spontaneous discourse, and more research is needed to determine the extent to which this semantic area is also covered by the verb *-ngawu*.

153 With one coverb in the database, *ngurlu* 'desire', *-ngawu* conveys a connotation of illicit sexual advance; see §4.2.1.2 for an example.

5.8.2 *-minda* 'EAT'

The transitive verb *-minda* is glossed here as 'EAT' but in fact covers all types of ingestion: eating, drinking, and inhaling. In two thirds of its uses, it occurs as a simple verb; the coverbs co-occurring with *-minda* are fairly restricted in number and type. The default interpretation for *-minda* as a simple verb is 'eat', i.e. consumption of solid food, predicated of any animate.

(5-333) wajgany gani-**mindi**-ya yulang-giyag warrba-ni
honey 3sg:3sg-EAT-PRS flower-ABL flying.fox-ERG
'the flying fox eats honey from flowers' (DR, CHE183)

When *-minda* is used to express 'drinking', this is usually made explicit with the coverb *burlug* 'drink', as in (5-339) below. However, as (5-334) shows, *-minda* may receive the same interpretation of 'drinking' as a simple verb; the interpretation can be derived solely from the semantics of the Undergoer argument.

(5-334) nga-**minda**-ny, ngayug, gugu / ... nga-wunga-ny \
1sg:3sg-EAT-PST 1sg water 1sg:3sg-LEAVE-PST
'I drank alcohol (lit.: 'water'), me. (But) I gave it up' (JM, E16511)

Even the interpretation of 'inhaling' is covered by *-minda* as a simple verb. An interesting example of the 'inhale' reading is the expression in (5-335), regularly used by a speaker who suffered from severe asthma and had to take medication several times a day. The Kriol loan *mijin* 'machine' refers to the inhalator, but this utterance is of course not intended to mean 'I will eat the machine'; rather, *mijin* metonymically represents the medication.

(5-335) mijin nga-**bida**
machine 1sg:3sg-FUT:EAT
'I'm going to inhale (asthma medicine) with the machine' (MW)

In other cases, the intended reading can again be straightforwardly derived from the Undergoer argument, e.g. *ngayimaj* 'breath' in (5-336).

(5-336) ngayimaj judbung gani-**minda**-ny
breath short 3sg:3sg-EAT-PST
'she was out of breath' (Orig. Tr.: 'she got short wind') (DR, D27106)

It should be pointed out that *-minda* is used only for unusual kinds of 'breathing', e.g. 'inhaling', 'being out of breath', or 'taking a deep breath'. To describe normal breathing, an intransitive construction with a coverb of continuous activity, *ngayib* 'breathe', is used. The coverb used for the general activity of 'eating', *Jawaya,* also belongs to this formal class and never

combines with *-minda*. The frequency of expressions of 'ingestion' formed with coverbs of continuous activity and the auxiliary verbs *-yu* 'BE' or *-ijga* 'GO' partly explains the relatively low frequency of *-minda*, which is only 1.5% in the overall text count.

The coverbs attested with *-minda* form a very small set. Some (listed as coverbs of ingestion in §6.10) encode a specific manner of ingestion, e.g. *yib* 'sip' in (5-337), and, as already mentioned, *burlug* 'drink' (see (5-337) below).

(5-337) **yib** nga-**bida**
sip 1sg:3sg-FUT:EAT
'I will sip it' (soup)

The general phase coverb *burrb* 'finish, do V to all', often combines with *-minda* in the reading 'eat up'. A phase coverb specific to ingestion is *dum* (J.)/ *darnku* (Ng.) 'full, satiated', illustrated in (5-338).

(5-338) daggarrag gani-yu, **dum** gani-**minda**-ny mangarra
burp 3sg:3sg-SAY/DO.PST full 3sg:3sg-EAT-PST plant.food
'she burped; she ate food such that she is full' (ER, MIX014)

So far, *-minda* 'EAT' was referred to as a generic verb of ingestion. There is some evidence that S5-25 is a more appropriate characterisation. This covers the range of uses of this verb in expressions of 'eating' (solid food), 'drinking', and 'inhaling'; however, according to this characterisation, *-minda* does not entail that an entity is also swallowed. Thus, *-minda* may be used even if the food or liquid is spat out again after taking it into the mouth, as shown in (5-339).

S5-25 *-minda* 'EAT' x (animate) takes y into x's mouth

(5-339) gugu **burlug** nga-**minda**-ny,
water drink 1sg:3sg-EAT-PST
dud nga-muwa,
hold 1sg:3sg-HAVE.PST
nga-rdgiya-ny jarra-ngunyi jurruny-bina
1sg:3sg-THROW-PST mouth-ABL hand-ALL
'I took water in my mouth, I held it, and I spurted it from my mouth into my hands' (JM, NUN238-240)

The semantic characterisation in S5-25 also accounts for the fact that chewing tobacco is described with *-minda.*

(5-340) warlayarra biyang=ung burrb ga-ngga yurri:::,
tobacco NOW=COTEMP finish 3sg-GO.PRS 1pl.incl

nganthan yurri-**bida**!
what 1pl.incl:3sg-FUT:EAT

'the tobacco runs out on us now, what are we going to chew!?' (DB, G04-02)

Furthermore, the characterisation in S5-25 can explain the seemingly 'abnormal' behaviour of the coverb for 'swallow', *ngilJig*. This would be expected to combine with *-minda*, but in fact only does so in very rare circumstances, and usually combines with *-arra* 'PUT' (see III/2 in the Appendix for an example). If *-minda* 'EAT' primarily encodes taking something into the mouth, this apparent idiosyncrasy makes more sense: one would not usually refer to the stage of swallowing, after having already taken food into the mouth, with the verb *-minda*; instead, the general verb of induced change of locative relation, *-arra* 'PUT' (§5.2.4.1), is used. The only exceptions in the data are (5-341) and (5-342).

(5-341) janga nga-yu, gurrany nga-**mindi**-ya **ngiljig**
sore 1sg-BE.PRS NEG 3sg:3sg-EAT-PRS swallow

'I'm sore (i.e. have a sore throat), I can't swallow' (MW, CHE123)

(5-342) **ngilthig** gani-**mindi**-ya, barndala=wung \
swallow 3sg:3sg-EAT-PRS whole=COTEMP

'it swallows it whole' (snake -> kangaroo) (DR, CHE206)

Both exceptions can be explained with exceptional circumstances of the 'swallowing'. In (5-341), the activity of eating as a whole, and not only swallowing, is impaired by the sore throat. In (5-342), the process of devouring a whole kangaroo would involve some part of it already down the snake's 'throat', while other parts are still in the 'mouth', or sticking out.

The characterisation given in S5-25 does not cover the – rare – metaphorical uses of *-minda* 'EAT', which may be regarded as idiomatic. In the attested examples, a flood, in (5-343), and the cold, in (5-344), are metaphorically represented as animate entities 'eating' a human.

(5-343) gugu yan-**minda** mindag, **wilany** biyang
water IRR:3sg:1-EAT 1du.incl.OBL floodwater NOW

'the water would devour us, the floodwater' (if the Argyle dam broke) (DP, RIV024)

(5-344) garrij-ni gan-**mindi**-ya
cold-ERG 3sg:1sg-EAT-PRS

'the cold is 'eating' me', 'I'm cold' (JJ, D18001)

An idiomatic complex verb, illustrated in (5-345), is the combination of *-minda* with the coverb *ngarda*, which is translated by speakers as 'heartbreak'. Other examples of this combination in the data clearly show that the person experiencing anxiety is encoded as the Actor on the verb, not the Undergoer. This use may therefore be a metonymic extension of the 'inhale' reading of *-minda*, but the evidence is not conclusive.

(5-345) jalig=malang biyang, **ngarda** gani-**minda**-ny=nu, wirib-gu
child=GIVEN NOW anxious 3sg:3sg-EAT-PST=3sg.OBL dog-DAT

'the child then was really worried about him, about the dog' (Frog Story) (CP, E18198-200)

5.8.3 *-(ma)linyma* 'MAKE'

The transitive verb *-(ma)linyma*[154] 'MAKE', like its English translation equivalent, can be paraphrased as 'create, produce an object'. Unlike English *make,* however, *-(ma)linyma* is a rather infrequent verb (with only 0.6% overall frequency), and is mostly used as a simple verb in its basic sense (§5.8.3.1). While it also has a causative reading, this is attested only in a small number of complex predicates (§5.8.3.2). Unlike creation verbs in a number of European languages other than English (e.g. German *machen* and French *faire),* *-(ma)linyma* is also not used as a general performance verb. As I have shown in some detail in §5.6, this function is fulfilled by *-yu(nggu)* 'SAY/DO' in Jaminjung.

5.8.3.1 Creation/transformation

As a simple verb, *-(ma)linyma* most frequently describes making an artefact, as in (5-346).

(5-346) garna nga-b-**ilinyma** ngayin-ku
spear 1sg:3sg-FUT-MAKE meat-DAT

'I will make a spear for (hunting) meat' (DD, DAR006)

[154] The stem *-ilinyma* is the Jaminjung form, *-malinyma* the Ngaliwurru form (see §2.4.2.1).

It is moreover used productively to refer to any kind of creation of an entity, e.g. of a language recording on tape in (5-347). In its 'creation' reading, it is only attested as simple verb.

(5-347) mind-**alinymayi**-na... minyga jalwany-ngarna
1du.incl:3sg-MAKE-IMPF what's.it.called talk-ASSOC

'you and me were making a, what's it called, tape recording' (DM, fieldnotes Mark Harvey)

As has been widely noted (e.g. Moreno 1993, Levin 1993: 172ff., Pederson 1991: 234), creation, i.e. 'bringing something into existence' often has to be characterised as a transformation of an already existing entity. In Jaminjung, this entity (the 'source material'), if represented, is marked with the origin case, as illustrated in (5-348).

(5-348) gani-**malinyma**-ny, ngurraginy \ ngurraginy \
3sg:3sg-MAKE-PST dingo dingo

mad-nyunga, ah, **wungurd-nyunga** \
mud-ORIG mud-ORIG

'He made it, the dingo. The dingo. From mud' (from a narrative that incorporated elements of the biblical version of the creation story) (JM, E03139-2)

This relationship between creation and transformation is captured in the semantic characterisation in S5-26(i).

S5-26(i) *-(ma)linyma* 'MAKE' x brings y into existence (from something)

The possibility of reading *-(ma)linyma* as a verb of transformation also accounts for its use with a predicative nominal, such as *jarlag* 'good' in (5-349) (see also III/34 in the Appendix for a comparable example), or a numeral, such as *jirrama* 'two' in (5-350), encoding a resultant state.

(5-349) ba-n-**malinyma** **jalag** ngarrgina wirra
IMP-2sg:1sg-MAKE good 1sg:POSS hair

'make my hair pretty' (JM, CHE096)

(5-350) gad=na nganthi-ma-m, (...)
cut=NOW 2sg:3sg-HIT-PRS

jirrama=biyang nganji-**malinyma**-ya \
two=NOW 2sg:3sg-MAKE-PRS

'you cut it now, (...) you make it (into) two' (JM, E16107/9)

The close relationship between 'creation' and 'transformation' is even more apparent in (5-351b), which in the context of (5-351a) could read 'I make a good one' or 'I make it good (i.e. soft)'. The 'actual/potential' ambiguity of the nominal encoding the effected (or affected?) entity, *bagarli* 'paperbark/ artefact made from paperbark', also reflects the continuity seen in the transformation of a material to an artefact.

(5-351a) nga-**malinyma**-ny=nu **bagarli**
1sg:3sg-MAKE-PST=3sg.OBL paperbark

b) jarlag nga-**malinyma**-ya, balbalya ya-yiyaj wayili
good 1sg:3sg-MAKE-PRS hurt IRR:3sg-BE back

'I made a paperbark (container) for her. I make it soft, (otherwise) her back might hurt' (referring to a carrier for a baby) (JM, NUN052-3)

5.8.3.2 Causation

Like English *make,* and verbs of creation cross-linguistically (cf. Pederson 1991: 235, Moreno 1993), *-(ma)linyma* is also used in a causative reading. However, this use is extremely rare; it accounts for only 0.1% of all verb tokens in the database. Since Jaminjung lacks complement clauses in general, *-(ma)linyma* in a causative reading only occurs as part of a complex verb. Here the event that is encoded by the coverb is metaphorically treated as an entity, filling the position of the participant 'brought into existence' in the basic sense of the verb. Only seven coverbs in total are attested with *-(ma)linyma*; some of these are illustrated in (5-352) to (5-354). These coverbs do not all belong to the same class. For example, *butharl* 'sad, weak' in (5-352) and *wangarr* 'mad' in (5-353) are coverbs of 'emotional condition', *girrgirrmib* 'remember, reminisce' in (5-354) is a coverb of continuous activity, and *walnginy* 'walk' in (5-355) below is a coverb of manner of motion.

(5-352) **butharl** gan-**kilinyma**-ya mayi nganya ga-yu=ma
sad/weak 3sg:1sg-MAKE-PRS man sing 3sg-BE.PRS=SUBORD

'he makes me sad, the man who is singing'; 'it makes me sad when the man is singing' (MJ, JAM292)

(5-353) yawayi, **wangarr** burr-**ilinyma**-ji,
yes mad 3pl-MAKE-REFL

wangarr burr-unggu-m=biya langa \
mad 3pl:3sg-SAY/DO-PRS=NOW ear

'yes, they make each other mad, they are mad then "in the ear"' (IP, E09266)

(5-354) **girrgirrmib** gan-**kilinyma**-ya
remember 3sg:1sg-MAKE-PRS
'it makes me think of something' (DP, JAM302)

Although it is difficult to account for the exact function of *-(ma)linyma* in its causative reading on the basis of such little data, a few restrictions can be formulated. The first is that *-(ma)linyma* only combines with monovalent coverbs. This is because the resulting expression is a canonical complex verb, subject to restrictions on argument sharing. In particular, each participant of a bivalent coverb has to share an argument slot with a participant of the verb it combines with (see §4.3 and §4.4). Since the causative function of *-(ma)linyma* lies precisely in introducing an additional participant with respect to the coverb, it follows that bivalent coverbs are excluded from combination with this verb. (According to Blake (1987: 67), causativisation is restricted to intransitive verbs in Australian languages in general.) In this way, these expressions are quite different from the English periphrastic construction with *make,* which has no counterpart in Jaminjung. The only functional equivalent to a periphrastic causative found in the data is a quotation framed by a speech verb, as illustrated in (5-355) below.

A further restriction on the causative use of *-(ma)linyma* seems to be that the causee has to be animate, and the coverb has to encode an internally caused event. In the sense intended by Levin & Rappaport (1995) (see also §5.7.2.1 and §6.4), 'internal cause' is not equivalent to 'control' (of the event by the causee), a term often used to define indirect causation. Obviously, one cannot assume that the causee 'controls' being sad or mad in (5-352) and (5-353). However, the causer (or causing event) only provides a stimulus to which the causee shows a reaction which can be described as 'internally caused'.

Presumably, *-(ma)linyma* is so restricted in its use because for events of physical cause and effect, the manner of causation has to be made specific, usually by one of the verbs of contact/force (§5.4), or the verbs of heating/burning (§5.5). The verb of creation, *-(ma)linyma*, on the other hand, is non-specific as to the manner of causation, but by the Q principle is restricted to those cases where the more specific verbs do not apply (just like the periphrastic causative in English, cf. McCawley 1978).

Moreover, there are alternative strategies even for expressing non-physical causation. Where the causation involves verbal means, this can be expressed with the speech and performance verb *-yu(nggu)* 'SAY/DO', framing a quotation. In (5-355), a complex verb formed with *-(ma)linyma* is immediately paraphrased with such a complex expression with *-yu(nggu)* 'SAY/DO'.

(5-355) **warlnginy** ba-**marlinyma**
walk IMP-MAKE
ba-**yu**=nu [**warlnginy** ga-w-**ijga**]
IMP-SAY/DO=3sg.OBL walk 3sg-FUT-GO
'Make him walk. Tell him he should walk' (DM, fieldnotes Mark Harvey)

With coverbs of spatial configuration, e.g. *mun* 'belly down' in (5-356), *-(ma)linyma* was claimed by speakers to be interchangeable with *-arra* 'PUT' (the regular 'causative' verb with these coverbs, see §6.1.1) to describe indirect, non-physical causation. However, only *-arra* 'PUT' (which also does not entail direct physical contact between the agent and the entity changing its locative relation; see §5.2.4.1 for details) was used spontaneously in comparable contexts, as in (5-357).

(5-356a) jalig nga-**rra**-ny **mun**
child 1sg:3sg-PUT-PST belly.down
b) jalig nga-**linyma**-ny **mun**
child 1sg:3sg-MAKE-PST belly.down
'I made the child lie on her belly' (LR)

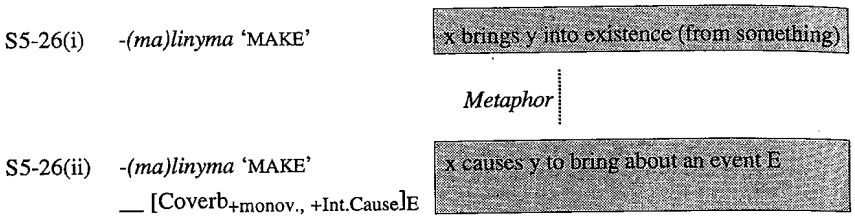
(5-357) **waga** ba-**rra**
sit IMP-PUT
'make him sit down' (dog) (= Orig. Tr.) (ER, CHE221)

The most serious competitor for *-(ma)linyma* in a causative reading is the verb *-mili/ -angu* 'GET/HANDLE'. Just like *-(ma)linyma*, *-mili/-angu* does not necessarily have to express direct (i.e. physical) causation, since it has a secondary sense of '(non-physical) interaction' (see §5.4.1.3). Consequently, both verbs are found in complex verbs with similar meanings. For example, *-mili/ -angu* 'GET/HANDLE', in its secondary sense, is found in a causative reading with coverbs of continuous activity like *gambaja* 'laugh' (see (6-27) in §6.3 for an example), with coverbs of state like *jurriya* 'knowledgeable' (see (5-188) in §5.4.1.3 for an example), and also with coverbs of bodily or emotional condition; compare (5-358) with (5-352) above.

(5-358) **butharl** nganthin-**ngangga**-m
sad/weak 2sg:1sg-GET/HANDLE-PRS
'you are making me sad' (context of Jarrarda singing) (ER, fieldnotes 1999)

On the basis of the few examples of a causative use of *-(ma)linyma* 'MAKE', it is difficult to delimit its range of uses, and to distinguish it semantically from the verbs employed in the alternative strategies. There is even a possibility that the

causative use of *-(ma)linyma* with coverbs only arose as a calque from English or Kriol. The characterisation in S5-26(ii) can therefore only be regarded as tentative, although it does include the restrictions (outlined above) on the coverbs combining with *-(ma)linyma*. It does not appropriately capture the metaphorical link from the basic meaning, since the 'event' participant in S5-26(ii) corresponds to the second participant (y) in S5-26(i), while the second central participant (y) in S5-26(ii) is the additional participant contributed by the coverb.



5.9 Marginal verbs

The remaining nine verbs, included here for the sake of completeness, mainly have in common that they are extremely infrequent. None of them was found more than 10 times in the entire database, and a number of them only occurred in elicitation. Consequently, the description of their meaning has to remain very tentative, and no formal semantic characterisation is offered for most of them. It is obvious, though, that they are semantically more specific than most of the more frequent verbs, to a degree that makes it surprising that they are included in the closed class of verbs at all (see also §5.10). These verbs are *-garra* 'excrete'[155] (§5.9.1), *-yangma* 'fear' (§5.9.2), *-malangawu* 'hear' (§5.9.3), *-warrwa* 'swear at' (§5.9.4), *-yima* 'tell a lie' (§5.9.5), *-inijba* 'do by magic' (§5.9.6), *-ngardgani* 'be sick' (§5.9.7), *-manka* 'be angry' (§5.9.8), and *-yangi* 'be†' (§5.9.9).

Six of these verbs are only attested in Ngaliwurru; thus, Ngaliwurru has a slightly larger verb class than Jaminjung. It is quite possible that there are several more very marginal verbs in Ngaliwurru in particular, which are not attested in the data. In Jaminjung, most of these verbs have as translation equivalents complex verbs formed with a coverb that is sometimes cognate with the Ngaliwurru verb.

155 Because of the greater semantic specificity of these verbs, their glosses will be in lower case rather than small capitals.

The verbs in this residual class also have in common that they are only used as simple verbs, with two exceptions. These are *-manka* 'be angry', which only occurs in collocation with a single coverb, and *-malangawu* 'hear', which occurs both as a simple verb and with a small number of coverbs.

5.9.1 *-garra* 'excrete'

The transitive verb *-garra* 'excrete' is only attested in reference to laying eggs, of birds or reptiles. It is not accepted by speakers of the Jaminjung dialect, who suggest *-arra* 'PUT' as the correct verb. Interestingly, even Ngaliwurru speakers use these two verbs interchangeably, as both (5-359) and (5-360) show.

(5-359) gardawalng.. gani-w-**arra** warrij-ni, barung \
egg 3sg:3sg-FUT-PUT crocodile-ERG hot.weather

julag-di olrait,.. burr-**arra**-m \
bird-ERG all.right 3pl:3sg-PUT-PRS

<x burru-**garra**-m x>=guji
3pl:3sg-excrete-PRS=FIRST

gani-**garra**-m julag-ni
3sg:3sg-excrete-PRS bird-ERG

'eggs, the freshwater crocodiles will lay in the hot season; the birds all right, they lay, they lay already, they lay, the birds' (JM, F04360-4)

(5-360) gurrany ganirri-**garra**-ny
NEG 3sg:3pl-excrete-PST

(ESB: gurrany-) DR: gani-**garra**-ny
NEG 3sg:3sg-excrete-PST

wanang=warra gan-**arra**-ny, majani \
where=DOUBT 3sg:3sg-PUT-PST maybe

'(we two didn't find any, no eggs...) it didn't lay them, it didn't lay any – somewhere, I don't know where, it put them, maybe' (DR, D27010-4)

This substitution of *-arra* 'PUT' for *-garra* 'excrete' is not all that surprising: the two verbs are not only formally almost identical and presumably etymologically related, but they are also related semantically.[156] Both verbs can

156 This semantic relationship is also reflected in verbs in other languages which may have a specific reading of 'lay (eggs)' and a general reading of 'put', e.g. German *legen*, and in the substitution of an 'excrete' verb with a 'put' verb in the Kalam Pandanus language (Pawley 1992: 313).

be used to express a caused change of location: *-arra* 'PUT' encodes caused change of locative relation in general, represented in S5-4(i) (§5.2.4.1) as 'x causes y to be in a locative relation with respect to a location'. This verb can be said to semantically include *-garra*, which encodes a very specific type of caused change of location where an entity changes location from inside to outside the agent's body, as represented in S5-27.

S5-27 *-garra* 'excrete' x causes y to be outside x's body

For several reasons, the more general semantic characterisation in S5-27 is proposed for this verb, rather than the specific 'lay eggs'. First, S5-27 comes close to a semantic explication that was offered to me by a Ngaliwurru speaker. Second, other languages of the area, like Gurindji (Patrick McConvell, p.c.) and Warlmanpa (Nash 1998c), possess a semantically comparable verb, glossed as 'excrete' or 'void', which also covers 'defaecating', 'urinating' and 'giving birth'. The fact that for these events, alternative expressions are used in Ngaliwurru can be explained partly by the general preference for imperfective intransitive complex verbs over transitive verbs (*ngurija* 'defaecate' and *gumbulala* 'urinate' are coverbs of continuous activity which combine with *-yu* 'BE' or *-ijga* 'GO'; see §6.3), and partly by taboo. Although 'giving birth' was never expressed by *-garra*, but only by the euphemistic expression corresponding to English *have a child* (using the verb *-muwa* 'HAVE'), the reaction of one speaker, when directly confronted with the question whether *-garra* 'excrete' also covered 'giving birth', strongly suggested that this is a restriction based on taboo, rather than semantic incompatibility.

These heavy restrictions on the use of *-garra* 'excrete', and the fact that it is already frequently replaced by *-arra* 'PUT', make it very likely that *-arra* is well on its way to substituting for *-garra* completely. Here we have another example of language change resulting from the loosening of the Q principle (which requires the use of the most specific verb available) in favour of the I principle (which allows for wide use of semantically general verbs which obtain specific readings in context).

5.9.2 *-yangma* 'fear'

The transitive verb *-yangma* always straightforwardly translates as 'fear, be afraid of'. Two examples illustrating its use are given in (5-361) and (5-362).

(5-361) Nangari wuju-ni=biyang ganiny-**jangma**-ny, yintit,
<subsection> small-ERG=NOW 3sg:2sg-fear-PST TAG
'Little Nangari was frightened of you, wasn't she?' (IP, F01262)

(5-362) majani gurrany gani-**yangma**-ya wurlngan \
maybe NEG 3sg:3sg-fear-PRS sun
'maybe she is not afraid of the sun' (JM, E16347)

The low frequency of this verb is partly explained by the fact that a complex verb, formed with the coverb of state *yarrajgu* or *yarrajgiyung* 'afraid' and the intransitive verb *-yu* 'BE', is used much more frequently than its transitive counterpart (compare English *be afraid of* and *fear*). Here, the 'stimulus of fear' is not encoded as Undergoer, as it is with *-yangma*, but as dative-marked noun phrase, as shown in (5-363) (see also §2.2.3.3.3 and §4.2.1.4).

(5-363) **yarrajgiyung** nga-**yu** jarriny-gu \
afraid 1sg-BE.PRS hole-DAT
'I am afraid of the hole' (on a rough road) (DR, NGA010)

5.9.3 *-malangawu* 'hear'

Only Ngaliwurru has a special transitive verb translating as 'hear', *-malangawu*. The Jaminjung translation equivalent is a complex verb formed with the coverb *malangayij*[157] and the verb *-uga* 'TAKE' (see §5.3.4.3 and §6.16). Both in Jaminjung and in Ngaliwurru, auditory perception can also be expressed by complex verbs formed with the same coverb (or its Ngaliwurru equivalent *gurru*) and the intransitive verb *-yu* 'BE' (see §5.2.1.2 and §6.3). Even in Ngaliwurru, this is the expression that is used more frequently than the transitive verb *-malangawu*.

Just like *-ngawu* 'SEE' (and perception verbs in general in many Australian languages, see Evans & Wilkins 1998), *-malangawu* is non-specific as to a reading of controlled ('listen', (5-364)) or uncontrolled perception ('hear', (5-365)). The presence of the coverb *gurru* 'hear/listen' in (5-364) appears to facilitate the 'controlled' reading; this is the only coverb attested with this verb.

(5-364) jarragib-bina **gurru** ganirri-**malangayi**-m \
talking-ALL listen 3sg:1pl-hear-PRS
'he listens to us talking' (a pet galah) (NG, E09840)

157 This is obviously cognate with the Ngaliwurru verb; both are etymologically related to the verb root *-ngawu* 'SEE' (see §2.4.2.1).

(5-365) gan-**malangawu**=ma=mindag mindi, mind-ijga-ny galu \
3sg:1-hear.PST=SUBORD=1du.incl.OBL 1du.incl 1du.incl-GO-PST walk

'when it heard you and me "on you and me", (when) you and me were walking, (it went down into the water)' (a crocodile sunbathing on the bank) (JM, F04019-21)

From the limited data available, it is unclear whether *-malangawu* can also take on a reading of 'remember', but it appears that in Ngaliwurru, just as in Jaminjung, *-uga* 'TAKE' takes on this function (§5.3.4.3).

5.9.4 *-warrwa* 'swear at'

The transitive verb *-warrwa* 'swear at, abuse' is attested in Bolt et al. (1971a) with examples like (5-366), and was confirmed by Mark Harvey in elicitation with a senior Ngaliwurru speaker (5-367).

(5-366) gurrany ya-wuny-**garrwa**-ji
NEG IRR-2du-swear-REFL

'don't swear at each other' (Bolt et al. 1971a: 56)

(5-367) janyju-ni=gun gan-**karrwa**-ya nyanangarrang
DEM-ERG=CONTR 3sg:1sg-swear-PRS continuously

'That one always swears at me' (DM, fieldnotes Mark Harvey)

It is also listed in Cleverly (1968: 89) as a Jaminjung verb, but could not be elicited from Jaminjung speakers, who always used complex verbs as translation equivalents. Even the Ngaliwurru speaker who provided (5-368) also used these alternative expressions, formed with the coverb *garrwaja* 'swear' (cognate with the verb), either with *-yu* 'BE' as in (5-368a), or with the transitive verb *-ma* 'HIT' in its sense of 'completely affect' (see §5.4.1.2), as in (5-368b).

(5-368a) **garrwaja** yiny-b-**iyaj**=nu //
swearing 1du.excl-FUT-BE=3SG.OBL

b) **garrwaja** yiny-**jiba**
swearing 1du.excl:3sg-FUT:HIT

'We will swear at him' (DM, fieldnotes Mark Harvey)

Another, middle-aged Ngaliwurru speaker also only offered the same complex verbs as in (5-368), but not *-warrwa*, in elicitation. This verb thus seems to have more or less dropped out of use even in Ngaliwurru.

5.9.5 *-yima* 'tell a lie'

Just like *-warrwa* 'swear', *-yima* 'tell a lie, deceive' is listed in Cleverly (1968: 89) for Jaminjung, as well as in Bolt et al. (1971a: 94) for Ngaliwurru, but could be elicited only from Ngaliwurru speakers.

(5-369) ganurru-**yima**-ya
3sg:3pl-tell.lie-PRS

'he deceives them', 'he tells them a lie' (JM, NUN018)

Again, even Ngaliwurru speakers prefer either a progressive construction as in (5-370), or a complex verb formed with *-yu(nggu)* 'SAY/DO', of the type used in Jaminjung, as in (5-371).

(5-370) janyju-ni=gun **mirrung**-mayan ga-**gba** yirrag
DEM-ERG=CONTR tell.lie-CONT 3sg-BE.PST 1pl.excl.OBL

'That bloke lied to us.' (DM, fieldnotes Mark Harvey)

(5-371) Ngaliwurru... "**jimarrib** nganj-**unggu**-m"
<language.name> tell.lie 2sg:3sg-SAY/DO.PST

'(in) Ngaliwurru (you say): "you are telling a lie"' (in contrast to Jaminjung *mirrung nganjunggum)* (DM, GIL005)

5.9.6 *-inijba* 'do by magic'

The verb *-inijba* is, again, only attested in elicitation with one senior Ngaliwurru speaker, in Mark Harvey's fieldnotes. It is usually translated as 'sing a magic song' (exerting a negative effect), as in (5-372) and (5-373).

(5-372) ganurr-**inijba**-na waladbari-ni
3sg:3pl-do.by.magic-IMPF old.man-ERG

'he always used to sing people, the old man' (DM, fieldnotes Mark Harvey)

(5-373) burr-**inijba**-ny yarrindi-ni
3pl:3sg-do.by.magic-PST magic.song-ERG/INSTR

'They sang him with *yarrindi* songs' (DM, fieldnotes Mark Harvey)

Example (5-374) suggests that it may have a more general meaning of 'perform magic ritual'; however, the gloss 'do by magic' has to be regarded as tentative. It is possible that the verb root is etymologically related to the nominal *jinij* 'name'.

(5-374) gan-**inijba**-ya // malagbaja // malagbuja gana //
3sg:3sg-do.by.magic-PRS paint.body paint.body 3sg:3sg:CHOP.PST
'He painted him' (boy) (DM, fieldnotes Mark Harvey)

5.9.7 *-ngardgani* 'be sick'

The intransitive verb *-ngardgani* was, on a single occasion, spontaneously produced by a Ngaliwurru speaker and translated as 'feel crook' by the speaker. I did not have the opportunity to check the range of applications of this form.

(5-375) mayi .. ngarrgina .. majani .. nga-**ngardgani**-m \
body 1sg:POSS maybe 1sg-be.sick-PRS
'My body is maybe sick' (JM, F04170)

The usual translation equivalent employed by both Jaminjung and Ngaliwurru speakers is a complex verb, consisting of the stative coverb *janga* (J.) */warlad* (Ng) 'sore, sick', and the verb *-yu* 'BE' (see (2-32b) in §2.3.1.2 for an example).

5.9.8 *-manka* 'be angry'

Unlike most of the other infrequent verbs, which are only attested as simple verbs, *-manka* is restricted to forming complex verbs with a single coverb, *wirrij*, which roughly translates as 'angry, aggressive, violent'. It is therefore difficult to disentangle the semantic contribution of the verb from that of the coverb, and the gloss 'be angry' is highly tentative. The root appears to be cognate with the Nungali word for 'ear', *-manka*, and one of the Jaminjung coverbs for 'hear/listen', *mankalag*. It is therefore possible (an interpretation suggested to me by Felix Ameka, p.c.), that the verb originally meant 'hear', got specialised to a meaning like 'feel', and finally restricted to expressions of 'feeling angry'.

(5-376) **wirrij** gani-**manka**-ya=burrag yina-nud-gu jawagun-ku
angry 3sg:3sg-be.angry-PRS=3pl.OBL DIST-COLL2-DAT other.group-DAT
'he is having an argument with those others ' (JM, NUN011)

(5-377) **wirrij** burru-**manka**-ji, yeah
angry 3pl-be.angry-REFL.PRS yes
'yes, they are arguing' (IP, F03632)

Speakers claim that *-manka* is interchangeable with the two other transitive verbs that form complex verbs with *wirrij*. These are *-ma* 'HIT', shown in (5-378), and *-ngawu* 'SEE' in its reading of 'display aggressive behaviour' (see §5.8.1.2), shown in (5-379).

(5-378) gurrany yarri-**ma**-ji=mulu **wirrij**,
NEG IRR:1pl.incl-HIT-REFL=COLL angry
'let's not fight, all of us' (IP, F03575-6)

(5-379) **wirrij-wirrij** ganurru-**ngayi**-m, jungulug-ni \
RDP-angry 3sg:3pl-SEE-PRS one-ERG
'he argues with them, one person does' (IP, F03626)

It is indeed possible that these two verbs are on their way to completely replacing *-manka;* however, it appears that for events of physical fighting, only *-ma* 'HIT' is used, while *-ngawu* 'SEE' is restricted to verbal arguing or scolding. The verb *-manka*, in contrast, seems to refer more to the display of aggressive behaviour itself.

5.9.9 *-yangi* 'BE†'

Both Jaminjung and Ngaliwurru seem to have had a second stative verb in addition to *-yu* 'BE', *-yangi*, which is now obsolete. It appears quite frequently in Capell's fieldnotes from 1938, and seems to be preferred for the positions of 'sitting' and 'standing' in (5-380) and (5-381b), while *-yu* is preferred for 'lying' (5-381a). This distribution would be consistent with comparative evidence, since cognates of *-yu* 'BE' in other languages are positional verbs meaning 'lie' (see §2.4.2.1).

(5-380) gaburrgad yirri-**yangi**-ny guyug yirr-arra-ny,
yesterday 1pl.excl-BE†-PST fire 1pl.excl:3sg-PUT-PST
jarragab yurri-**yangi**-ny luba
talk 1pl.incl-BE†-PST big
'yesterday we were (sitting together) and lit a fire, we were talking a lot' (fieldnotes Arthur Capell, glossing mine)

(5-381a) yurru-**yu** murrgun=mulu **mugurn**;
1pl.incl-BE.PRS three=COLL lie/sleep

b) ngayug **gud** nga-**yangi**-ny,
1sg rise 1sg-BE†-PST
'we were sleeping all three of us, me, I got up, (..:)' (fieldnotes Arthur Capell, glossing mine)

In my own data, one older Jaminjung speaker used *-yangi* in two complex verbs, with the coverbs *gud* 'rise' (in a context comparable to that in (5-381b)), and with *wirriny* 'turn', in (5-382).

(5-382) **wirriny** ga-**yangi**-ny, wirriny gan-arra-ny,
turn 3sg-BE†-PST turn 3sg:3sg-PUT-PST

jurdug gan-arra-ny
straight 3sg:3sg-PUT-PST

'it turned, he turned it, he put it straight' (a car that was stuck on top of a river bank) (DP, RIV012)

Although *-yu* 'BE' was used with these coverbs by other speakers, these are untypical environments for this stative verb, since the coverbs themselves encode a change of location. Usually, a change of location would be expressed with *-irdba* 'FALL', which is indeed also attested with *wirriny* 'turn', but is unacceptable with *gud* 'rise'. This is because *-irdba* 'FALL' cannot encode events of change of location away from a location (see §5.2.2.1). The fact that the events encoded by these coverbs fall 'outside', as it were, both the stative category of *-yu* 'BE', and the 'change of locative relation' category of *-irdba* 'FALL', may explain why the archaic verb was used instead by this particular speaker.

5.10 Semantics and use of the generic verbs: some generalisations

5.10.1 Verb semantics: Summary

In this chapter, the meaning and range of uses of each of the verbs were discussed in some detail. The investigation of the verbs' meaning started out from a monosemic bias, and from the working hypothesis that the complex verbs are generally compositional (which does not preclude their lexicalisation under the view of the lexicon outlined in §1.4.1.3). The meaning of a verb was taken to correspond to the invariant features of the denotata of the utterance in which it occurs. Following this method, many verbs could be given a monosemous and semantic characterisation, but a number of verbs were described as having a small number of polysemous senses. In this case, the basic sense of the verb was taken to correspond to the meaning of the verb as a simple verb. In some cases, a secondary sense is only available in the context of a coverb. While this information, where applicable, was included with the semantic characterisations throughout this chapter, it has been omitted from Table 5-3 below for reasons of space.

Evidence for the productivity of the verbs was adduced by demonstrating that they are combined with loanwords used as coverbs, and productively applied to

introduced and other non-stereotypical activities and situations. Still, for some high-frequency verbs, a number of uses could only be accounted for as idiomatic expressions.

The semantic characterisations proposed for each of the verbs are summarised in Table 5-3. They were designed to represent the semantic invariants for each verb, and capture semantic relationships between the verbs, but they should not be taken to correspond to the meaning of the verbs in the sense of a psychologically real representation. It is quite possible that these representations are of an imagistic nature. In fact, in some places in this chapter, graphic representations were offered – in addition to the paraphrases – which may come closer to these imagistic representations, but of course do not adequately capture their dynamic nature.

A number of very marginal verbs (in terms of frequency), described briefly in §5.9, have not been included in the overview in Table 5-3. All of them are regularly replaced by complex verbs formed with a different verb. The 26 remaining verbs are ordered according to the formal/semantic grouping employed throughout this chapter. The root form, transitivity (as formally indicated by the paradigm of pronominal prefixes) and the gloss are followed by the semantic representation. For the polysemous verbs, senses are numbered. For reasons of space, the '&' sign is employed where semantic components were arranged in separate lines in the preceding sections.

Table 5-3. *The meanings of Jaminjung verbs: Overview*

Location, existence, possession, and change of locative relation

Verb		GLOSS	Semantic Characterisation	
-yu	itr	BE	S5-1(i)	x is located at a location
			S5-1(ii)	x is (involved) in a state / an activity
-muwa	tr	HAVE	S5-2	x is located at y & y controls the location of x
-ardba	itr	FALL	S5-3	x comes to be in a locative relation with respect to a location
-arra	tr	PUT	S5-4(i)	x causes y to be in a locative relation with respect to a location
			S5-4(iia)	x transforms itself (y) into z
			S5-4(iib)	x (human) conventionally calls y by a word "z"
			S5-4(iii)	x (human) causes y to be accessible to z
			S5-4(iv)	x causes y to change its configuration

Translational motion

-ijga	itr	GO	S5-5(i)	x moves along a path
			S5-5(ii)	x moves to a state
			S5-5(iii)	x is (involved) in a state / an activity for a long time
-ruma	itr	COME	S5-6	x moves along a path which is oriented towards the deictic centre
-uga	tr	TAKE	S5-7(i)	x moves along a path & y is located at x & x controls the location of y
			S5-7(ii)	y is located at x for a long time & x controls the location of y
			S5-7(iia)	x (animate) has y in mind
			S5-7(iib)	x (animate) hears y
			S5-7(iv)	x applies force on y by means of x's body weight
-anJama	tr	BRING	S5-8	x moves along a path which is oriented towards the deictic centre & y is located at x & x controls y
-unga	tr	LEAVE	S5-9	x purposefully moves along a path which is oriented away from y
-arrga	tr	APPROACH	S5-10	x purposefully moves along a path which is oriented towards y
-warda-garra	tr	FOLLOW	S5-11	x purposefully moves along a path which is oriented towards y and in the same direction in which y is moving

Contact/Force

-mili / -angu	tr	GET/ HANDLE	S5-12(i)	x is in contact with y with a movable (body) part or instrument & x affects y
			S5-12(ii)	x (animate) is in contact with y through its lower senses
			S5-12(iii)	x is in the same place as y & x affects y
			S5-12(iv)	x attempts to make contact with y
-ma	tr	HIT	S5-13(i)	x makes an impact on y & x affects y
			S5-13(ii)	x completely affects y
			S5-13(iii)	x emerges
-ina(ngga)	tr	CHOP	S5-14	x makes an impact on y with the edge of a body part or instrument & x affects y
-inama	tr	KICK/ STEP	S5-15(i)	x makes an impact on y with the foot & x affects y
			S5-15(ii)	x makes an impact on y, moving on a downward trajectory & x affects y
-ijja / -yaluga	tr	POKE	S5-16	x makes an impact on y with the pointed end of a body part or instrument & x affects y
-wa	tr	BITE	S5-17(a)	x makes forceful contact with y with the mouth part & x affects y
			S5-17(b)	x causes y to experience pain like from a bite & x affects y
-wardgiya	tr	THROW	S5-18	x causes y to move along a trajectory determined by gravity/the direction of force applied

Burning / Cooking

-irna	itr	BURN	S5-19	x is affected by heat
-irriga	tr	COOK	S5-20	y affects x by means of heat

The polyfunctional SAY/DO verb

-yu(nggu)	tr	SAY/DO	S5-21	x internally causes, and gives immediate evidence of, an event E

Caused change of possession

-ngarna	tr	GIVE	S5-22(i)	x (animate) causes y to be located at z (animate), such that z controls y
			S5-22(ii)	x (animate) transmits y (information) to z (animate)
			S5-22(iii)	x/z (animate) say "y" to one another
			S5-22(iv)	x (animate) directs event E at z & x affects z
-yungga	tr	TAKE AWAY	S5-23	x (animate) causes y to be removed from its location at z (animate), and from the controls of z

Other major verbs

-ngawu	tr	SEE	S5-24(i)	x (animate) directs one's eyes at y & x visually perceives y
			S5-24(ii)	x (animate) directs aggressive behaviour at y
-minda	tr	EAT	S5-25	x (animate) takes y into x's mouth
-(ma)linyma	tr	MAKE	S5-26(i)	x brings y into existence (from something)
			S5-26(ii)	x causes y to bring about an event E

5.10.2 Distinctions forming the basis for the categorisation

In §5.1, I argued that the closed-class verbs in Jaminjung function like classifiers, in that they categorise events. They carve up the semantic space of event expressions – that is, all denotata of simple or complex verbal predicates – into a relatively small number of categories. The guiding question in this chapter therefore has been the question of what constitutes the basis for this categorisation. This question has been partly answered by examining the meaning of each of the verbs: the semantic distinctions made by the verbs are, at the same time, the distinctions according to which events are categorised. We can now make some generalisations concerning the features of events that form the basis for the categorisation by verbs. The marginal verbs identified in §5.9 will be left out of consideration, since they hardly have any relevance for the productive system of classification. Note that 'leaks' in the system have also been reported in the case of nominal classification (cf. e.g. Dixon 1982e: 215).

One basic division – cross-cutting other distinctions – among the verbs is in terms of valency. There are five monovalent verbs, which can be formally identified by their intransitive pronominal prefix. The majority of verbs which take the transitive pronominal prefix are bivalent. The events categorised by these verbs all involve a salient second participant, which is affected, controlled,

or perceived by the first, or with respect to which motion of the first participant is oriented. Only two of the formally transitive verbs (*-ngarna* 'GIVE' and *-yungga* 'TAKE AWAY', see §5.7) have to be regarded as trivalent, because (as simple verbs) they always allow for a third core argument. The events described by these verbs thus have three central participants; the third participant is always an animate into whose possession something is transferred (*-ngarna* 'GIVE'), or from whose possession something is taken away (*-yungga* 'TAKE AWAY'). The 'performance' verb *-yunggu* 'SAY/DO' (§5.6) has some peculiar properties with respect to valency. This verb takes transitive prefixes, but fails to take the reflexive/reciprocal suffix, and also shows mixed transitivity properties in other respects, depending on the context in which it is used. Semantically, it has a 'performer' and a propositional participant; the second participant is the event that is 'internally caused' by the first.

Another basic distinction incorporated into the Jaminjung verb system is that between (stative) location, change of location, and locomotion along a path. Stative location can be further subdivided into mere location or existence (categorised by *-yu* 'BE', §5.2.1.1) and possession, i.e. control of the location over the located figure (categorised by *-muwa* 'HAVE' or *-uga* 'TAKE' in a secondary sense; see §5.2.2 and §5.3.4.3). No distinction is made between mere ascription of location, or assertion of prolonged stay at a location, in other words, these two verbs also translate as 'stay' and 'keep', respectively. Change of location is categorised by *-irdba* 'FALL' (§5.2.3.1), and, if it is caused, by *-arra* 'PUT' (§5.2.4.1). More precisely, these verbs apply if an entity comes to be in a locative relation with respect to a specifiable location. This characterisation does not apply to events of 'emerging'; here *-ma* 'HIT' is used in a specific secondary sense of 'emerge' (§5.4.2.3), expressing change of location as opposed to locomotion. (Caused change of location can also be described using the verb *-mili/-angu* 'GET/HANDLE'. However, this verb only entails affectedness and contact, not change of location. In this way, *-mili/-angu* 'GET/HANDLE' and *-arra* 'PUT' are antonyms only on a functional, but not a semantic level; see §5.4.1.1.2).

Verbs of locomotion all entail motion of a participant along a path, i.e. a sequence of locations. This characterisation already exhausts the meaning of the most general verb of locomotion, *-ijga* 'GO' (§5.3.2.1). The other six locomotion verbs are further subdivided, first, according to the direction of motion. This could be oriented towards the deictic centre (*-ruma* 'COME', §5.3.3, and *-anJama* 'BRING', §5.3.5), or oriented with respect to another participant: away from a source (*-unga* 'LEAVE', §5.3.6), towards a goal (*-arrga* 'APPROACH', §5.3.7), or oriented in the direction of a goal, where the goal is also moving (*-wardagarra* 'FOLLOW', §5.3.8). The second subdivision distinguishes two verbs of accompanied locomotion (*-uga* 'TAKE' and *-anJama* 'BRING', §5.3.4-5) from the other verbs of locomotion. Both of these verbs entail that a

concomitant participant is located at, and controlled by, the moving figure; they thus combine the meaning of *-muwa* 'HAVE' with that of the two intransitive locomotion verbs. Note that motion without change of location (internal motion) does not fall into any of the categories set up so far, and is categorised by the general verb of 'performance', *-yunggu* 'SAY/DO' (§5.6.1.2.1).

Two further features that are highly relevant for the categorisation of events are contact and affectedness; these show some degree of overlap. Contact without further specification is categorised by *-mili/ -angu* 'GET/HANDLE' (§5.4.1). This comprises not only physical contact and manipulation, but also some types of metaphorical contact, i.e. perception by the lower senses and interaction, and even events of attempted or failed contact, such as 'pursuing' or 'losing'.

Some relatively fine-grained distinctions are made in the domain of contact by impact (all the relevant events also have the feature of affectedness of a second participant). Of the impact verbs, *-ma* 'HIT' is the least specific, and can also have the general interpretations of 'fight' and 'kill' (§5.4.2.1). The other verbs are specific as to the shape of the contact area or manner of contact, and thus are restricted to impact made with certain types of instruments: an edged instrument or body part in the case of *-ina(ngga)* 'CHOP' (§5.4.3), the foot (or, alternatively, an entity making an impact following a downward trajectory) in the case of *-inama* 'KICK/STEP' (§5.4.4), the pointed end of a body part or instrument for *-ijja/-yaluga* 'POKE' (§5.4.5), and the mouth for *-wa* 'BITE' (§5.4.6). The verb *-uga* 'TAKE' in a secondary sense also takes part in this system of oppositions, in that it encodes force applied with the weight of the whole body (§5.3.4.4).

Affectedness by induced motion is categorised by *-wardgiya* 'THROW' (§5.4.7). This verb can, however, receive an interpretation of 'affectedness by impact', where the impact is between the moving entity and the end point of the motion. Two verbs of heating/burning, *-irna* 'BURN' (§5.5.1) and *-irriga* 'COOK' (§5.5.2) encode affectedness not by contact, but by heat. In contrast to the intransitive *-irna* 'BURN', *-irriga* 'COOK' only applies if there is an ultimate cause of the heating event (i.e. not just the heat source), usually a human agent (see also §4.2.2.1.1).

In the case of one participant affecting another by non-physical means, the basis for categorisation becomes less straightforward. As already indicated above, affectedness by non-physical interaction can be categorised as 'metaphorical contact' by *-mili/ -angu* 'GET/HANDLE' (§5.4.1.3). If the effect on a participant is brought about by threat of contact, or some types of indirect physical contact, e.g. by means of blowing air, *-ngarna* 'GIVE' is used in a secondary sense of 'direct action at' (§5.7.1.4). If the event can be characterised as resulting in complete affectedness of one participant, *-ma* 'HIT' is used (§5.4.2.2). Some types of social interaction are also categorised in this way, e.g. 'promising a wife', 'caring for', 'recognising' or 'forgetting'. Finally, aggressive social interaction is to some extent covered by *-ngawu* 'SEE' in a secondary sense (§5.8.4.1).

Two special trivalent verbs are used to categorise caused possession (*-ngarna* 'GIVE', §5.7.1) and caused removal from possession (*-yungga* 'TAKE AWAY', §5.7.2). Transfer of information can be expressed using *-arra* 'PUT' (§5.2.4.3) or *-ngarna* 'GIVE' (§5.7.1.2), in metaphorical senses.

In the domain of perception, only visual perception is categorised by a special verb, *-ngawu* 'SEE' (§5.8.4.1), which is in line with a cross-linguistic tendency for specificity in the visual domain (cf. Viberg 1984: 137). In Ngaliwurru, in addition, 'hearing' also receives a special encoding as *-malangawu* 'HEAR'. In Jaminjung, 'hearing' (as well as memory) is singled out by the use of *-uga* 'TAKE' in a secondary sense (§5.3.4.3). Note that tactile perception is covered by the verb *-mili/ -angu* 'GET/HANDLE' in its basic sense of 'physical contact' (§5.4.1.1), and that the same verb, in a secondary sense, also categorises the remaining types of perception by the lower senses (§5.4.1.2).

Ingestion and creation are also encoded by special verbs, *-minda* 'EAT' (§5.8.2) and *-(ma)linyma* 'MAKE' (§5.8.3). Events that are internally caused by a participant, but are not construed as being oriented towards another participant (in terms of controlling it, moving along a path which is oriented with respect to it, affecting it, perceiving it, or otherwise interacting with it), are categorised by *-yunggu* 'SAY/DO', unless they fall under the categories of 'locomotion'[158] or 'change of location'. This verb, thus, has a number of seemingly heterogeneous functions. It is used as a verb of speech (§5.6.1.1), as a verb of internal motion (§5.6.1.2.1), as a verb of manifestation of bodily or emotional condition (§5.6.1.3), as a verb of 'throwing away' (§5.6.1.4), as a general performance verb (§5.6.1.5), and as an inchoative verb (§5.6.1.6). It was suggested in §5.6.2 that these uses may be covered by a single monosemous sense of *-yunggu* 'SAY/DO', 'internally cause, and give immediate evidence of, an event'.

Events that are not internally caused, and not oriented towards a second participant, can basically only be states, or some kinds of state changes. States – including the states of location and spatial configuration already mentioned above – are categorised with the single verb of stance/location, *-yu* 'BE' (§5.2.1.1). State changes that are not internally caused are categorised by *-ijga* 'GO' in a metaphorical sense of 'change of state' (§5.3.2.2). Note that caused change of state is not expressed by any specific verb, but instead is categorised according to the type of causing event, usually by one of the verbs of contact

[158] As shown in §5.6.1.2.2, *-yunggu* 'SAY/DO' may be used for some types of locomotion.

and impact (however, induced change of configuration can be expressed using *-arra* 'PUT' in a secondary sense; see §5.2.4.4).

Distinctions of aspectual character – e.g. telicity and dynamicity – play a secondary role in the event categorisation carried out by verbs in Jaminjung. This is not all that surprising, since aspectual character – telicity in particular – has long been noted to be a property of the clause, not necessarily of the verb (e.g. Dowty 1979). For example, all verbs of locomotion are inherently atelic, but may be part of telic expressions formed with a coverb and/or a locational argument. In both cases, the event in question will be categorised, through the use of a locomotion verb, as 'motion along a path' (with possibly additional features). Of course, some verbs (e.g. the verbs of change of locative relation *-irdba* 'FALL' and *-arra* 'PUT', or *-ma* 'HIT' in its sense of 'completely affect'), are inherently telic, and others (e.g. *-muwa* 'HAVE') are inherently atelic. However, this is not the primary feature responsible for the categorisation of events by one of these verbs. Moreover, some verbs are neutral as to telicity; these include *-yu(nggu)* 'SAY/DO' and *-mili/ -angu* 'GET/HANDLE'.

There is a curious exception to the generalisation that telicity plays a secondary role in event categorisation. Members of a large class of coverbs of continuous activity are restricted to occurrence in what was argued to reflect a lexicalised progressive construction. The events described by complex verbs formed with these coverbs are categorised as 'atelic' – disregarding any other features of the events in question – through the use of the verbs *-yu* 'BE' (§5.2.1.2) or *-ijga* 'GO' in their auxiliary function (the latter conveying an additional nuance of habitual or prolonged activity; §5.3.1.3). The events categorised in this way form a relatively large class; they comprise, among others, some bodily functions, types of motor patterns and sound emission, and conventionalised activities.

The features of events that were argued to be responsible for the choice of a verb in Jaminjung, i.e. the features of relevance for the categorisation of events by generic verbs, are summarised again in Figures 5-24 to 5-26. Only those features that correspond to semantic components of the verbs have been included; thus, there are no features like 'perception (in general)' or 'induced change of state'. The features have been represented in boxes; accumulation of features in the meaning of a certain verb is represented by lines joining the boxes to each other, and to the respective verb. Where only a secondary verb sense is relevant, this is indicated in brackets after the gloss. As the diagrams also show, some verbs (e.g. *-ijga* 'GO' and *-ma* 'HIT' in their basic senses) are in privative opposition with other verbs with which they share a certain semantic component. I have already argued that in these cases the pragmatic Q principle is responsible for the choice of a more specific verb over a more general verb (see also again §5.10.5 below). The effect of this principle is so strong that I suspect that it would be impossible to elicit a statement like "*-ijja* 'POKE' is a type of *-ma* 'HIT'" from Jaminjung speakers (see also (5-202) in §5.4.2.1), even

if I was aware of the metalanguage to use in such statements. Thus, those verbs that are in privative opposition to a set of other verbs cannot be regarded as hyperonyms of these verbs. Generally, although some of the generic verbs are clearly more generic (i.e. semantically less specific) than others, they cannot be ordered in a strict taxonomic hierarchy. The same observation has been made for classifiers in systems of nominal classification, e.g. by Berlin (1968: 174) and Becker (1975).

Because of their two-dimensional nature, these diagrams have some shortcomings. They mostly do not show the semantic relationships between tbe different senses of polysemous verbs (this issue is taken up in §5.10.3). Also, some of the relationships and oppositions between different verbs could not be adequately represented, such as the relationship between *-muwa* 'HAVE' and *-uga* 'TAKE'; as shown in §5.2.2 and §5.3.4, both share a semantic component of control of one participant over another one, located at the controlling participant. Finally, some minor semantic extensions of verbs were left out of consideration due to lack of space, for example the metonymic extensions from locomotion to spatial extension (see 5.3.2.1), and from *-wa* 'BITE' in its basic sense to 'experience pain like from a bite' (see §5.4.6). It should also be remembered that not all complex verbs can be motivated by the account of productive categorisation presented here; rather, they have to be regarded as idiomatic, fixed expressions.

Fig. 5-24. *Features relevant for the categorisation: location and locomotion*

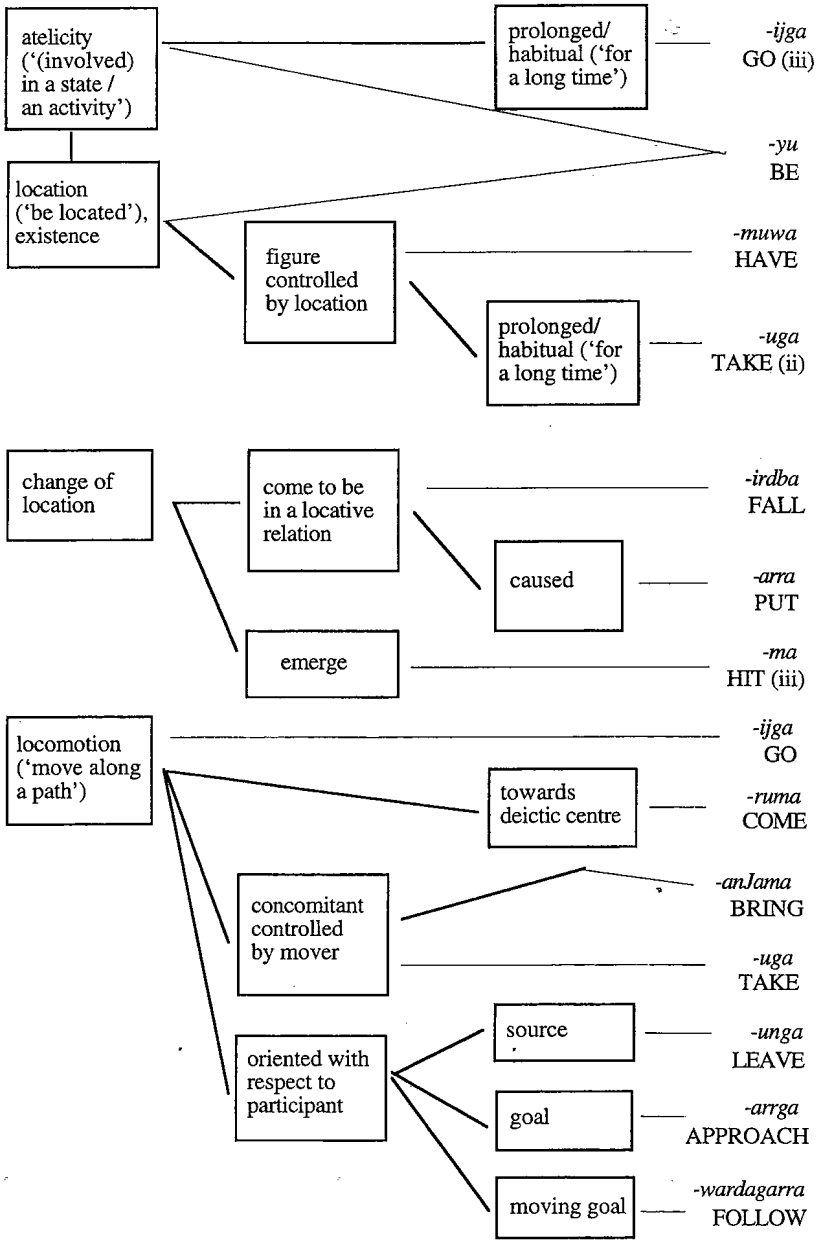


Fig. 5-25. *Features relevant for the categorisation: contact/affectedness*

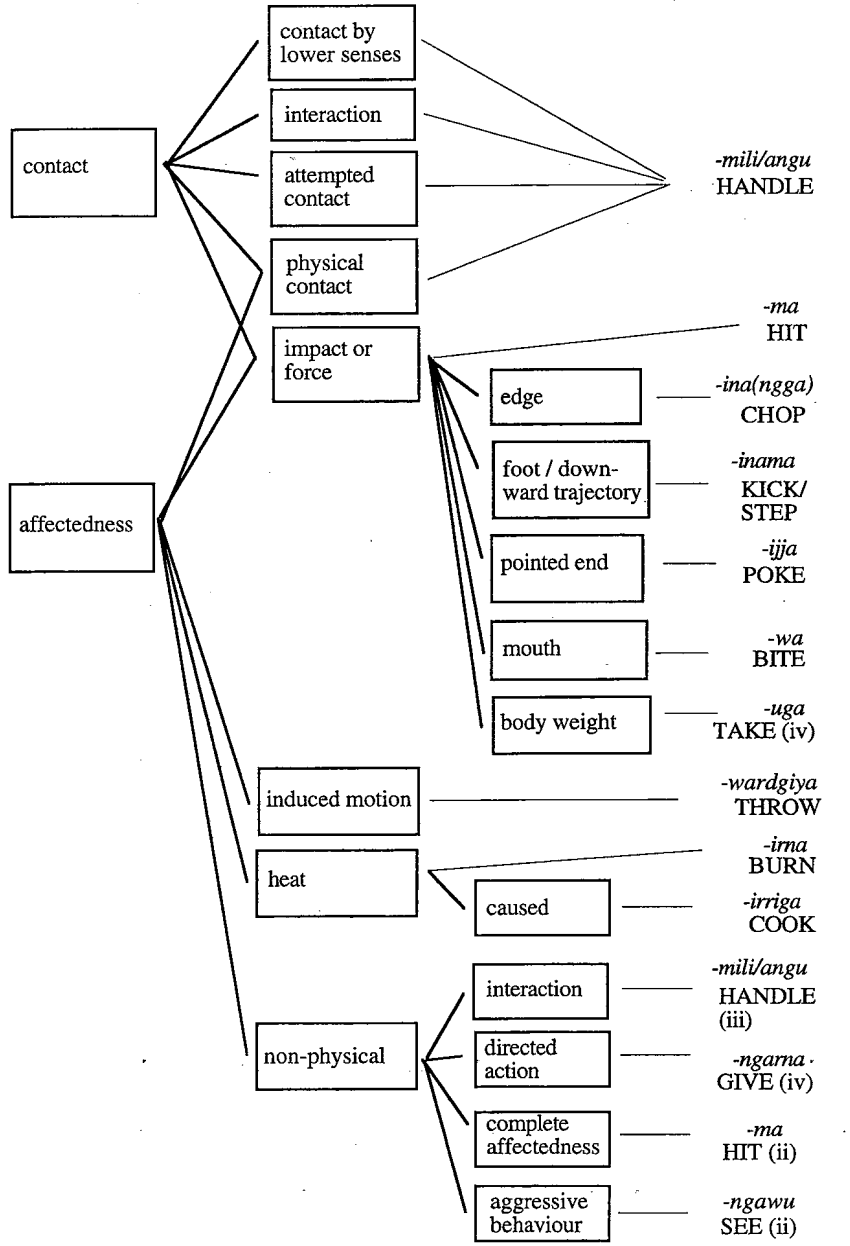
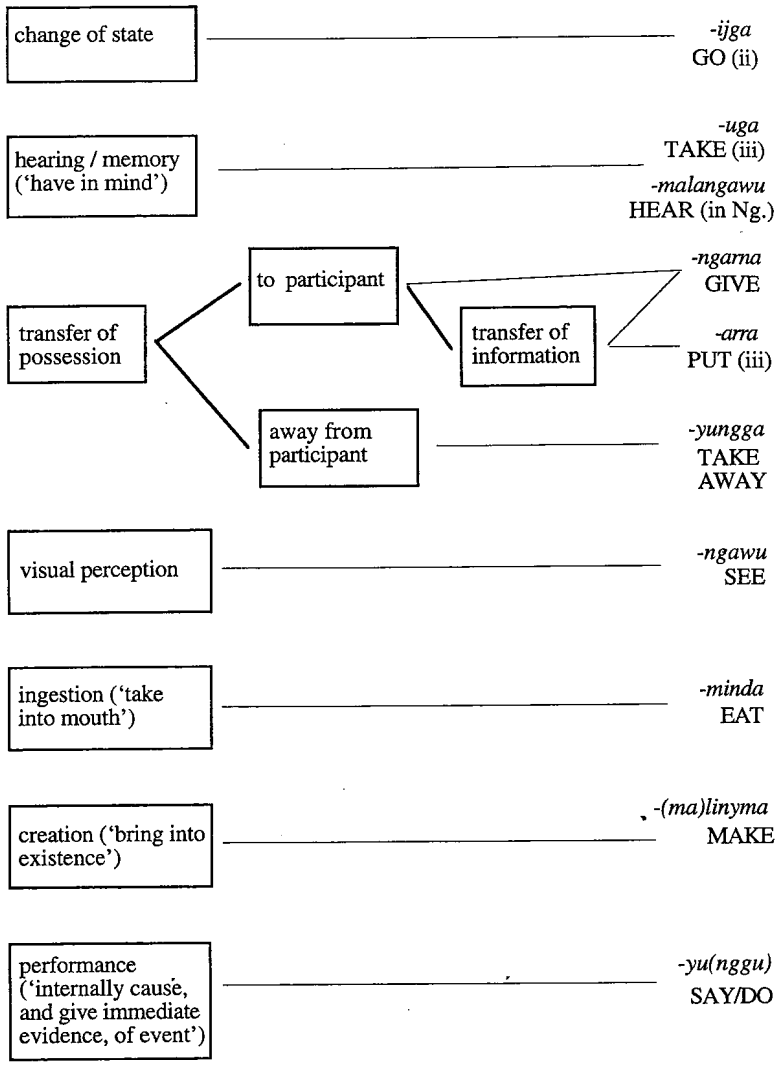


Fig. 5-26. *Features relevant for the categorisation: other features*



5.10.3 Patterns of polysemy

Some additional comments on the polysemous verbs are offered in this section. Several types of semantic extension could be identified, many of them recurrent, i.e. accounting for the secondary senses of more than one verb. The main types are metaphor, metonymy, and bleaching of semantic components. Some of these extensions are common cross-linguistically, others are not reported in the general literature, but are also found in other languages in the same cultural area.

One type of metaphorical extension is based on the – cross-linguistically attested – metaphorical treatment of speech or information as an entity. This metaphor accounts for the use of both *-arra* 'PUT' and *-ngarna* 'GIVE' in a sense of 'transfer of a message/of information' (§5.2.4.3., §5.7.1.2), and moreover for a use of *-arra* 'PUT' in the sense of 'conventionally name' (§5.2.4.2). It also forms the basis for the use of a verb of accompanied locomotion, *-uga* 'TAKE', in the reading of 'remember', i.e. 'carry in mind'. The metaphorical construal of an event as an entity accounts for the use of *-ngarna* 'GIVE' in the sense of 'direct action at s.o.', and for the (marginal) causative use of *-(ma)linyma* 'MAKE'; both also have cross-linguistic parallels.

The wide-spread use, cross-linguistically, of a general motion verb in a sense of 'change of state' is based on the metaphorical treatment of an event as a location; this has been commented on in ; in Jaminjung, *-ijga* 'GO' also takes on this secondary sense. Similar uses of *-irdba* 'FALL' in the reading 'reach a state' are rare, and restricted to a few idiomatic expressions (§5.2.3.2).

Metonymy, based on culture-specific associations, accounts for the use of a verb of visual perception, *-ngawu* 'SEE', in the sense of 'direct aggressive behaviour at' (§5.8.1.2). The metonymic link is here 'direct one's gaze at s.o.', since direct eye contact has a culture-specific association with aggression. Another presumably metonymic connection, which is reflected in many Australian languages, is that between 'hearing' and 'memory' (§5.3.4.3); both types of event are expressed in Jaminjung using the verb *-uga* 'TAKE' (§5.3.4.3). A very different metonymic link, forms the basis for a further secondary sense of *-uga* 'TAKE'. This is the association between locomotion together with a concomitant participant, and forceful contact using the body weight on another participant (see §5.3.4.4). Occasionally, the verbs *-wa* 'BITE' (§5.4.6) and *-irriga* 'COOK' (§5.5.2) are employed to describe a pain resembling that resulting from a bite or burn, respectively; this type of metonymy also occurs cross-linguistically.

Metonymy and semantic bleaching furthermore account for the use of both the verb of existence and location *-yu* 'BE' and the general locomotion verb *-ijga* 'GO' as auxiliary verbs. Both form atelic complex predicates with predicates of state and of activity, which become the main predicates from the point of view of semantics and argument structure. Except for signalling atelicity, *-yu* 'BE' in

this use is semantically completely non-specific (§5.2.1.2). Over and above signalling atelicity, *-ijga* 'GO' in its auxiliary use conveys a notion of habitual or prolonged state/activity, which metonymically reflects a component of motion along a path (§5.3.2.3). A second locomotion verb, *-uga* 'TAKE' (§5.3.4.2), also has a secondary sense where the locomotion component is bleached to habitual or prolonged association. When used in this sense, *-uga* 'TAKE' is almost interchangeable with *-muwa* 'HAVE'.

Semantic bleaching, or possibly metaphor, may explain the general use of *-mili/ -angu* 'GET/HANDLE', which has a basic meaning of 'affect and be in (physical) contact', for all kinds of non-physical 'contact' – perception by the lower senses (§5.4.1.2), non-physical interaction (§5.4.1.3), and even attempted or failed contact (§5.4.1.4). Perhaps the underlying link here is 'focus attention on something'.

A similar bleaching of the component of 'physical contact' accounts for the use of a non-specific impact verb, *-ma* 'HIT', in the sense of 'completely affect' (§5.4.2.2). Another secondary sense of this verb, 'emerge' (§5.4.2.3), is also attested in other languages inside and outside Australia, but the nature of the semantic link is unclear at present.

5.10.4 Frequency

An overview of the frequencies of each of the generic verbs, both as simple verbs and as complex verbs, is provided in Table 5-4. The text counts were not always performed on the same text samples – for the high-frequency verbs, the text samples were smaller than for the low-frequency verbs. However, the samples were at least 2500 intonation units in length. Since the samples, in any case, were not balanced for, e.g., text genre, these figures can only convey a general tendency, and are not intended for a statistical purpose. Note also that instances of the progressive construction (see §3.3.1) are included in the figures for *-yu* 'BE' and *-ijga* 'GO' as part of complex verbs.

The column labelled 'Total frequency' indicates the overall frequency of a given verb (the percentage of all expressions containing a verb), that is, it comprises its uses both as a simple verb and as part of a complex verb. In the next column, this percentage is then split up into the percentage of simple verb occurrences (top) and occurrences as part of a complex verb (bottom). In other words, the figures, for each verb, in the white and in the shaded section of this column always add up to the single figure given immediately to the left (except for minor differences due to rounding). Only for the marginal verbs, which have an overall frequency of 0.1 or below, this column is not filled. In order to facilitate the comparison of the ratio of simple verb and complex verb occurrences across verbs, the frequency is given as the percentage of all tokens of a single verb in

the next column (in other words, the figures, for each verb, in the white and in the shaded section of this column always add up to 100). Finally, in the rightmost column, the number of coverb types attested with each verb in the complex verb entries in the lexical database is also listed, to give an indication of the overall productivity of a given verb in complex verb formation. The verbs are arranged by the same subgroupings as in other places throughout this chapter.

Table 5-4. *Verb Frequencies*

Verb form	Gloss	Total frequency	Simple verbs vs. complex verbs		Number of coverbs
		% of all verb tokens	% of all verb tokens	% of tokens / verb	n of types
Location / Change of locative relation					
-yu	BE	22.2	8.0	36	
			14.2	64	124
-muwa	HAVE	1.8	1.5	81	
			0.3	19	28
-irdba	FALL	5.2	1.0	19	
			4.2	81	89
-arra	PUT	6.9	2.1	30	
			4.8	70	125
Locomotion					
-ijga	GO	13.2	5.8	44	
			7.4	56	140
-ruma	COME	6.5	2.8	43	
			3.7	57	66
-uga	TAKE	2.9	1.5	50	
			1.5	50	48
-anJama	BRING	1.0	0.8	78	
			0.2	22	15
-unga	LEAVE	1.1	0.2	21	
			0.9	79	18
-arrga	APPROACH	0.8	0.5	68	
			0.3	32	16
-wardagarra	FOLLOW	0.7	0.5	63	
			0.3	37	14

Contact/Force

Verb form	Gloss	Total frequency % of all verb tokens	Simple verbs vs. complex verbs % of all verb tokens	% of tokens / verb	Number of coverbs n of types
-mili/-angu	GET/ HANDLE	7.8	2.3	30	
			5.5	70	105
-mangu	HIT	5.9	1.6	27	
			4.3	73	70
-inangga	CHOP	1.2	0.4	36	
			0.8	64	20
-inama	KICK/STEP	0.5	0.3	50	
			0.3	50	6
-ijja/-yaluga	POKE	1.7	0.7	43	
			1.0	57	27
-wa	BITE	1.4	0.8	58	
			0.6	42	17
-wardgiya	THROW	1.0	0.1	5	
			1.0	95	24

Heating / Burning

-irna	BURN	0.9	0.4	47	
			0.5	53	25
-irriga	COOK	1.0	0.7	68	
			0.3	32	10

The polyfunctional SAY/DO verb

-yu(nggu)	SAY/DO	7.1	2.8	40	
			4.3	60	78

Change of possession

-ngarna	GIVE	2.1	1.3	62	
			0.8	38	15
-yungga	TAKE AWAY	0.2	0	0	
			0.2	All CV	4

Other major verbs

Verb form	Gloss	Total frequency % of all verb tokens	Simple verbs vs. complex verbs % of all verb tokens	% of tokens / verb	Number of coverbs n of types
-ngawu	SEE	4.5	2.6	58	
			1.9	42	19
-minda	EAT	1.5	1.0	68	
			0.5	32	12
-malinyma	MAKE	0.6	0.5	83	
			0.1	17	7

Marginal Verbs

-garra	excrete	< 0.1		100	
				0	0
-yangma	fear	< 0.1		100	
				0	0
-malangawu	hear	< 0.1		75	
				25	1
-warrwa	swear	< 0.1		100	
				0	0
-yima	tell a lie	< 0.1		100	
				0	0
-inijba	do by magic	< 0.1		100	
				0	0
-ngardgani	be sick	< 0.1		100	
				0	0
-manka	be angry	< 0.1		0	
				100	1
-yangi	be†	< 0.1		10	
				90	2
TOTAL		100.1	**40% Simple verbs**		
			60% Complex verbs		

As Table 5-4 shows (and as has occasionally already been indicated in earlier sections), the generic verbs vary quite dramatically in overall frequency and productivity, even if we leave out of consideration the verbs that were already identified as 'marginal'.

The verbs with the highest overall frequency are those that are employed as auxiliary verbs with nominal predicates, in the progressive construction, and with coverbs of continuous activity, *-yu* 'BE' and *-ijga* 'GO'. The verb *-yu* 'BE' alone accounts for almost a quarter (22.2%) of all verbal predicates; *-ijga* 'GO' is only about half as frequent, with 13.2% frequency.

The other high-frequency verbs are the general performance verb *-yu(nggu)* 'SAY/DO' (7.1%), the two non-specific and polysemous verbs of contact/force, *-mili/ -angu* 'GET/HANDLE' (7.8%) and *-ma* 'HIT' (5.9%), the two verbs of (caused) change of locative relation, *-irdba* 'FALL' (5.2%) and *-arra* 'PUT' (6.9%), the other intransitive motion verb *-ruma* 'COME' (6.5%), and the verb of visual perception *-ngawu* 'SEE' (4.5%). Not surprisingly, the number of coverbs attested with a given verb correlates with its general frequency. In other words, the high-frequency verbs are also those most productive in complex verb formation. Some of the low-frequency verbs only combine with a small number of coverbs.

The overall ratio of simple verbs to complex verbs is roughly 40 : 60; this ratio was also confirmed in independent counts in selected texts (see §3.6). As a general rule, low-frequency verbs have a higher percentage of occurrence as simple verbs than high-frequency verbs, and most of the very marginal verbs are only attested as simple verbs. A few verbs, though, although low in overall frequency, have a high ratio of occurrence in complex verbs. This is because these verbs collocate frequently or almost exclusively with a particular coverb which almost completely overlaps with the verb semantically. For *-unga* 'LEAVE' (with nearly 80% of its occurrences in complex verbs), this coverb is *waj* 'leave behind' (see §5.3.4.1); with *-wardgiya* 'THROW' (95% occurrence in complex verbs) the most frequent coverb is *diwu* 'throw away', and with *-yungga* 'TAKE AWAY' (only attested in complex verbs), the most frequent coverb is *birrg* 'take something away from someone'. In the most extreme case, that of the marginal verb *-manka* 'be angry', the verb is restricted to a combination with a single coverb, *wirrij* 'be angry', and does not occur as a simple verb.

5.10.5 The role of pragmatics in the use of the verbs

Throughout this chapter, it was shown that the range of uses of a verb cannot be predicted from its meaning alone, even taking into account all possibilities of polysemous extension. This is, first, because verbs may semantically overlap, and second, because a given event may be categorised by more than one verb, i.e. more than one verb may be applicable in principle on the basis of its meaning, even if the verbs do not overlap semantically.

The first possibility shows most clearly where verbs are in privative opposition. This was argued to be the case, for example, for *-ijga* 'GO' with respect to the other motion verbs, and for *-ma* 'HIT' with respect to some other verbs in the set of contact/force verbs. Here one needs to account for the fact that the more general verbs do not simply replace all the more specific verbs. This was explained by the general applicability of a pragmatic Q principle. This roughly corresponds to Grice's First Maxim of Quantity ("Make your contribution as informative as required"). Applied to a class of expressions from the same formal class and therefore of roughly the same degree of formal markedness (such as the set of Jaminjung verb roots), this principle requires the selection of the most specific member of this class that is applicable. For the general locomotion verb *-ijga* 'GO' (§5.3.2.1), for example, this means that it will typically only apply if the motion cannot be specified as being towards the deictic centre (which is not the same as assigning a meaning of 'away from the deictic centre' to the verb, see Wilkins & Hill 1995 for a detailed account). Likewise, for *-ma* 'HIT', this means that the verb can only categorise events of impact that cannot otherwise be categorised as being made with an edge (*-ina(ngga)* 'CHOP'), a pointed end in axial motion (*-ijja* 'POKE'), and so on. The events categorised by *-ma* 'HIT', in the end, include, e.g., those of impact made with the flat hand or a blunt instrument like a club (§5.4.2.1).

The Q principle can, of course, be stretched according to the purposes of the current exchange between speaker and hearer. Thus, a speaker may choose to specify the direction of motion as oriented towards or away from a ground with the verbs *-arrga* 'APPROACH' or *-unga* 'LEAVE', but she may also decide that this degree of specificity is unnecessary for the purposes of the current communicative situation, and use the general motion verb *-ijga* 'GO' instead (see §5.4.6-7). Likewise, it may be unnecessary to describe the specific manner of impact if only an overall description of 'fighting' is intended, or only the overall result of 'killing' is relevant, and it is exactly in those cases that the non-specific impact verb *-ma* 'HIT' may also be used (see §5.4.2.1).

In other cases, verbs may not differ markedly in semantic specificity, and consequently, no *a priori* preference for one over the other verb is dictated by the Q principle. For example, the construal, of the same real-world event, as either change of locative relation (by the use of the verb *-irdba* 'FALL') or as locomotion (by the use of a locomotion verb) appears to depend on discourse packaging, e.g. the extent to which the speaker wishes to distinguish phases of locomotion and change of location, or whether she simply presents the event as an overall event in a sequence.

If we also take into account the semantic contribution of the coverbs, it is easy to see that a principle like the Q principle is needed in order to maintain a system of categorisation by verbs. This is because usually, a specific verb has to be chosen even if it is semantically redundant in combination with an equally or

more specific coverb. If it was not for the Q principle, one could imagine a system which, like the Jaminjung one, had simple and complex verbs, and only a closed class of verbs, but would use a single (or a few) 'dummy' verbs in combination with coverbs, and reserve the other verbs for use without a coverb.

Indeed, we find some tendencies, even in Jaminjung, in the direction of a system of this type. For example, events of cutting or chopping with a blade, which by the Q principle should be categorised by the specific verb *-ina(ngga)* 'CHOP', are often described using the less specific, high-frequency impact verb *-ma* 'HIT'. Even more dramatically, despite the existence of a specific verb for 'affecting by heat', *-irriga* 'COOK', a number of coverbs of 'manner of heating' are also frequently found with the semantically general verbs *-ma* 'HIT' or *-arra* 'PUT'. In §5.5.2 I argued that the contrast between the specific and the general verb is also exploited for the purposes of information packaging in discourse: the use of *-irriga* 'COOK' presents the overall event as one of 'cooking/ burning', while the use of one of the non-specific verbs invites the hearer to focus on the specific manner of heating that is encoded by the coverb.

The most striking tendency counteracting the Q principle resides in the large functional load on coverbs of 'continuous activity' (which were argued to be fossilised progressive forms). These coverbs, which form a large class, usually only combine with one of the two auxiliary verbs. The verbs, in this case, do not categorise the event in question, except for conveying a very general meaning of atelicity. All other possible semantic distinctions are neutralised. In these cases, the I principle can be applied to enrich the information conveyed by the semantics of the verb with information from the linguistic and nonlinguistic context. In the cases just discussed, the necessary information can be found in the immediate linguistic context, in the coverb. The I principle is also applied to arrive at a default interpretation for a verb used as simple verb, as shown for the high-frequency verb *-mili/-angu* 'GET/HANDLE' in §5.4.1.1.

The two conflicting tendencies correspond to the antinomic forces associated with Zipf's Law of the Least Effort. Similar kinds of variation in a classifier system, due to the dynamic nature of the categorisation, have also been observed for systems of nominal classification (e.g. Adams 1986: 244, Carpenter 1986), which provided the model for our investigation of categorisation of events by generic verbs in Jaminjung. In a larger, comparative, perspective, these antinomic forces may be used to account for synchronic and diachronic variation in the verb systems throughout Northern Australia. This point will be addressed briefly in §7.1.

COVERB CLASSES

CHAPTER 6

In Chapter 5, complex verb formation in Jaminjung was described from the point of view of each of the closed-class verbs. In this chapter, the perspective is reversed, and the coverbs are taken as the starting point of investigation. Classes of coverbs, established on the basis of their formal properties, will be shown to also form semantically circumscribed classes, which in many cases are reminiscent of predicate classes found in other languages (although they do not necessarily correspond to semantic fields arrived at on an *a priori*, onomasiological basis). The existence of these classes corroborates the main claim put forward in this thesis, that the distribution of the closed-class verbs is semantically motivated. That is to say, they combine with coverbs on the basis of semantic compatibility, and the resulting complex verbs are largely semantically compositional.

Since coverbs do not inflect, and consequently do not fall into inflectional classes, the main formal criterion for grouping coverbs into classes is their co-occurrence with the same set of generic verbs. (Occasionally derivational morphology and valency will also be used as criteria). This method of classification is reminiscent of the method of establishing predicate classes on the basis of so-called argument structure alternations (e.g. Levin 1993, Levin & Rappaport Hovav 1995). This correspondence is not accidental: the same function of expressing valency alternations for a predicate with the same semantic core, which is fulfilled in languages like English mainly by the use of alternating valency frames, and in many other languages mainly by valency-changing morphology, is fulfilled in languages like Jaminjung almost exclusively by the choice of different verbs with the same coverb (cf. also Merlan 1994: 202ff.). In addition, as was shown throughout Ch. 5, various verbs may also be employed with the same coverb to highlight certain aspects of an event, even where no valency change is involved.

The sections in this chapter correspond to classes of coverbs. For each section, the formal criteria for class membership are indicated, and illustrated with examples. Often the combination with certain verbs is seen as criterial for the membership in a given coverb class, while the combination with other verbs may depend more on the specific semantics of individual members of the class; this possibility is also discussed. Mention will be made of coverbs which may appear to belong to a class on semantic grounds but cannot be included according to the formal criteria, and often cannot be satisfactorily classified at all at this point. The classification suggested here is not claimed to be the only possible one, and

in some cases a revision, or further refinement, of the classification is likely to result from an extension of the database. It will also become apparent that not all semantic domains have been explored in the same detail.

Based on the formal evidence, a semantic characterisation of coverbs from each class is provided, along the same lines as the semantic characterisations proposed for the generic verbs in Ch. 5. An additional convention is adopted here; this is the use of the symbol Σ as a variable for those semantic components that are specific to individual coverbs. The semantic characterisation, thus, only includes those components that characterise the class as a whole. This should not be taken as evidence for a two-level approach to semantic decomposition, distinguishing 'syntactically relevant' from other components of meaning, along the lines of Dowty (1979) or Jackendoff (1990). As already indicated, a more fine-grained subdivision of coverbs will have to take into account further aspects of their meaning that may account for their compatibility with generic verbs, and other properties (cf. Taylor 1994, contra Jackendoff 1990: 32ff.).

For a subset of the complex verbs that are discussed, I attempt a semi-formal representation of the semantic relationship between coverb and verb. This is achieved by aligning the semantic representation of the coverb class with that of the verb. Like the semantic representations in Ch. 5, both the verb's and the coverb's representation will be framed by boxes, but some additional conventions are necessary to represent the overlap.

The upper box always represents the coverb, the lower box, the verb. In addition, the verb's representation is marked by shading. Both boxes are framed by thick lines. Thin lines separate semantic components of a single predicate (these were just written in separate lines in Ch. 5.). Double-lined boxes indicate shared participants of both predicates, i.e. those participants that are expressed as one argument on the morpho-syntactic level. The types of argument expressions that these shared participants may receive have already been discussed in Ch. 4. Note that the order of the variables 'x' and 'y' sometimes has to be reversed (when compared with the representations found e.g. in Ch. 5) in order to represent shared participants. Since these variables merely distinguish participants, and do not in themselves indicate their roles, this does not result in inconsistencies. Note also that overlap of participants (which merely amounts to coreferentiality) does not, in itself, count as semantic overlap of predicates. Such semantic overlap is indicated by alignment of components in the decompositional characterisation. Meaning components that are contributed by either the verb or the coverb alone are (wherever possible) not aligned with other components, and printed in boldface. Finally, sometimes semantic components have to be read from right to left, because otherwise the overlap cannot be represented. This is indicated by an arrow (<–) pointing from right to left. The arrow, in other words, signals that the semantic representation starts with the rightmost participant, acting on the

participant to the left (if there is any) in the way indicated by the paraphrase in the main part of the semantic representation.

The conventions are illustrated in Fig. 6-1, representing the combination of a positional coverb and the verb of accompanied locomotion *-uga* 'TAKE', in a complex verb with a reading of 'associated motion'. An example is the complex verb *gulurl ganuga* 'take something that is upright and on top' (see (5-112) in §5.3.4.1). Below, the semantic representations are first given separately as S6-1(i) (positional coverb) and S5-7(i) (*-uga* 'TAKE').

S6-1(i) | x is in a spatial configuration Σ with respect to a location |

S5-7(i) | y moves along a path
x is located at y
y controls the location of x |

The representation in Fig. 6-1 is meant to capture, first, that the 'figure' of the positional coverb is the concomitant participant of the verb, i.e. the one taken along. The location – not a central participant of the coverb – overlaps with a central participant of the verb; it is identical with the 'mover'. The component of 'spatial configuration' of the coverb overlaps with the component of 'location' of the verb, but the coverb contributes specific information about the type of configuration. The verb, on the other hand, contributes the components of motion along a path, and of control of one participant over the location of the other.

Fig. 6-1. *Positional coverb and* -uga *'TAKE'*

S6-1(i)	x	is in a spatial configuration **Σ with respect to**	a location
S5-7(i)		**moves along a path <–**	
	x	is located at	y
	<– controls	the location of <–	

Each section also includes an exhaustive list (in terms of the available data; see §1.3.4) of the members of each coverb class. Not all combinatorial possibilities claimed to be indicative of membership in a certain class are always attested for each individual member. Coverbs were often included in a class if a subpart of the pattern of combinations was attested for them, and if they seemed to fit the general semantic characterisation. The attested combinations with verbs are indicated in the lists of coverbs in order to give the reader a better sense of the

basis for the classification. Combinations that were rejected by speakers are marked with a minus sign; an empty cell indicates combinations for which evidence is lacking. Some coverbs are assigned multiple class membership; these are marked in the lists by an asterisk following the coverb. The dialect membership (Jaminjung vs Ngaliwurru) of the coverbs is also indicated, but it should be kept in mind throughout this chapter that many speakers use synonymous terms from both dialects interchangeably (see also §1.2.1), and that in many cases the evidence is inconclusive.

The ordering of the sections roughly follows a twofold cline based on valency (monovalent – bivalent – trivalent) and temporal event structure (stative – dynamic and atelic – telic). The sections are arranged in a relatively 'flat' hierarchy since multiple formal and semantic relationships exist between various classes. For expository reasons, subsections sometimes correspond to subclasses established on purely semantic, not formal grounds

6.1 Coverbs of spatial configuration

Coverbs of spatial configuration form a large class in Jaminjung; more than 80 can be found in the lexical database on which this thesis is based. Many of these coverbs are very frequent and used productively with a number of generic verbs. This class is therefore suited very well to illustrating the various kinds of semantic relationships that coverbs can enter into with verbs.

Semantically, all the coverbs that have been included in this class are stative, and share a component of a spatial configuration. This spatial configuration may hold between a figure and a location (§6.1.1) or just concern the posture of a figure (§6.1.2). Coverbs of direction of gaze (§6.1.3) and coverbs of 'holding' (§6.1.4) also fall under the class of coverbs of spatial configuration.

Formally, this class can be defined in terms of a clear pattern of combinatorial possibilities. Coverbs of spatial configuration are stative, and therefore may all combine with stative verbs. Most of them form complex verbs with *-yu* 'BE', encoding the state of being in a position or configuration, and/or with *-muwa* 'HAVE', encoding a configuration between a possessor/location and a possessum/figure. All coverbs that combine with the intransitive verb *-yu* 'BE' can be considered monovalent by the criteria given in §4.1.3. Only a subclass of bivalent coverbs of 'holding' (§6.1.4.) is restricted to a combination with bivalent verbs.

6.1.1 Coverbs of configuration with respect to a location (positionals)

By far the largest subgroup within the coverbs of spatial configuration is made up of coverbs which describe the configuration of a figure with respect to a location.

The location is more often than not left implicit (6-1a), but it may be specified by a locational or locative-marked noun phrase (6-1b), and, in combination with a dynamic verb, also by an allative-marked noun phrase (6-1c). This is illustrated below for the coverb *walthub* 'inside, enclosed'.

(6-1a) **walthub** ga-**yu** jungulug,
inside 3sg-BE.PRS one

janyungbari balarrgu-ngunyi ga-yu
another outside-ABL 3sg-BE.PRS

'one is inside, the other is outside' (toy pig in yard, Farm Animals 10) (DB, D30039)

b) nindu biligirri-wari \ **walthub** ga-**yu** yard-**gi** \
horse white-QUAL inside 3sg-BE.PRS yard-LOC

'a white horse is inside the yard' (toy horse in yard, FA 13) (DB, D30046)

c) dibard ga-w-**ijga** **walthub** langiny-**bina**
jump 3sg-FUT-GO inside wood-ALL

'it will jump into the trees' (frog in Frog Story) (IP, F03005)

Positionals thus fulfill a similar function to prepositions or preverbs in Indo-European languages, indicating a topological relation between a figure and a location, but are usually semantically more specific. In their syntactic properties, especially in the possibility to leave the location unspecified, they are reminiscent of relational adverbs like German *innen* 'inside' or *oben* 'above' (cf. Lehmann 1990, 1995: 87ff.), but positional coverbs form a much larger set than these, and can often only be translated as verbs. The semantic component that is common to all coverbs of spatial configuration is represented in S6-1(i).

S6-1(i) | x is in a spatial configuration Σ with respect to a location |

The combinations with generic verbs that can be regarded as criterial for their class membership are those with the verb of location and existence *-yu* 'BE',and the verbs of change of locative relation *-irdba* 'FALL' and *-arra* 'PUT' (see §5.2). The semantic contribution of these verbs is illustrated in (6-2) below for the coverb *nang* 'stick, adhere'. The examples show that, unlike in many other languages (cf. Talmy 1985: 86ff.), expressions of stative position, of entering a position and of induced position are in an equipollent relationship in Jaminjung, that is, none of these is formally derived from the other (although they are all based on a positional which is itself stative).

(6-2a) **nang** ga-**yu** larriny-gi
stick 3sg-BE.PRS paperbark-LOC
'it is sticking on the paper' (stamp) (DBit, D09058)

b) **nang-nang=**biya burr-**irda**-m=nu \
RDP-stick=NOW 3pl-FALL-PRS=3sg.OBL
'they (ants) get stuck on it then' (on echidna tongue) (IP, F02009)

c) **nang** burr-**arra**-m
stick 3pl:3sg-PUT-PRS
'they stick it on' (stamp)

As (6-2a) shows, expressions of stative position are formed with *-yu* 'BE'. Here, the meaning of the verb is included in the meaning of the coverb. The semantic relationship in complex verbs of this type is represented in Fig. 6-2.

Fig. 6-2. *Positional coverb and* -yu *'BE'*

S6-1(i)	x	is in a spatial **configuration** Σ		with respect to a location
S5-1(i)	x	is located		at a location

Entering a position is encoded with *-irdba* 'FALL' (6-2b). Recall that this verb does not entail downward motion, but only change of locative relation of the figure (§5.2.3.1). The resulting locative relation may be specified by a positional coverb, as indicated in Fig. 6-3. The coverb and the verb thus partially overlap semantically. The verb alone contributes the dynamic component, and the coverb alone specifies the actual resulting configuration.

Fig. 6-3. *Positional coverb and* -irdba *'FALL'*

S6-1(i)	x	is in a spatial configuration	Σ	with respect to a location
S5-3	x	**comes to** be in a locative relation		with respect to a location

Causative expressions, such as that illustrated in (6-2c), are formed with *-arra* 'PUT', the causative variant of *-irdba* 'FALL'. The meanings of coverb and verb partially overlap, similarly to what has been illustrated in Fig. 6-4 for *-irdba* 'FALL', except that *-arra* 'PUT' contributes a second, agentive participant that does not correspond to any participant of the coverb.

Fig. 6-4. *Positional coverb and* -arra *'PUT'*

S6-1(i)		x	is in a spatial configuration	Σ	with respect to a location	
S5-4(i)	y causes	x	**to come to** be in a locative relation			with respect to a location

As well as with the three verbs just illustrated, positionals are frequently found with the verb *-muwa* 'HAVE'. An example illustrating the alternation of all four verbs with the positional *marrug* 'be hidden' is given in (6-3) (see §5.2 for a further example).

(6-3a) **marrug** buny-**agba**=rnu \
hidden 3du-BE.PST=3sg.OBL
'the two were hiding from him' (Frog Story) (CP, E18294)

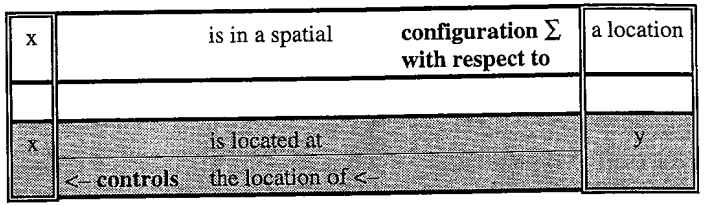
b) **marrug** ga-**rdba**-ny
hidden 3sg-FALL-PST
'she hid (e.g. behind a tree)'

c) **marrug** nga-w-**arra** memmem, mangarra warralalnga
hidden 1sg:3sg-FUT-PUT emu.berry plant.food emu.berry
'I'm going to hide the *memmem*, the emuberry fruits' (speaker hiding berries in closed hands) (DB, D14103)

d) **marrug** nga-**buwa**
hidden 1sg:3sg-FUT:HAVE
'I will keep it hidden' (Orig. Transl.: 'you wanna keep it hide') (DBit, FRA222)

In combinations with *-muwa* 'HAVE', the 'location' participant of the positional coverb is identified with the 'possessor' participant of the verb, and consequently the figure is identifed with the 'possessed' participant. Again, coverb and verb show partial semantic overlap. The coverb contributes the information on a specific spatial configuration. The verb contributes a second central participant, and a component of control of this participant over the figure that is located. This is represented in Fig. 6-5. The representation of the second component of the verb *-muwa* 'HAVE' has to be read from right to left, in the way outlined at the beginning of this chapter.

Fig. 6-5. *Positional coverb and* -muwa *'HAVE'*



The full list of positionals that are attested with these four verbs, or a subset of them, is provided in Tables 6-1 to 6-7. Combinations with locomotion verbs (for which see below) are also listed. Subdivisions are made on semantic grounds (alternative subdivisions would be possible). As already indicated, positionals have as part of their meaning a specific configuration (e.g. a relationship of support with an upright figure for *gurlurl* 'upright on top', or a relationship of containment for *bagurr* 'be in a flat container with open top'). In addition, they may specify a property of the figure (e.g. 'animacy' for *waga* 'sit', or 'long flexible entity' for *dibird* 'be wound around, entwined'), or a property of the location (e.g. *thawu* 'immersed in liquid'). The positionals listed in Table 6-1 are restricted to animate figures.

Table 6-1. *Coverbs of position: ANIMATE FIGURE*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
waga	J/Ng	sit, stay in a place	√	√	√	√	√
jalu	J	squat, crouch, sit on haunches	√			√	
jardarda	J	kneel, sit/stand on knees	√				
mugurn	J/Ng	lie, sleep	√		√	√	√
lula	J	lie (multiple entities)	√		√		
yirrb	J/Ng	be together, gather around s.o./s.th.	√		√	√	√
ngamang	J	ride, be astride, sit on s.o.'s back/shoulders	√	√	√	√	√

Positionals from another semantic group only apply to complex figures, i.e. figures that consists of several parts of entities. The coverb *durlma* 'whole, in one piece' has been included because it specifically encodes the absence of complexity of a figure, and as such is also in opposition to the other coverbs in this set. Coverbs of complex figure are listed in Table 6-2.

Table 6-2. *Coverbs of position: COMPLEX FIGURE*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
balbba	J	side by side, close together (of two entities)	√		√	√	√
darl	J/Ng	lined up, be in a line side by side (of multiple entities)	√				√
yarr	Ng	be in one line side by side			√		√
mundalung	Ng	back to front, head to toe	√				
darrmarr	J	hang (of multiple entities)	√				
warrb	J/Ng	be together	√	√	√		√
murruny	J	heaped up, in a heap	√	√	√	√	√
jurrb	J	be left in a place, be put down together (multiple entities)	√			√	√
yirrginy*	J/Ng	1. be symmetrical[159]	√				
yulij*	J	2. reciprocate	√				
durlma **barndala**	J Ng	whole, in one piece, altogether	√				

A number of positionals, listed in Table 6-3, can only be predicated of a featured location (e.g. *walyang* 'be at s.o.'s/ s.th.'s front'). Others require a featured figure, that is, they encode the orientation of a specific side of the figure (e.g. front, back or side) with respect to the location; these are listed in Table 6-4.

Table 6-3. *Coverbs of position: FEATURED LOCATION*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
birang	J/Ng	behind	√		√		√
warlyang	J/Ng	in front of, ahead	√			√	√
gamurr	J/Ng	in the middle, halfway	√			√	√

[159] See also §6.20.

Table 6-4. *Coverbs of position: FEATURED FIGURE*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
linkid	J/Ng	sidewards, on the side	√		√	√	√
bilwa	J	belly up, on the back	√		√		
warrngalab	Ng						
mun	J/Ng	belly down, upside down, bent over	√		√	√	
wamam	J	facing s.th.	√				√
walalam	Ng		√				√
Jarda	J/Ng	facing away, back turned to s.th.	√				√

Coverbs encoding specific spatial configurations of containment and support or adhesion are listed in Tables 6-5 and 6-6, respectively. Some of the coverbs of containment may describe either the configuration holding between a container and a contained figure, or alternatively, the configuration of the container itself, e.g. *jubard* 'shut' or 'shut in, enclosed', and *jardi* 'filling (a container)' or 'full (of container)'.

Table 6-5. *Coverbs of position: CONTAINMENT*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
walthub	J	inside, enclosed	√	√	√	√	√
walyag	Ng		√		√	√	√
bagurr	J	be in a flat container with open top (e.g. nest)	√		√	√	√
jardi	J/Ng	filling out (a container), be full	√		√	√	
jamam	Ng				√	√	
ngabma	J/Ng	empty, open, gaping	√			√	
jubard	J/Ng	be shut in/off, enclosed	√	√		√	√
thuny	J	be buried in a hole (of animal)	√				
mirrbba	J	be covered up, buried (in the ground)	√		–	√	
mujud	Ng		√			√	
thawu	J	be immersed in a liquid, soak	√		√	√	
gulb	Ng		√		√	√	
dard	J/Ng	be stuck in throat	√		√		

Table 6-6. *Coverbs of position: SUPPORT AND ADHESION*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
gurdij	J/Ng	stand (still)	√	√	√[160]	√	
jalalang	J	hang, protrude	√	√		√	√
balb	J	be flat on a surface, be painted or engraved	√		√	√	
bayirr	J/Ng	be on top of s.th., be supported	√	√	√	√	
thuward	J	lie across, be stretched out across	√		√	√	√
ngardurdug	J/Ng	folded (also of clothes), collapsed, crossed (of arms, legs), curled up	√		√		√
diridi	J	lean over / against s.th.	√		√	√	
gurlurl	J/Ng	be upright on top of s.th	√	√	√		√
dirrg	J	be tied up, be fastened	√			√	
dibird	J	be wound around s.th., be tied up, be entangled	√	√		√	√
nang	J/Ng	stick, adhere to a surface	√		√	√	√
narrng	J/Ng	be stuck on s.th.	√		√		
bardag	J/Ng	joint, be in tight fit	√	√		√	
jalarr	J	joint, of spearhead to spear				√	
nud	J	be on s.th. as a weight (e.g. stones)	√			√	?[161]
thabba	J	stick out, protrude; be-pierced with s.th.	√	√	√	√	√
tharrmarrb			√	√			
bardbard	J/Ng	covered with a layer (e.g. leaves, clothes)	√			√	
balginy	J/Ng	spread out (e.g. of blanket)	√	√		√	

160 Only the reading 'stand still' (as opposed to locomotion) is possible for the complex verb *gurdij* + *-irdba* 'FALL'; the reading 'stand up' (as opposed to another position) is expressed with the (formally related) coverb of change of location *gud* 'rise, get up'.

161 The coverb *nud* does combine with the locomotion verb *-uga* 'TAKE', but in a secondary sense of 'apply body weight on something'; see §5.3.4.4.

Finally, the relationship between figure and location encoded in the coverb may involve the perspective of an observer, as is the case for *marrug* 'hidden' or *jarlwab* 'safe, in a safe place', or the coverb may encode a purpose for the position, as for *balarr* 'be outside to dry'. Coverbs of this type are listed in Table 6-7. Note that *jirrib* 'be married' was included with the positionals on formal grounds; this is in line with the observation made by Dixon (1980: 111) that the concept of 'marriage' is expressed by a positional verb in a number of other Australian languages.

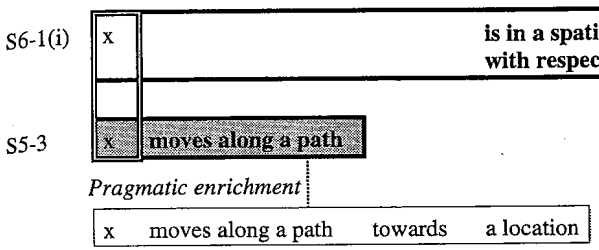
Table 6-7. *Coverbs of position: PURPOSE/PERSPECTIVE OF OBSERVER*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-irdba* FALL	*-arra* PUT	Loc. Verbs
marrug	J/Ng	hidden	√	√	√	√	√
warung	J	out of sight, lost, missing	√		√	√	√
warduj	J				√	√	√
warlban	Ng		√			√	√
jarlwab	J	safe, be in a safe place	√	√		√	√
biny	Ng					√	√
bijirr*	J	in the right place, in the right way[162]			√	√	
dij	J/Ng	stay overnight (also of inanimates)	√	√	√		√
balarr	J/Ng	be outside to dry	√			√	
jirrib	J	be married	√	√	√		√

As Tables 6-1 to 6-7 also show, positionals regularly combine with locomotion verbs. The resultant complex verbs can have either of two readings. The first is a sequential, 'motion cum purpose' reading (i.e. 'move into a position', 'move and then assume position'; see also §5.3.1.4). This interpretation is often given to combinations of a locomotion verb and a coverb expressing containment; an example is (6-1c) above. There is no semantic overlap between coverb and verb, but the reading of the motion verb is 'move towards a location' by pragmatic enrichment (as already illustrated in §5.3.2.3), and this location corresponds to the location with respect to which the figure assumes a position. This is illustrated in Fig. 6-6.

[162] See also §6.20.

Fig. 6-6. *Positional coverb and* -ijga *'GO'* in a reading of 'motion cum purpose'

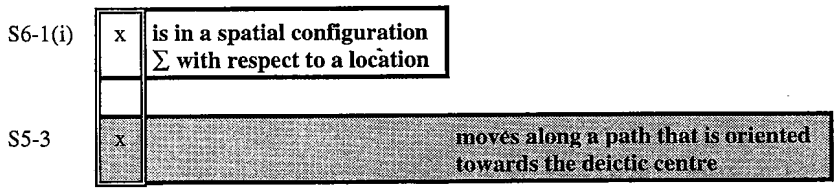


The second reading that can result from a combination of positionals with locomotion verbs is one of 'simultaneous motion', e.g. 'move while being in a specific position', as illustrated in (6-4b) and Fig. 6-7. Again, there is no semantic overlap between coverb and verb (except with a verb of accompanied locomotion, illustrated in Fig. 6-1, where the positional specifies the configuration of the concomitant participant).

(6-4a) **balbba** bunthu-**yu**
side.by.side 3du-BE.PRS
'the two are side by side' (sticks) (DP, JAM168)

b) **balbba** bun-**daram**
side.by.side 3du-COME.PRS
'the two come along side by side' (toy animal arrangement) (DP, SPA055)

Fig. 6-7. *Positional coverb and* -ruma *'COME'* in a reading of 'associated motion'



Combinations of positionals with verbs of contact/force, or other transitive verbs, are less frequent and semantically less regular than complex verbs of the types discussed so far. For reasons of space, the attested combinations were not indicated in the tables in this section. They are not considered to be criterial for class membership, because the choice of verb in these cases depends more on the specific semantics of the positional. For example, only the coverb *dard* 'be stuck in throat' combines with the generic verb of ingestion, *-minda* 'EAT' (in the reading of 'swallow something such that it gets stuck in the throat').

Complex verbs consisting of a positional and a verb of contact/force usually have a resultative interpretation, in that they express a configuration resulting from the contact. For example, the positional *thabba* 'stick out, of elongated object partly inside another object', combines, not surprisingly, with *-ijja* 'POKE', to express 'piercing'. The complex verb in (6-5a) therefore contrasts with the regular causative complex verb formed with *-arra* 'PUT' in (6-5b), which just expresses placement of the figure in a protruding position, and where the figure is encoded as Undergoer.

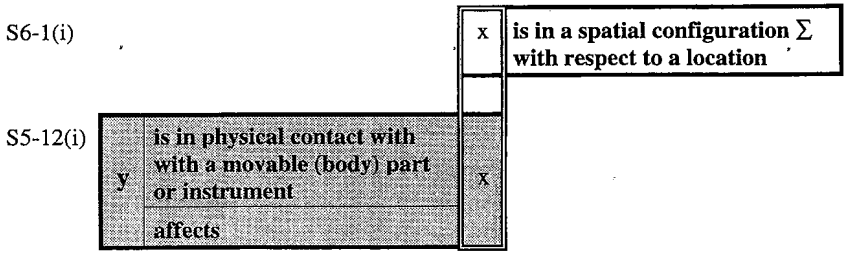
(6-5a) **thabba** gan-**ijja**-ny mangarra=biya jarndang
stick.out 3sg:3sg-POKE-PST plant.food=NOW go.down.completely
gurunyung-ngunyi,
head-ABL
'he shot the apple such that it (arrow) was sticking out, (shooting it) right down from the head' (translating the Wilhelm Tell story into Jaminjung) (IP, F03616)

b) **thabba** nganth-**arra**-ny
stick.out 3sg:3sg-PUT-PST
'you placed it such that it is sticking out' (knife in the ground) (DMc)

Another example of a resultative complex verb formed with a positional coverb is (6-6); here the verb *-mili/-angu* 'GET/HANDLE' is used to express that the position of being wound up *(dibird)* resulted from manipulation involving physical contact. In complex verbs with a resultative reading, coverb and verb do not overlap semantically; this is represented in Fig. 6-8.

(6-6) **dibird** nganth-**angu** ngarrgina bunud-
be.wound.around 2sg:3sg-GET/HANDLE.PST 1sg:POSS <false.start>
ah .. munungu
<hesitation> rope
'you tangled up my .. uh – fishing line' (MJ, KNX160)

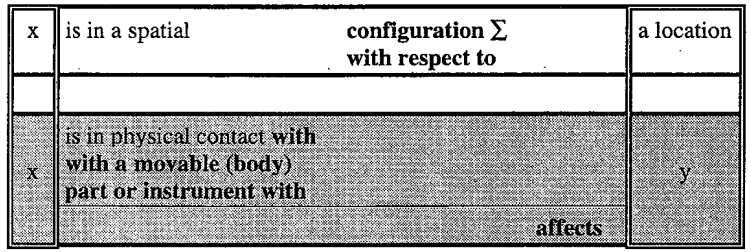
Fig. 6-8. *Positional coverb and* -mili / -angu *'GET/HANDLE', resultative reading*



The same verb, *-mili/-angu* 'GET/HANDLE', may however also enter into combinations with positionals that do not yield a resultative reading. Rather, the interpretation is that the figure itself exerts control over the position it is in, and actively maintains that position. (This does not necessarily mean that the figure is animate; it may control the configuration by virtue of some inherent property, such as e.g. stickiness, as in (6-7)). Consequently, the figure is grammatically encoded as the Actor, and the location as the Undergoer, and coverb and verb overlap semantically. Positionals which allow for a combination of this type are *ngamang* 'astride, riding', *narrng* 'be stuck, get caught' (see (5-166) in §5.4.1.1), as well as *nang* 'stick, adhere', illustrated in (6-7) and Fig. 6-9.

(6-7) en blek jol-ni **nang** ganurra-**mila** wilga
and black soil-ERG stick 3sg:3pl-GET/HANDLE.IMPF foot
'and the black soil would get stuck on the wheels' (with the result that the car got bogged) (IP, GV09-02)

Fig. 6-9. *Positional coverb and -mili/-*angu *'GET/HANDLE', figure = A reading*



Again, complex verbs of this type contrast with causative complex verbs formed with *-arra* 'PUT', where the Actor does not coincide with the figure, but with an external agent (compare (6-7) and Fig. 6-9 with (6-2c) and Fig. 6-4 above).

6.1.2 Coverbs of posture

Semantically, coverbs of posture differ from positionals in that they do not encode the locative relation of a figure with respect to a location, but rather the shape or the configuration of parts (e.g. body parts) of a single figure (cf. Talmy 1985: 146, fn. 30). Their semantic representation thus corresponds to that of positionals, without the location component

S6-1(ii) x is in a spatial configuration Σ

Formally, coverbs of posture differ from positionals in that entering a posture cannot be expressed with the verb *-irdba* 'FALL'. The reason, presumably, is that this verb entails that a figure reaches a location (§5.2.2). Since the posture

coverbs do not have a location as part of their semantics, they are incompatible with *-irdba* 'FALL'. Some of them, e.g. *jard* 'be upright' in (6-8) below, form inchoative complex verbs with *-yu(nggu)* 'SAY/DO'; for others, this combination was rejected, and *-yu* 'BE' was used in both the stative and the inchoative reading. So far I have been unable to account for the difference in behaviour in this respect. Causative complex verbs are formed with *-arra* 'PUT', just as with positionals, although admittedly this combination is only attested for a small number of posture coverbs. The alternation is illustrated in (6-8).

(6-8a) julu-ni ga-yu... langiny **jard** ga-**yu**
hill-LOC 3sg-be.PRS tree upright 3sg-BE.PRS

'it is on the hill, a tree stands upright' (Topological Relations Picture book) (DP, D09136)

b) gan-ijja-ny, **jard** gani-**yu**
3sg:3sg-POKE-PST upright 3sg:3sg-SAY/DO.PST

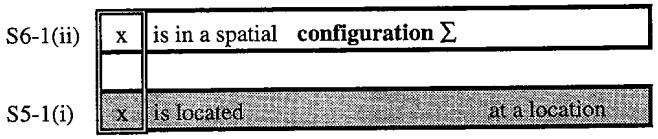
'he hit it (with a pointed instrument), and straightened himself again' (Change of State video) (IP, IZA056)

c) marlayi-ni=binji=biya ngiyi **jard-jard** yirr-**arra**-ny=ngarndi
woman-ERG=ONLY=NOW PROX RDP-upright 1pl.excl:3sg-PUT-PST=SFOC2

'only us women, we built this' (bough shade) (IP, F03936)

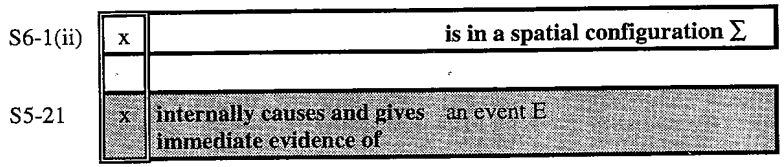
The combination of a positional with *-yu* 'BE' is represented in Fig. 6-10.

Fig. 6-10. *Coverb of posture and* -yu *'BE'*



The combination with *-yu(nggu)* 'SAY/DO' has an inchoative reading in that the dynamic component of 'internally cause, and give immediate evidence' is not part of the meaning of the coverb, and therefore has to be interpreted as the stage leading to the configuration. The coverb represents the propositional participant ('event E') of the verb in the way outlined in §4.2.3.3 and §5.6.

Fig. 6-11. *Coverb of posture and* -yunggu *'SAY/DO'*



Combinations with transitive verbs other than *-arra* 'PUT' and *-muwa* 'HAVE' are attested only for a few posture coverbs. One of these is *marrg* 'tight', which may form a complex verb with the verb *-ijja* 'POKE' with a resultative interpretation of 'sew tight' (see §5.4.5 for an example). Just like positionals, though, coverbs of posture regularly combine with locomotion verbs in an associated motion reading (though not in a reading of 'motion cum purpose', because the posture cannot be interpreted as overlapping with a goal location). Many translation equivalents of words that are traditionally classified as 'posture', such as the coverb *waga* 'sit', fulfil the criteria for positional coverbs rather than posture coverbs in Jaminjung. However, Jaminjung lexicalises a number of quite specific postures, such as *murnunguj* 'hands behind back', *jardagaj* 'on tip-toe', or *rang* 'prick up ears'. With the exception of *jard* 'be upright' and *marrg* 'tight, pressed together', these are restricted to animates.

Table 6-8. *Coverbs of posture*

Coverb	Dial	Translation	*-yu* BE	*-muwa* HAVE	*-yu nggu* SAY/DO	*-arra* PUT	Loc. Verbs
jard	J/Ng	be upright	√	√	√	√	
jagard	J	be on tip-toe	√				√
tharndawayi	J/Ng	stand on one leg	√		–		
digarlg	Ng		√		–		
jardarda	J	kneel, sit/stand on knees	√				√
jardagaj	J	legs standing up or crossed (while lying down)	√		–		
dudurr	J/Ng	legs straight (while sitting or lying), be stretched out	√		–		
Jandarlng	J/Ng	be stretched out (of limb, long entity, or entities in a line)	√		√		√
mununguj	J	hands behind back	√		–		√
mununyjurrgu			√				
marrg	J	tight, pressed together	√		√	√	
rang	J/Ng	have ears stand up, prick up ears	√	√	√		
bunthug	J	empty-handed, nothing on	√				√

6.1.3 Coverbs of direction of gaze

Coverbs which specify the direction of gaze are formally a subclass of the coverbs of spatial configuration, in that they form stative complex verbs with *-yu* 'BE'. In addition, these coverbs regularly form bivalent complex verbs with *-ngawu* 'SEE' (see §5.8.1.1). (An exception is *ngalinggi* 'look askance', which specifies that the eyes are directed away from something). The membership of *wang* 'look in vain' in the 'direction of gaze' class is somewhat doubtful, since this coverb is not attested with *-yu* 'BE', but with both *-yu(nggu)* 'SAY/DO' and *-ngawu* 'SEE' (see §5.8.1).

By far the most frequent and semantically general coverb of direction of gaze is *mung* 'look at, watch'; in (6-9) below, this is combined with a second, more specific member of this class, *mirrang* 'look up'.

(6-9a) wirib.. **mirrang** **mung** ga-**yu**, ba-ngawu /
dog look.up look.at 3sg-BE.PRS IMP-SEE

'the dog is looking (at something) looking up, look!' (Frog Story, dog looking at beehive) (IP, F03091)

b) Thurruguman -ni =biya **^mung** ganurra-**ngayi**-na=ngarndi
<proper.name>-ERG=NOW look.at 3sg:3pl-SEE-IMPF=SFOC2

'Th. was watching them' (crocodile eating cattle) (IP, EV03117)

Semantically, coverbs of direction of gaze like *mirrang* 'look up' or *wib* 'look over one's shoulder' combine properties of posture coverbs (§6.1.2) and properties of those positionals which encode the orientation of a featured object towards a location (e.g. *mun* 'belly down'; §6.1.1).[163] For coverbs of direction of gaze, the relevant feature is the eye, or perhaps the face. In contrast to positionals, however, coverbs of direction of gaze do not allow the specification of a location with a locative noun phrase, but only with a directional or allative marked noun phrase; an example is given in (6-10).

(6-10) buliki thanthu-wurla-**ngining** **mung** ga-**yu**
cow DEM-DIR-L.ALL look.at 3sg-BE.PRS

'a cow is looking in that direction' (Men & Tree 6) (DMc, E13067)

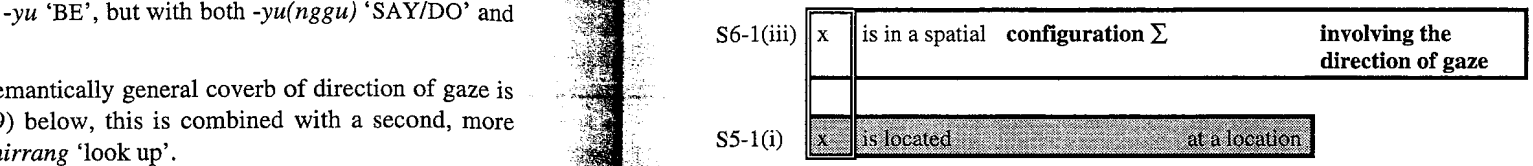
This expression is an instantiation of what Talmy (1996) calls 'fictive motion', in Talmy's terms, it specifies both an 'orientation path' (Talmy 1996: 217) and a

[163] *Jarda* 'face away' and its antonym, *wamam* (J.) /*walalam* (Ng) 'face s.o./s.th.', listed under the positionals, may actually have intermediate properties; they are not attested with either locative nor directional-marking, and are also not attested with *-irdba* 'FALL' in the reading of 'assume a position'.

'sensory path' (Talmy 1996: 224). As usual, the location, in this case the 'goal' of the gaze, may also be left unspecified, as in (6-9) above.

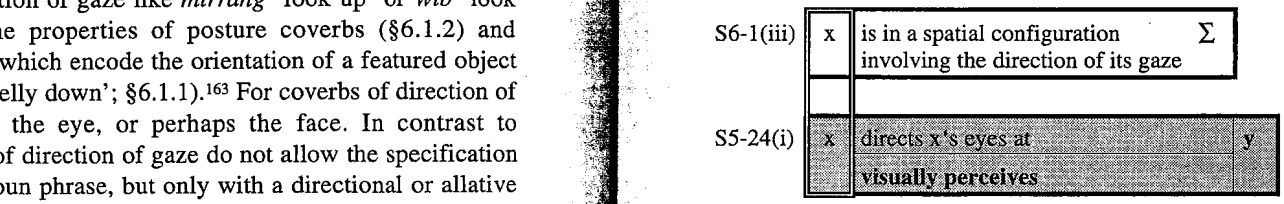
The meaning components common to coverbs of direction of gaze (represented as S6-1(iii)), and the semantic relationship to the verb *-yu* 'BE, are shown in Fig.6-12.

Fig. 6-12. *Coverb of direction of gaze and* -yu *BE'*



The combination of a coverb of direction of gaze and *-ngawu* 'SEE' is represented in Fig. 6-13. The notation only imperfectly captures the semantic relationship between the two predicates. According to the analysis presented here, the first semantic component of *-ngawu* 'SEE', 'direct one's eyes at', corresponds to the component 'be in a spatial configuration involving the direction of gaze' of the coverb. The verb, then, contributes a second central participant, and the notion of perception of this participant by the first.

Fig. 6-13. *Coverb of direction of gaze and* -ngawu *'SEE'*



At least some coverbs of direction of gaze, like *wib* 'look back' in (6-11), form complex verbs with *-yu(nggu)* 'SAY/DO' in the reading of 'assuming a position'. In (6-11), the coverb *wib* 'look back' is shown both with *-yu(nggu)* 'SAY/DO' and with *-ngawu* 'SEE'.

(6-11a) girrang **wib** nga-wu-**yu**
hold.on look.back 1sg:3sg-FUT-SAY/DO

'wait, I will look back' (i.e. 'I will turn my head back over my shoulder') (ER, MIX045)

b) wal.. buwuny-ni=malang **wib** gani-**ngawu** wirib,
well marsupial.rat-ERG=GIVEN look.back 3sg:3sg-SEE.PST dog

'well, the rat looked back at the dog' (Frog Story) (CP, E18242-43)

The only coverb of direction of gaze which is attested as combining with a transitive verb other than *-ngawu* 'SEE' is *ngayirr* 'peep into/out of a location'. The combination of this coverb and the verb *-arra* 'PUT' allows the location 'looked into' to be construed as the Undergoer. The four contiguous clauses from a Frog Story narrative in (6-12) illustrate the use of this coverb with *-yu* 'BE', *-arra* 'PUT', and *-ngawu* 'SEE'. This is the description of a scene where a boy climbs up a tree to examine a hole in the tree while looking for his lost frog.

(6-12) thanthu=biya jalig **ngayirr** ga-**yu** mindi,
DEM=NOW child peep 3sg-BE.PRS 1du.incl

nganthan=warra **ngayirr** gani-**ngayi**-m, ba-ngawu /
what=DOUBT peep 3sg:3sg-SEE-PRS IMP-SEE

burduj ga-jga-ny, jalalalang miri \
go.up 3sg-GO.PST RDP:hang leg

ngayirr gan-**arra**-m jarriny=biyang \ nganthanug=warra
peep 3sg:3sg-PUT-PRS hole=NOW why=DOUBT

'That child is peeping in (you and me watching), I don't know what he is looking at peeping in, look!, he went up, the legs hanging down. He peeps into the hole now. I don't know why.' (IP, F03147-51)

Table 6-9. *Coverbs of direction of gaze*

Coverb	Dial	Translation	*-yu* BE	*-ngawu* SEE	Other verbs
mung	J/Ng	look at s.th., watch	√	√	
warranab	J/Ng	look, look out, be awake	√		
mirrang	J	look up	√	√	
wib	J/Ng	look back over one's shoulder	√	√	*-yu(nggu)* 'SAY/DO'
ngalinggi	J	look aside, look askance	√	–	
ngayirr	J/Ng	peep in/out, look into/out of a location	√	√	*-arra* 'PUT'
riyi* [164]	J/Ng	be alert, look out from somewhere	√	√	see also §6.5.4
wiya'ma	J	look out at night (of owl)	√	√	
? wang	J/Ng	look for s.th. in vain		√	*-yu(nggu)* 'SAY/DO'

164 This coverb also combines with *-ma* 'HIT' in its reading of 'change of location' (§5.4.2.3).

6.1.4 Coverbs of 'holding'

Coverbs of 'holding', like positionals, describe a spatial configuration between two entities; examples are *warrgi* 'hold in arms in front of body' (6-13), and *Jurluj* 'carry under arm at the side of the body'. Unlike positionals, however, these coverbs are bivalent, that is, both entities are obligatorily encoded as core arguments. The Actor corresponds to the location, the Undergoer to the figure (cf. Dixon 1991: 100 on English verbs of the 'hold' type). Semantically, this amounts to saying that one of these entities is ascribed control over the position of the other. This is captured in the semantic representation proposed in S6-1(iv).

S6-1(iv)

x is in a spatial configuration Σ with respect to y
y controls the configuration Σ of x

For this reason, coverbs of 'holding' do not combine with *-yu* 'BE' or other intransitive verbs, but form stative complex verbs only with *-muwa* 'HAVE', as in (6-13). The semantic relationship is one of inclusion: the meaning of *-muwa* 'HAVE' corresponds to the meaning component common to all coverbs of 'holding', and the coverb only adds the specification of the relation. This is shown in Fig. 6-14.

(6-13a) jalig.. **warrgi** gana-**ma**-ya
child hold.in.front 3sg:3sg-HAVE-PRS

'she is holding the baby in her arms' (DP, C10022)

Fig. 6-14. *Coverb of holding and* -muwa *'HAVE'*

S6-1(iv)

x	is in a spatial **configuration Σ with respect to**	y
	<– controls the configuration of <–	

S5-2

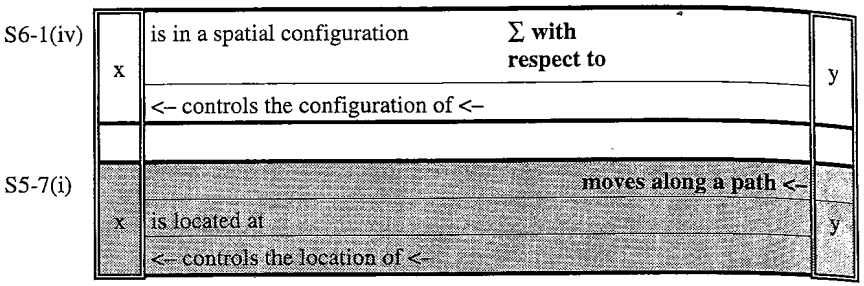
x	is located at	y
	<– controls the location of <–	

In addition, coverbs of holding combine with the transitive verbs of accompanied locomotion, which can be analysed as combining the meaning of *-muwa* 'HAVE' and a component of locomotion (§5.3.4-5). In this case, the resulting interpretation is that the Actor moves while holding the Undergoer, as illustrated in (6-14) and Fig. 6-15. In this respect, coverbs of 'holding' parallel positionals, which also may combine with locomotion verbs in a simultaneous reading.

(6-14) jalig **warrgi** gan-**anyja**
child hold.in.front 3sg:3sg-TAKE.PRS

'she is carrying the baby in her arms' (DM, fieldnotes Mark Harvey)

Fig. 6-15. *Coverb of holding and* -uga *'TAKE'*



The parallel between these coverbs and coverbs of position (§6.1.1) also extends to their degree of semantic specificity, and the conflation of number (single vs. multiple) of the figure; compare, e.g., the coverbs of 'holding' *durd* 'hold single entity in hand' and *garrb* 'hold multiple entities or mass in hands, gather' with the coverbs of position *mugurn* 'lie (of single entity), sleep' and *lula* 'lie, of multiple entities'.

Coverbs of 'holding' can be further subdivided into two subclasses, depending on which verb is used to form causatives, i.e. to express 'picking something up to hold it in the specified position'. The first subgroup takes *-mili/ -angu* 'GET/HANDLE' in this function. The most frequent coverb in this class is *durd* 'hold single entity in hand', illustrated in (6-15).

(6-15) nga-rrganthi-ya::::, **durd** nga-**ngga**-m jarlig \
1sg:3sg-APPROACH-PRS hold.one 1sg:3sg-GET/HANDLE-PRS child

'I go up to him, and pick him up, the child' (IP, E08006)

Other coverbs of 'holding' that take *-mili/ -angu* 'GET/HANDLE' are *garrb* 'hold multiple entities in hand' (see (6-18) below) and *warrgi* 'hold in arms in front of body'. The latter is exemplified in (6-16); compare this to (6-14) above.

(6-16) **warrgi** ganiny-**angu**,
hold.in.front 3sg:2sg-GET/HANDLE.PST

'she hugged you' (JB, CHE048)

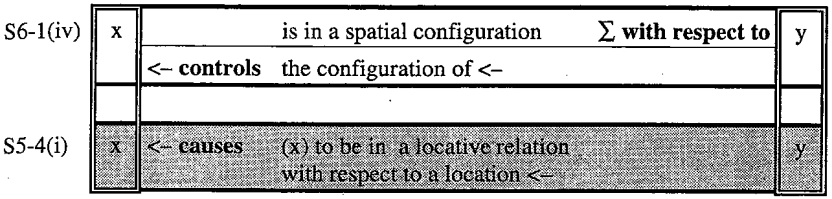
Members of the second subgroup, instead, behave like positionals in that causative complex verbs are formed with *-arra* 'PUT'. The coverbs *nguggu* 'have in mouth' and *thunuj/jurluj* 'carry under arm at the side of the body' (6-17) are of this type.

(6-17) **jurlu-jurluj** yiny-**garra**-ny
RDP-carry.under.arm 1du.excl:3sg-PUT-PST

'we two took them under the arm' (goannas) (VP, NUN131)

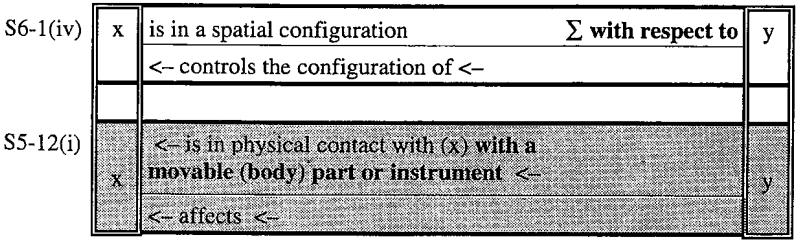
This split is not completely random; an explanation can be provided by considering again the semantic characterisations proposed for the verbs *-arra* 'PUT' (§5.2.4.1) and *-mili/-angu* 'GET/HANDLE' (§5.4.1.1) in their basic meaning. As Fig. 6-16 and Fig. 6-17 show, both of these verbs are semantically compatible with all coverbs of 'holding': picking something up to bring it into a certain configuration with one's body counts as an instance of S5-4(i), i.e. of induced change of locative relation of the entity in question. The 'agent' of *-arra* 'PUT', i.e. the participant causing an entity to be in a locative relation with respect to a location, is interpreted as coreferential with that location (something that is not adequately captured in Fig. 6-16), and at the same time as coreferential with that participant of the coverb of 'holding' that controls the spatial configuration. As in all complex verbs encountered so far, the coverb also contributes a specific component which, in this case, corresponds to the type of spatial relation holding between the two participants.

Fig. 6-16. *Coverb of holding and* -arra *'PUT'*



At the same time, events encoded by coverbs of 'holding' also count as instances of S5-12(i), 'affect something by contact with a movable (body) part/instrument'; this is represented in Fig. 6-17. As was shown in §5.4.1.1, the verb *-mili/ -angu* 'GET/HANDLE' is regularly used, both as a simple verb and in complex verbs, to express bringing an entity into reach of the agent ('getting, picking up').

Fig. 6-17. *Coverb of holding and* -mili/-angu *'GET/HANDLE'*



Thus, *-arra* 'PUT' (§5.2.4.1) and *-mili/ -angu* 'GET/HANDLE' are here in direct competition. It appears that the choice of verb depends on the actual configuration encoded by the coverb: *-mili/-angu* 'GET/HANDLE' is used if the co-figuration is one of holding in the hands, or in the arms in front of the body,

whereas *-arra* 'PUT' is used for any other configuration. In the first case, the component of ongoing manipulation, or at least potential manipulation, takes precedence over the component of placement in a location. In the second case, the reverse holds. This is confirmed by the one case in the data where a coverb allows both verbs, this is *garrb* 'hold multiple entities or mass in hands, gather'. The more usual combination, illustrated in (6-18), is with *-mili/-angu* 'GET/HANDLE'.[165] However, *-arra* 'PUT' was used in one instance, given in (6-19), where the entities in question (pieces of meat) were gathered in a location other than the hands (a plate).

(6-18) **garrb** burr-**angu**=rrgu=rndi buyud
gather 3pl:3sg-GET/HANDLE-PST=1sg.OBL=SFOC1 sand

'they picked up hot sand for me from the fire' (to apply to sore) (IP, F03374)

(6-19) yirri-ngarna-ny=biyang warladbari \
1pl.excl:3sg-GIVE-PST=NOW old.man

garrb yirr-**arra**-ny=nu \.. pleit-gi \
gather 1pl.excl:3sg-PUT-PST=3sg.OBL plate-LOC

'We gave some (meat) to the old man. We put some pieces together for him, on a plate' (CP, E11077-9)

The full list of coverbs of 'holding' is given in Table 6-10. None of these coverbs is attested with verbs other than the ones indicated in the list.

Table 6-10. *Coverbs of 'holding'*

Coverb	Dial	Translation	*-muwa* HAVE	*-mili* HANDLE	*-arra* PUT	Acc. Loc.
durd	J/Ng	hold (single entity), pick up (single entity), grasp, grab	√	√	–	√
garrb	J/Ng	pick up multiple entities or mass, gather, hold many things in hand		√	√	√
bunja	Ng	hold in closed hand	√			√
warrgi	J/Ng	hold with arms in front, embrace, hug	√	√		√

[165] The analysis is complicated somewhat by the fact that both *durd* and *garrb* 'hold single/multiple entities in hand' are in fact used for cases of 'picking up' which do not involve physical contact, e.g. giving someone a lift in a car. In these cases, *-mili/-angu* 'GET/HANDLE' is also invariably used.

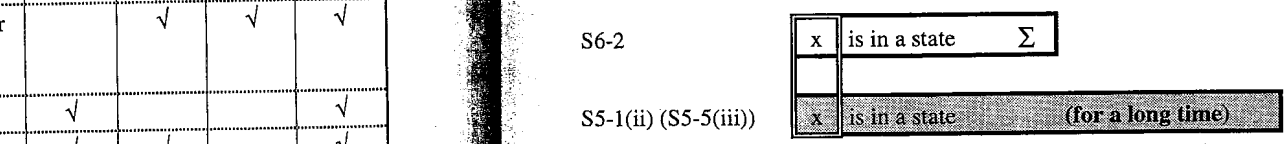
wurlg(ba) **juburru**	J Ng	carry on shoulder, at shoulder height, or on head			√	√ √
thununy **jurluj**	J Ng	carry under arm (in a carrier, or tied up as bundle)	√		√	√
nyib	Ng	carry (child) on one hip			√	
nguggu	J/Ng	have in mouth	√	–	√	

6.2 Coverbs of property and state

Stative coverbs, with the exception of the coverbs of spatial configuration, which have already been treated in the preceding section (§6.1), constitute the most problematic class. This is because they are difficult to distinguish formally from both the adjectival subclass of nominals (§2.2.2.6), and from coverbs of continuous activity (§6.3). This is consistent with typological observations concerning the variation in word class assignment of predicates of property and state (see e.g. Dixon 1982b, Lehmann 1990, Stassen 1997).

The main diagnostic for all monovalent stative coverbs – including the coverbs of spatial configuration – is their ability to combine with *-yu* 'BE', the only intransitive stative verb in Jaminjung. Some are also attested with *-ijga* 'GO' (see §5.3.2.3 and III/12 in the Appendix for examples). Both verbs are used here in their auxiliary function, expressing atelicity only (*-ijga* 'GO' in addition expresses that a situation holds habitually or for a long time). The overlap between stative coverbs and these two verbs is represented in Fig. 6-18 (the additional contribution of *-ijga* 'GO' is enclosed in brackets).

Fig. 6-18. *Coverb of property and state and* -yu *'BE' (ii) (* -ijga *'GO' (iii))*



However, the combination with these two verbs is not a sufficient criterion for an inclusion in the stative class of coverbs, since both *-yu* 'BE' and *-ijga* 'GO', in their auxiliary function, may also combine with predicative nominals and with coverbs of continuous activity (see §2.2.2.3 and §6.3). The main criterion which further distinguishes coverbs of property and state both from nominals and from coverbs of continuous activity is the possibility to take the noun-deriving suffix *-bari ~ -wari,* with the meaning 'something having the quality of x' (§2.3.2.3.1) (this is attested with coverbs from other classes as well, but not with coverbs of

continuous activity). Furthermore, coverbs of continuous activity can almost always be identified by one of a number of semi-productive or non-productive endings (see §6.3), which are not present on coverbs of state. There is one exception: certain coverbs denoting colour or texture, like *dililib* 'bright, red' in (6-20), end in *-b*, which is also one of the semi-productive suffixes on activity coverbs. However, *dililib* takes the suffix *-bari ~ -wari* and was therefore included with the coverbs of state.

(6-20a) **dililib**=biyang nga-**yu**
bright/red=NOW 1sg-BE.PRS
'I am now red (have a red skin)' (MW, CHE028)

b) yulang **dililib-bari**
flower bright/red-QUAL
'the flower is red' (Bolt et al. 1971a: 58)

Some other properties which distinguish coverbs from nominals were presented in §2.3.1.2. Ocurrence in a noun phrase as defined in §2.2.1 is one of them; however, many nominals encoding states or properties are mostly used in predicative function, which does not make this a very useful criterion in practice. A second criterion is the possibility of nominals, but not of (underived) coverbs, to form predicates in verbless clauses; of course nominals derived from a coverb, such as *dililibbari* in (6-20b), do have this property.

Even applying these criteria, some problematic cases remain. Some of these were discussed in §2.3.1.2: a few forms, for example *dili* 'light, shine'; 'firestick, torch' and *ngabuj* 'smell' are clearly heterosemous, i.e. may function as nominals or coverbs. Others, e.g. *jurriya* 'know/knowledgeable and *marring* 'bad', combine properties of both classes.

Another problem is that some coverbs are only attested in their derived form with *-bari ~ -wari*, and not in combination with the verbs *-yu* 'BE' or *-ijga* 'GO'. In other words, although these are clearly coverb roots by the derivational criterion, the actual expression of the state or property favours nominal word forms. Coverbs of this type have been included in the list, but are followed by a hyphen in the tables below if they are not attested in their underived form. Some coverbs do occur in their underived form, but only with verbs other than *-yu* 'BE' or *-ijga* 'GO'; this is the case for *murrb* 'dark', illustrated in (6-21).

(6-21a) gugu **murrb** ga-**ram**
water dark 3sg-COME.PRS
'a dark raincloud is coming' (JM, CHE144)

b) juwiya **murrb** ga-**mili**-ji
nose dark 3sg-GET/HANDLE-REFL.PRS
'he is covering his nose' (boy in Frog Story) (IP, F03127)

These strictly formal criteria leave us with a rather small class of coverbs of property and state. The coverbs identified in this way belong to various semantic fields, comprising smell and taste (Table 6-11), colour and texture (Table 6-12), physical conditions (Table 6-13), and mental states/knowledge (Table 6-14). Note that the tables represent semantic subclasses only; there is no clear formal distinguishing characteristic of these classes. It is perhaps significant that *-ijga* 'GO', expressing habituality or long duration, is not attested with the coverbs encoding a property (e.g. colour and smell) but only with coverbs encoding a (temporary) state (e.g. physical condition or knowledge). However, the evidence is inconclusive at the moment, since a judgment on these combinations was not elicited.

As is also indicated in Tables 6-11 to 6-14 below, some coverbs of property or state, like coverbs of spatial configuration (§6.1), are also attested with motion verbs in an associated motion reading, and with some transitive verbs in a causative reading. Moreover, some are found with *-irna* 'BURN' in the reading 'burn with characteristic x', and with either *-yu(nggu)* 'SAY/DO' (§5.6.1.6) or *-irdba* 'FALL' (§5.2.3.2) in an inchoative reading.

Table 6-11. *Coverbs of property/state: SMELL/TASTE*

Coverb	Dial	Translation	*-bari* QUAL	*-yu* BE	*-ijga* GO	Other verbs
nguyang* **ngabuj***	J Ng	smell	√	√		*-irna* 'BURN': 'burn with a smell' *-mili* 'HANDLE': 'smell s.th.' see also §2.3.1.2, §6.17
jaly	J	be tasty, taste good	√			*-irna* 'BURN': 'cook until tasting good'

Table 6-12. *Coverbs of property/state: COLOUR/TEXTURE/HEAT*

Coverb	Dial	Translation	*-bari* QUAL	*-yu* BE	*-ijga* GO	Other verbs
dili*	J/Ng	shining, bright, light (of fire, light)		√		*-irna* 'BURN': 'burn bright' *-arra* 'PUT': 'make a light, light s.th. up' see also §2.3.1.2
dililib	J/Ng	bright, light, shiny, red, orange	√	√		
malngarr*	J	bright, shining (of sun, reflection)		√		*-irna* 'BURN': 'shine bright' *-ruma* 'COME': 'come shining bright (of sun)' see also §6.8.2
murrb	J/Ng	dark; covered (e.g. with hands)	√			*-ruma* 'COME': 'come dark (e.g. of clouds)' *-mili* 'HANDLE': 'cover s.th. with hands'[166]
mum	Ng	dark	√			*-irdba* 'FALL': 'get dark'
mangurrb-	J	dark	√			
biligirri-	J/Ng	white	√			
dabdab-	J	colourful	√			
bun	J	hot, warm (inanimate), feel hot (animate)	√	√		*-irna* 'BURN': 'be warm'
bundurr-	J	hot, warm	√			

166 For reasons of space, *-mili* 'HANDLE' is used instead of *-mili/-angu* 'GET/ HANDLE' in the tables in this chapter.

Table 6-13. *Coverbs of property/state: PHYSICAL CONDITON*

Coverb	Dial	Translation	*-bari* QUAL	*-yu* BE	*-ijga* GO	Other verbs
janga*	J	sick, sore		√		*-irdba* 'FALL': 'get sick'
warlad	Ng		?[167]	√		*-ma* 'HIT' 'hit s.o. such that he is sore', and other verbs of contact/force see also §2.3.1.2
guwamany	J	headache		√		see also §6.4.3
wangi	Ng					
wuthma	J	ache, have pain		√		
guyawud	J/Ng	hungry		√	√	
yarrajgu	J/Ng	afraid		√	√	
ngardgu	J/Ng	alive		√	√	
girrb	J	quiet	√	√		*-yu(nggu)* 'SAY/DO': 'become quiet' *-mili* 'HANDLE': 'make quiet', 'turn off'

Table 6-14. *Coverbs of property/state: KNOWLEDGE*

Coverb	Dial	Translation	*-bari* QUAL	*-yu* BE	*-ijga* GO	Other verbs
jurriya	J/Ng	know, be knowledgeable	√	√	√	*-mili* 'HANDLE': 'teach/ train s.o.'
nug	J/Ng	be familiar, be used to s.th./s.o.	√	√		*-irdba* 'FALL': 'get used to s.o./s.th.' *-minda* 'EAT': 'get used to eating s.th.'

6.3 Coverbs of continuous activity

Coverbs of continuous activity form a large class, with members from a variety of semantic fields. This class does not exhaust the class of activity predicates, in

167 The form *warlad-bari* is lexicalised as 'old(er) man'

Vendler's sense of 'activity', which includes, for example, also coverbs of internal motion, bodily condition, and manner of motion. The class of coverbs of continuous activity overlaps with these classes semantically. Formally, the class is defined in that its members combine almost exclusively with *-yu* 'BE' and *-ijga* 'GO' in their secondary function as auxiliary verbs. Criteria that distinguish activity coverbs from the only other coverbs with this property, coverbs of property and state, were discussed in §6.2. Complex verbs formed with coverbs of activity are illustrated in (6-22) for the coverb *wirrigaja* 'cooking', and represented in Fig. 6-19 (note the parallel to Fig. 6-18 in §6.2).

(6-22a) mangarra **wirrigaja** nga-**yu**
plant.food cook 1sg-BE.PRS
'I am cooking food' (VP, NUN161)

b) luba ngany-angu,
big 1sg:2sg-GET/HANDLE.PST
gurrany.. **wirrigaja** na-**ngga**=rrgu /... mangarra
NEG cook 2sg-GO.PRS=1sg.OBL plant.food
'I raised you, (but) you never cook food for me' (DP, FRA200b)

The two auxiliary verbs here merely indicate atelicity. (As has already been shown in §3.3.1 and §5.3.2.3, *-ijga* 'GO' in this use conveys an additional nuance of prolonged or habitual activity.) From the fact that coverbs of continuous activity combine with these verbs, we can conclude that they are all atelic. This is represented in S6-3(i) as a component of 'be involved in an activity', which completely overlaps with the meaning of *-yu* 'BE' and partially overlaps with the meaning of *-ijga* 'GO' in their secondary senses.

Fig. 6-19. *Coverb of continuous activity and* -yu *'BE' (ii) (*-ijga *'GO' (iii))*

S6-3(i)

x	is involved in an activity Σ

S5-1(ii) (S5-5(iii))

x	is (involved in an activity) **(for a long time)**

Coverbs of continuous activity have a further curious property, in that they all have one of the endings *-ja/-ya, -la(la), -ma, -mib, -(g)ib/-gab,* or *-b*. None of these functions as a productive suffix in the language. Some of the coverbs in this class, however, have a counterpart lacking this ending, and belonging to a different formal class. For example, the counterpart of *jardija* 'build, erect' is the posture coverb *jard* 'upright', and the counterpart of *gurrija* 'dig' in (6-23a, is *gurr* 'dig' (6-23b), a coverb of manipulation which combines with *-milil-angu* 'GET/HANDLE' (see §6.9.2).

(6-23a) gulban **gurrija** burru-**yu** jalig wuju-wuju
ground dig 3pl-BE.PRS child RDP-small
'they are digging the ground, the small children' (playing with sand) (DP, JAM120)

b) **gurr-gurr** ba-**ngu** mindag
RDP-dig IMP-GET/HANDLE 1du.incl.OBL
'dig it up for you and me' (yam, with crowbar) (IP, F01201)

Coverbs of continuous activity may be monovalent or bivalent. Bivalent activity coverbs allow for a patient participant to be expressed as an absolutive noun phrase (i.e. they allow two absolutive noun phrases in total), as shown in (6-22a) and (6-23a) above (see also §4.3.1.2). Examples for monovalent activity coverbs are those in (6-24) to (6-26) below, since these coverbs never occur with an absolutive noun phrase representing a patient. The meaning common to all bivalent activity coverbs can be represented as in S6-3(ii).

S6-3(ii)

x is involved in an activity Σ with respect to y

Coverbs derived by means of the productive continuous suffix *-mayan* (see §2.3.2.2 and §3.3.1) belong to the class of coverbs of continuous activity formally, but have not been listed here. It has been argued in §3.3.1 that the recurrent endings on the coverbs of continuous activity are older, and more or less fossilized, suffixes, which once had the same or a similar function as *-mayan,* or perhaps came as unanalysed components with loans from neighbouring languages where they are used productively. If the coverbs in the 'continuous activity' class indeed originated in derived forms which occurred in a 'progressive' construction, this would explain why they are lexically restricted to a combination with *-yu* 'BE' and *-ijga* 'GO'.

Their origin in a productive 'progressive' construction would also explain why coverbs of continuous activity form such a large and semantically heterogeneous class.[168] It comprises motor patterns (6-24), bodily functions (6-25), types of speech and sound emission (6-26), types of perception, and conventionalised activities like 'cooking' (cf. (6-22) above), 'digging' (cf. (6-23) above), 'eating' and 'fishing'. Coverbs of activity that encode some kind of burning constitute a (small) subclass that is also formally defined, in that its members also combine with *-irna* 'BURN', and correspondingly are cross-listed as coverbs of heat and light emission in §6.8.2.

[168] It may also be semantically more appropriate to gloss all these coverbs with English forms in *-ing*. For reasons of brevity and consistency with glossing of other coverbs, however, they are glossed with English infinitives.

(6-24) **ngajija** ga-**yu** wirlga-ni,
dance 3sg-BE.PRS foot-ERG/INSTR
'she is dancing/ stomping with the feet' (DP, F01367)

(6-25) **guninya** ga-**gba** mirdang
vomit 3sg-BE.pST night
'he was vomiting at night' (MW, CHE121)

(6-26) **durdurdub** ga-**yu**, langa gan-karra-ny=mindag
thunder 3sg-BE.PRS ear 3sg:1-PUT-PST=1du.incl.OBL
'it is making a thundering noise, it made you and me deaf' (truck) (DMc, CHE386)

Examples (6-25) and (6-26) shows that membership in the 'continuous activity' class does not necessarily correlate with control. Other undisputably uncontrolled events, like 'snoring' or 'shivering', and even events predicated of inanimate entities, like 'glowing' (of fire) and 'running' (of water), are also encoded by coverbs in this class.

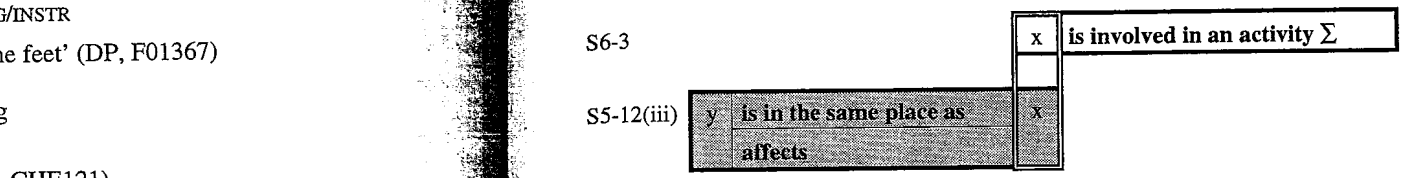
Apart from the two auxiliary verbs, coverbs of continuous activity may also combine with verbs of locomotion in a simultaneous (associated motion) or a sequential (motion cum purpose) reading, in a way that has been illustrated for positional coverbs in §6.1 above (see also §5.3.1). In addition, some coverbs in the activity class are found with transitive verbs. These are used either with a causative reading as in (6-27a), or in order to allow for a participant that is affected by the activity to be encoded as Undergoer, as in (6-27b) (see §5.9.4 for another example).

(6-27a) **gambaja** nga-**bili**
laugh 1sg:3sg-FUT:GET/HANDLE
'I'm going to make her laugh' (DR, VP, CHE078)

b) **gambaja** gani-**ma-m**
laugh 3sg:3sg-HIT-PRS
'he is laughing at him' (DP, JAM293)

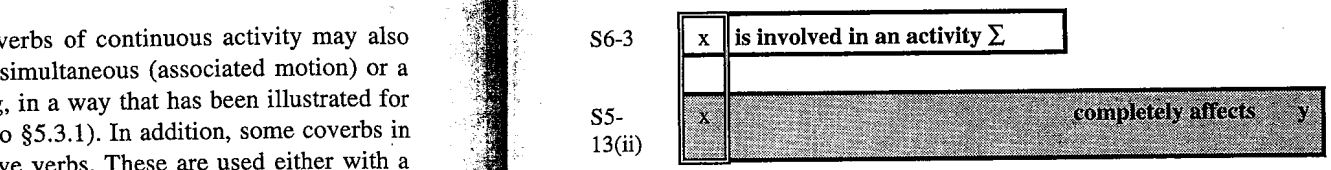
The combination with an interpretation of cause/result with no semantic overlap between verb and coverb, of the type illustrated in (6-27a), is represented in Fig. 6-20. The verb *-mili/ -angu* 'GET/HANDLE' is used here in a secondary sense of 'interact' (see §5.4.1.3).

Fig. 6-20. *Monovalent coverb of continuous activity and* -mili/ -angu *'GET/HANDLE': resultative reading*



In combinations of the type illustrated in (6-27b) there also is no semantic overlap between coverb and verb. However, the interpretation is not one of cause and result. Rather, the coverb specifies the manner in which another participant is affected. The participant involved in the activity is thus aligned with the Actor participant of the verb, not with the Undergoer, as shown in Fig. 6-21 (see also §4.3.2.1-2). Note that coverbs like *gambaja* 'laugh' are not themselves bivalent, since in combination with the intransitive auxiliary verbs they fail to license a second core argument.

Fig. 6-21. *Monovalent coverb of continuous activity and* -ma *'HIT' (ii)*



The attested coverbs of continuous activity are listed in Tables 6-15 to 6-21, grouped by semantic areas. Coverbs that have counterparts lacking the semi-productive suffix are marked with an arrow (<); the others are only attested in the form given here.

Table 6-15. *Coverbs of continuous activity: BODILY FUNCTION*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
ngayimaj		breathe	√	√	
ngayib	Ng		√		
gumbulala	J	urinate[169]		√	
ngurija	J	shit, defecate	√		
waburlma	J	vomit	√	√	
guninya	Ng		√		

169 Based on the nominal *gumbu* 'urine'.

Table 6-16. *Coverbs of continuous activity: SPEECH AND SOUND EMISSION*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
gambaja*	J/Ng	laugh, smile	√	√	*-ngawu* 'SEE', *-ma* 'HIT': 'laugh at s.o.' (see also §6.18) *-mili* 'HANDLE': 'make s.o. laugh'
ngilija	J/Ng	cry, weep	√	√	
waya* <	J	shout, cry	√		see also §6.4.1
ngujulb <	J/Ng	cough	√		
jirrngayib	J	sneeze	√	√	
bungarrjang	J	snore	√		
burrnguyib	Ng		√		
jalwany	J	talk, make a noise	√		
jarragja	J	talk, have a conversation, have a discussion	√	√	
jarragab	Ng		√		
yirrgbi[170] **<**	J		√		
nyinganyingab	J	humbug, be a nuisance	√		
nyuwalng	J/Ng		√	√	
ngunkulurrb	J	mutter, talk quietly	√		
gayiyab	J/Ng	whisper, talk to oneself, mutter	√		
garrwaja	J/Ng	swear	√		*-ma* 'HIT': 'swear at someone'
jiwajib[171]	J		√		
marringma <	J	swear, use bad language[172]	√		
nganya	J/Ng	sing	√		
gulumbu-nyang	J	play didgeridoo[173]	√		

170 Here and in a few other forms the ending *-(i)b* is metathesised.

171 Probably based on a Kriol loan, *jiwa* 'swear'.

172 Based on *marring* 'bad'.

173 Based on *gulumbung* 'didgeridoo'.

nijbilija <	J/Ng	call out names of places or things	√	√	
ngarl'ma <	J/Ng	bark	√	√	
durdurdub	J	thunder, rumble	√	√	
gardarrb	J/Ng	rattle			
wububub	J	make a noise, rustle	√	√	
wurrma	Ng	make a noise		√	

Table 6-17. *Coverbs of continuous activity: MOTOR PATTERN*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
wuriwurima	J	wag tail	√		
bardab	J/Ng	wander round, walk without specific direction or purpose	√		
jardab		walk with a stick	√		
ngajija	J/Ng	dance	√	√	*-irdba* 'FALL': 'dance'
mungamunga	J	dance with a stick (women's dance)	√		
wabarrajba	J	dance (woman)	√		
thunthunba	J	stomp		√	
burdurdubba <	J	run, race		√	
lululub	J	run (of water)	√	√	
wuburrjb	J	be turbulent (of water)		√	
yilima <	J	move, stir	√		
dalalab <	Ng	shiver, shake	√		

Table 6-18. *Coverbs of continuous activity: CONVENTIONALISED ACTIVITY*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
thawaya	J	eat	√	√	*-minda* 'EAT' (rare)
wirrigaja	J/Ng	cook	√	√	
ngabulgja <	J	bathe, have a wash, have a swim	√		
bulugaja	Ng		√	√	
garlagarla	J/Ng	play, joke	√	√	
wajama	J/Ng	engage in fishing	√		
wurdbaja <	J/Ng	look for s.th.	√		
ngarayib	J	have a rest	√		
widbi	J/Ng	busy, occupied	√		*-arra* 'PUT': 'keep s.o. busy'

Table 6-19. *Coverbs of continuous activity: MANIPULATION*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
binyinyib <	J/Ng	make fire with a firedrill	√	√	*-mili* 'HANDLE'
bulawulab	J	draw, paint[174]	√		
jardija <		build, erect	√		
warranygib <	J	remove a cover (with the hands), scratch	√		
warranya <					
gurrija	J/Ng	dig	√		
yalugaja	Ng				
lurrgijab <	J	pierce, poke	√		
wurrgijab <	J	throw, chuck away	√		
ngalyagab <	J	lick	√		
thaburrmib <	J	smash up with a stone	√		
? yaab <	J	stroke	√		
bijibijirrb <	J	do in the right way	√		

174 Based on *bulawula* 'a painting'.

Table 6-20. *Coverbs of continuous activity: PERCEPTION AND COGNITION*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
girrgirrmib <	J	remember, think about s.o.	√	√	*-linyma* 'MAKE': 'remind'
malangayij*	J	listen, hear	√		see also §6.16
gurru*	Ng		√		
warayi	J/Ng	insist on (having) something, keep on asking for s.th., keep pursuing s.o.	√		*-uga* 'TAKE': 'pursue s.o./s.th'
bankiyaja <	J	dream	√		

Table 6-21. *Coverbs of continuous activity: BURNING*

Coverb	Dial	Translation	*-yu* BE	*-ijga* GO	Other verbs
ngarnarna'ma*	J	glow, first flames coming up	√		*-irna* 'BURN' (see §6.8.2)
thunkulajbi*	J	smokey, smoking fire	√	√	*-irna* 'BURN' (see §6.8.2)

6.4 Coverbs of speech and sound emission, internal motion, and physical or emotional condition

These three classes of coverbs at first sight seem semantically unrelated, but belong together formally in that all their members combine with the performance verb *-yu(nggu)* 'SAY/DO', either mainly or exclusively. Furthermore, all of these coverbs are monovalent, that is, complex verbs formed with them and *-yu(nggu)* 'SAY/DO' behave like monovalent verbs (even though *-yu(nggu)* 'SAY/DO' is formally transitive). It will also turn out that the boundaries between the classes are not clearcut from a semantic perspective.

6.4.1 Coverbs of speech act and sound emission

Coverbs in this class either denote speech acts, or specific sounds or noises; they form complex verbs with *-yu(nggu)* 'SAY/DO' almost exclusively. The formal relationship between these complex verbs and the 'quotation' construction (with the same verb but without a coverb) has already been pointed out in §5.6.2. This

is consistent with the observation that the coverbs of sound emission often have an onomatopoetic quality: one could think of them as lexicalised sound imitations. Examples are *waya* 'call out, shout' in (6-28), and *winy* 'whistle' in (6-29).

(6-28) jalig-gu **waya** ba-**yu**=nu
child-DAT call.out IMP-SAY/DO=3sg.OBL
'call out for the child!' (DMc, CHE399)

(6-29) **winy** nganth-**unggu**-m nganthan jalag nganthu-ngawu
whistle 2sg:3sg-SAY/DO-PRS what good 2sg:3sg-SEE.PST
'you whistle, what good (thing) have you seen?' (ER, NOT058)

Table 6-22. *Coverbs of sound emission*

Coverb	Dial	Translation	*-yu nggu* SAY/DO	Other Verbs
waya*	J/Ng	call, shout, sing out	√	see §6.3
bawa	J/Ng	call out, shout	√	
winy	J/Ng	whistle	√	
ngarl*	J/Ng	bark	√	*-arra* 'PUT' *-ngawu* 'SEE' (see §5.8.1.2 and §6.18)
ngujul	J/Ng	cough	√	
ngajirr	Ng	sneeze	√	
daggarrag	J/Ng	burp, hiccough	√	
dirrng	J/Ng	fart	√	
yirrirrib	Ng	rustle, make a noise	√	

Of these coverbs, only *waya* 'call, shout' also combines with *-yu* 'BE' (see (6-30) below), and is therefore cross-listed as a coverb of continuous activity, a class which contains a number of other coverbs which semantically encode types of sound emission.[175]

The last four coverbs listed in Table 6-22 could also have been listed under the class of 'bodily condition' (§6.4.3), since it is not clear whether sound emission

175 The Jaminjung translation equivalent of *ngajirr, jirrngayib*, is a coverb of continuous activity (§6.3); see also §5.6.2. *Ngujul* 'cough' and *ngajirr* 'sneeze' also have counterparts in the 'continuous activity' class, which are formally marked with the semi-productive continuous suffix *-b*.

is a criterial component of their meaning. This shows that the boundary between the classes is as difficult to draw on semantic grounds as it is on formal grounds.

Only a few coverbs are attested in the 'speech act' class. These all combine exclusively with *-yu(nggu)* 'SAY/DO'. In addition to 'lying' and 'telling the truth', a further specific speech act which is lexicalised as a coverb in Jaminjung is *jaj* 'speak/warn in vain'.

(6-30) **waya** yirr-**agba**=nu::,
call.out 1pl.excl-be.PST=3sg.OBL
jaj yirri-**yu**=nu,
say.in.vain 1pl.excl:3sg-SAY/DO.PST=3sg.OBL
bugu dibard gana-ngu:,
JUST jump 3sg:3sg-GET/HANDLE.PST
'we were calling out to him, we called in vain, he just jumped down' (a boy who climbed up a tree and was injured when jumping down (IP, E09108)

Table 6-23. *Coverbs of speech act*

Coverb	Dial	Translation	*-yu nggu* SAY/DO	Other verbs
jilag*	J	report, tell an experience	√	see §6.16
jaj	J	say/warn in vain	√	
gumbulung	J	tell the truth	√	
jimaj	Ng		√	
mirrung	J	tell a lie, deceive, pretend	√	
jimajala	Ng		√	
gimarrib	Ng		√	

6.4.2 Coverbs of internal motion

The class of coverbs of internal motion semantically closely corresponds to Levin's (1993: 261) class of 'body-internal motion'; the term 'internal motion' is adopted from Jackendoff (1990: 88). In the way it is used here, the term covers any kind of movement, of animates or inanimates, that does not involve motion along a path as defined in §5.3.1, e.g. 'nodding', 'shivering', or 'bubbling'. There is a clear formal distinction between coverbs of internal motion and coverbs of

manner of locomotion (§6.5.1), in that the former only combine with *-yu(nggu)* 'SAY/DO' and the latter – usually – with the locomotion verbs.[176]

As in many other places in the lexicon, Jaminjung does not distinguish between controlled and uncontrolled events of internal motion (see also §5.6.2). An example for controlled internal motion is 'waving' (*mangan)* in (6-31).

(6-31) girrang **mangan-mangan** nga-wu-**yu** na
wait RDP-wave 1sg:3sg-FUT-SAY/DO NOW
'wait, I will wave now' (ER, MIX045)

An example for uncontrolled internal motion/appearance is given in (6-32), which describes dead fish floating to the surface after being poisoned in the traditional way of fishing.

(6-32) **nyam'** burr-**ina**=biyang,
float.up 3pl:3sg-SAY/DO.IMPF=NOW
'they used to float up to the surface' (Orig. Transl.: IP: dying, you know (...) come out from water, you know, floating') (EH, E18099)

The last three coverbs in Table 6-24, *girlang* 'show up, appear', and *nyam/ warnang* 'float up', could perhaps more appropriately be described as coverbs of appearance. However, they have the same formal properties as the other coverbs of internal motion, and can be distinguished from the coverbs of 'emerging' listed in §6.5.4 in that the latter combine with *-ma* 'HIT' rather than *-yu(nggu)* 'SAY/DO'. As Table 6-24 shows, most coverbs of internal motion are attested with *-yu(nggu)* 'SAY/DO' exclusively. The only exceptions are *burrngburrng* 'bubble', which is cross-classified as a coverb of cooking/burning, and *jili* 'stir' and *birdinyiny* 'rotate', which are attested in complex verbs with a causative interpretation.

Table 6-24. *Coverbs of internal motion*

Coverb	Dial	Translation	*-yu nggu* SAY/DO	Other Verbs
dalala	Ng	shiver, shake	√	
burrurrd	Ng	shake in fright, shudder	√	
jili, yili	J	stir, move	√	*-mili* 'HANDLE': 'stir s.o., wake s.o. up'
duwaj	J	nod (with the head)	√	
nunaj	Ng		√	
wardarda	Ng	shake head	√	
mangan	J	wave (goodbye)	√	
mamaj	J	wave, beckon	√	
mangmang	J/Ng	move knees in and out (in women's dance)	√	
yimij	J	wink (with the eye)	√	
birdinyiny	J	rotate, spin, turn round and round, swing, whirl	√	*-mili* 'HANDLE': 'turn/twist s.th.' *-wardgiya* 'THROW': 'swing s.th. round' *-arra* 'PUT': 'twist s.th.'
wuburr	J	be turbulent (of water)	√	
burrngburrng	J	bubble, boil up	√	see §6.8.2
girlang	J	show up, appear	√	
nyam	J	float up (of fish after being poisoned)	√	
warnang	Ng		√	

176 See §5.6.1.2.2 for a few exceptions.

6.4.3 Coverbs of bodily or emotional condition

Many coverbs describing a physical or emotional condition show the same formal properties as the coverbs of speech act and sound emission (§6.4.1), and the coverbs of internal motion (§6.4.2). They, too, form complex verbs with *-yu(nggu)* 'SAY/DO', and, even though this verb is formally transitive, these complex verbs are clearly monovalent (see §4.2.2.1.3, §5.6.2). An example is given in (6-33).

(6-33) ngayug=gayi **bujarl** nga-**yunggu**-m, Nangari-wu,
1sg=ALSO sad/sorry 1sg:3sg-SAY/DO-PRS <subsection>-DAT
'I too am worried for Nangari' (DR, BAR048)

There are several semantic links between coverbs of bodily and emotional condition, coverbs of sound emission, and coverbs of internal motion, which may explain their similar formal properties. First, physical and also emotional conditions are often attributed to specific body parts, which can be syntactically represented in a part-whole construction as in (6-36) below, just as for internal motion e.g. of limbs.

Second, speakers often give translations that indicate that the emotional conditions which are encoded by coverbs of this class are regarded as observable

from outside. For example, translation equivalents given for *nguny,* in addition to 'sulky', were 'frowning' and 'no smile'; the coverb *buJarl* was not only translated as 'sad, sorry, missing something' but also as 'too weak to do something', and the coverb *wangarr* 'mad' can be used to describe someone's destructive behaviour (see also §5.6.1.3). A further example is the coverb *jalug*; I first heard this with reference to a small child who was sitting up and bouncing to music. When I asked for a translation, I was told it meant 'lively'. Another speaker, in (6-34), confirmed the use of *jalug* in describing a bouncing baby, but offered 'happy' as translation.

(6-34) nganthan-nyunga **jalug** gan-**unggu**-m yirra=mulu +
what-ORIG lively 3sg:3sg-SAY/DO-PRS 1pl.excl.OBL=COLL?

+ thanthu jalig?
DEM child

'why is he being lively "at us all", that child?' (Orig. Tr.: 'what wrong[177] he.. happy') (IP, F01550)

The common semantic denominator of coverbs of speech and sound emission, coverbs of internal motion, and coverbs of bodily and emotional condition, thus seems to correspond to the general meaning proposed for the verb *-yu(nggu)* 'SAY/DO' in §5.6.2, 'internally cause, and give immediate evidence of, an event'. This relation between coverb and verb is thus one of inclusion, as illustrated in Fig. 6-22 for coverbs of bodily/emotional condition. Coverbs of the types listed in this section were argued in §4.2.3.3 and §5.6.2 to simultaneously represent the propositional participant indicated by the variable 'E' in the semantic characterisation of the verb. In complex verbs, then, the semantically specific coverb contributes the information of what is 'internally caused, and given evidence of' (in addition to having this semantic component itself). This could be either a sound or speech act (S6-4(i)), internal motion (S6-4(ii)), or bodily/emotional condition (S6-4(iii)); only the representation of the latter is explicitly given here.

Fig. 6-22. *Coverb of bodily or emotional condition and* -yunggu *'SAY/DO'*

S6-4(iii)	x	internally causes and gives immediate evidence of **a bodily/emotional condition of type Σ**
S5-21	x	internally causes and gives immediate evidence of an event E

177 This expression does not necessarily have a negative connotation in Kriol; it is used here basically with the same meaning as 'why'.

As was argued in more detail in §5.6.2, 'internal causation' is not equivalent to control, but also includes events coming about because of internal properties of the participant (even if that internal property is 'being dead', as in the case of *nyam* 'fish floating up' in (6-32)). Therefore, uncontrolled internal motion and bodily/emotional conditions can also be subsumed under 'internal cause'. Likewise, the component of 'giving immediate evidence of an event' is contained in coverbs from all three classes, if it is true that coverbs of bodily/ emotional condition all describe observable conditions. This might explain why all these coverbs are more or less restricted to a combination with *-yu(nggu)* 'SAY/DO', since according to this analysis, the verb is semantically included in the coverbs.

However, some of the coverbs in Table 6-25 below are cross-classified as coverbs of state, and a number of other coverbs encoding a 'psycho-physiological condition' belong to the state class exclusively (see §6.2). These tend to encode conditions that are more time-stable, and/or not easily located in one body part. This can be illustrated for *marring* 'bad'. For example, the 'badness' of the untrained horse in (6-35) can be interpreted as an inherent property more than a condition (although this property can also change over time), while the bad (i.e. sick) heart in (6-36) is an acquired condition.

(6-35) **marring** ga-**gba** thanthiya dimarna
bad 3sg-BE.PST DEM horse

'(they were training a horse), it was bad, that horse' (DR, BAR002-3)

(6-36) durlu **marring** nga-**yunggu**-m
heart bad 1sg:3sg-SAY/DO-PRS

'I have a sick heart' (MW, CHE106)

However, there also is some variation in class membership without a clear difference in meaning. For example, while *guwarnany* 'have a headache' is attested with both *-yu* 'BE' and *-yu(nggu)* 'SAY/DO' and is therefore cross-listed as a coverb of state, its Ngaliwurru translation equivalent, *wangi*, only belongs to the 'state' class (i.e. only combines with *-yu* 'BE'). And *janga* (J.) and *warlad* (Ng.) 'sick, sore', even though they may be used synonymously with *marring* 'bad', are coverbs of state, compare (6-37) below with (6-36) above.

(6-37) **warlad** nga-**yu** durlu
sore 1sg-BE.PRS heart

'I have a sick heart' (MW, CHE107)

Table 6-25. *Coverbs of bodily or emotional condition*

Coverb	Dial	Translation	*-yu nggu* SAY/DO	Other verbs
marring	J/Ng	be bad, sick, weak, sad	√	*-yu* 'BE': 'be bad' (see also §2.2.2.3) *-mili* 'HANDLE': 'make bad, destroy'
guwarnany*	J	have a headache	√	*-yu* 'BE': 'have a headache' (see §6.2)
butharl	J	be sad, sorry, weak, bored, no good at doing s.th.	√	*-mili* 'HANDLE' or *-(ma)linyma* 'MAKE': 'make s.o. sad' (see §5.8.3.2)
gururu	J/Ng	be tired, exhausted	√	
nguny* **nyul**	J Ng	be in a bad mood, sulky, frowning, envious	√	*-ngawu* 'SEE': 'be envious of s.o./s.th.' (see §6.18)
wangarr	J	act madly, silly, out of one's mind	√	*-(ma)linyma* 'MAKE': 'make s.o. mad'
dadarr	J/Ng	be stiff	√	
yarl	J	be itchy	√	
jalug	J	be lively, excited	√	
burriburrib	Ng	have one's hair stand on end (as when followed by spirits)	√	

6.5 Coverbs of motion

The common denominator of the coverbs grouped together in this section is that they can all combine with verbs of locomotion. They fall into several subgroups, with sometimes fuzzy boundaries. The most important criterion for subgrouping is whether the coverbs in question can form complex verbs with verbs of locomotion alone, or also with verbs of change of locative relation. Coverbs of manner of motion (§6.5.1) and coverbs of hunting (§6.5.2) generally only combine with locomotion verbs. Coverbs of direction of motion (§6.5.3) fall into three subgroups: coverbs of change of location may combine wih *-irdba* 'FALL', but coverbs of path and coverbs of detachment may not. Coverbs of emerging (§6.5.4) form a special subclass which can be formally identified by their ability to combine with the verb *-ma* 'HIT' in a secondary sense. Since all coverbs of motion may combine with intransitive as well as transitive verbs of locomotion, they have to be regarded as monovalent.

6.5.1 Coverbs of manner of motion

Coverbs of manner of motion encode a motor pattern and, in a few cases, velocity. 'Manner of motion' should be read as 'manner of locomotion', since these coverbs form a class which is formally distinct from coverbs of internal motion (§6.4.2). Coverbs of internal motion combine with *-yu(nggu)* 'SAY/DO', while coverbs of manner of motion combine with the locomotion verbs.

The distinction between coverbs of manner of motion and coverbs of continuous activity is less clear; members of the latter class (e.g. *ngajija* 'dance', *lululub* 'run, of water') may also encode a motor pattern, but usually form complex verbs with *-yu* 'BE' and *-ijga* 'GO'in their auxiliary function (see §6.3). Even though some of them also allow for a combination with locomotion verbs, coverbs of continuous activity encoding manner of motion are not cross-listed here.

Examples for two coverbs of manner of motion, *walnginy* 'walk' and *rayib* 'sneak up', in combination with several locomotion verbs, are given in (6-38) and (6-39) below (for further examples see §5.3.1.3).

(6-38a) wamam ga-**ram** **walnginy**
facing 3sg-COME.PRS walk
'he comes walking facing us' (Orig. Transl.: 'he coming up')
(Enter/Exit Animation video) (DP, SPA058)

b) **walnginy** gan-**antha** wirib... mununggu-mij
walk 3sg:3sg-TAKE.PRS dog string-COMIT
'she takes the dog walking with a lead' (DP, FRA216b)

c) **walnginy**=biyang ba-**wardagarra**
walk=NOW IMP-FOLLOW
'follow him walking' / 'walk after him' (DB, D05048)

(6-39a) **rayib** ga-**yinji** yangarra-bina mirdi ga-gba
sneak.up 3sg-GO.IMPF kangaroo-ALL sleep 3sg-BE.PST
'he snuck up on a sleeping kangaroo' (Fieldnotes Michael Walsh)

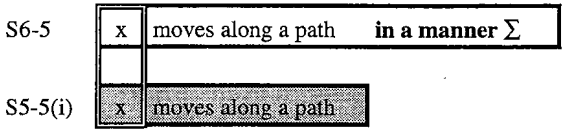
b) **rayib** gan-**karrga**
sneak.up 3sg:1sg-APPROACH-PST
'it snuck up on me (crocodile)' (DBil, FRA034)

Generally, the most frequent verbs with coverbs from this class are the intransitive locomotion verbs *-ijga* 'GO' and *-ruma* 'COME'. Where a combination with a transitive verb is also frequent, it is clearly explained by the specific semantics of the coverb; for example, *rayib* 'sneak up' was most frequently found with *-arrga* 'APPROACH', as in (6-39b) above, although the

combination with *-ijga* 'GO' is also attested, e.g. in (6-39a). For reasons of space, the locomotion verbs are not listed individually in Table 6-26 below.

The semantic relationship between coverbs of manner and motion and locomotion verbs is represented in Fig. 6-23 for the most general locmotion verb, *-ijga* 'GO'. The relationship in this case is one of inclusion; with other locomotion verbs, it is one of partial overlap, since these verbs contribute further semantic components, e.g. orientation of the path.

Fig. 6-23. *Coverb of manner of motion and* -ijga *'GO'*



Combinations of manner of motion coverbs with verbs other than the locomotion verbs are rare. As a rule, these coverbs do not combine with *-irdba* 'FALL' (see §5.2.3); this is why they can be analysed as having themselves a component of 'motion along a path'. Two exceptions are *dibard* 'jump' and *didid* 'roll'; these are therefore cross-listed as coverbs of ballistic motion (§6.6).

Three manner coverbs, *yugung* 'run', *yawal* 'run, of multiple animates', and *warrngwarrng* 'walk', are also attested with the verb *-yu(nggu)* 'SAY/DO' in a motion reading, although this verb is otherwise restricted to combination with coverbs of internal motion (see §5.6.1.2.2). *Diwu* 'fly/throw', in the reading of 'throw', also combines with *-yu(nggu)* 'SAY/DO' (§5.6.1.4), while with locomotion verbs the reading is 'fly'. This coverb is regarded as polysemous and cross-listed as a coverb of induced ballistic motion. Additional evidence for this analysis is that some speakers reject the use of *diwu* in the reading 'fly', i.e. to them it can only mean 'throw'.

Two coverbs, *yugung* 'run' and *bilmang* 'elope', also combine with *-ma* 'HIT' in its secondary sense of 'totally affect'; the resultant readings are 'run after s.o.' and 'elope on someone'. The semantic relationship between coverb and verb in this case is the same as that represented for coverbs of activity with *-ma* 'HIT' in Fig. 6-21 in §6.3 above.

All coverbs of manner of motion that are well attested in the database are listed in Table 6-26.

Table 6-26. *Coverbs of manner of motion*

Coverb	Dial	Translation	Loc. Verbs	Other verbs
warlnginy **galu(wirrb)**	J Ng	walk, be on foot, walk around	√	
warrng	J/Ng	move by moving legs or wings, walk, fly	√	*-yu(nggu)* 'SAY/DO'
yugung	J/Ng	run, race, speed	√	*-yu(nggu)* 'SAY/DO' *-ma* 'HIT'
yawal	J	run (of multiple animates)	√	*-yu(nggu)* 'SAY/DO'
burdurdub	J/Ng	race, rush, gallop	√	
dibard*	J/Ng	jump	√	*-irdba* 'FALL' (see also §6.6) *-mili* 'HANDLE'[178]
didid*	J/Ng	roll	√	*-irdba* 'FALL' (see also §6.6)
mingib **mingiwarrb**	J Ng	crawl	√	
ngarrang	J/Ng	stagger	√	
digurrgba	J	limp	√	
diwu*	J/Ng	1. fly, 2. throw	√	see also §6.14
jaburrb	J	wade	√	
liwu **lilaj**	J/Ng	swim	√ √	
bulumab **wumbalb**	J Ng	float	√ √	
wuburrb	J	row, stake across with a stick	√	
rayib **burlgub**	J J/Ng	sneak	√ √	
lalama	J	rustle	√	
bilmang	J	elope with s.o.	√	*-ma* 'HIT'

[178] This complex verb has the idiomatic interpretation 'jump off'; see §5.4.1.4.

6.5.2 Coverbs of hunting

Coverbs of hunting and searching formally behave like coverbs of manner of motion, that is, they combine with verbs of locomotion (mainly *-ijga* 'GO'), and can enter the same case frames as other complex verbs formed with locomotion verbs, as shown by the occurrence of the allative case in (6-40).

(6-40) jalig biyang **wurdbaj** ga-**jga**-ny jarriny-bina
child NOW look.around 3sg-GO-PST hole-ALL
'the child while looking around went up to a hole' (Frog Story) (DR, E01242)

It is indeed possible to conceive of searching and hunting, in the hunter-gatherer context, as a manner of motion. Coverbs like *rayib* 'sneak up' which were listed with the coverbs of manner of motion could also have been included in this class. Note that there is a separate subclass of coverbs of pursuit, which on formal grounds is grouped with coverbs of touch and manipulation (see §6.9.2).

Only *wurdbaj* 'look around, search' (which is the most frequent of the coverbs listed in Table 6-27) is in a single instance attested with a verb other than a locomotion verb; this is *-ngawu* 'SEE'. Example (6-41), from a Frog Story narration, describes a scene where a boy and dog were searching for their lost frog inside a closed room, which is presumably why a locomotion verb was not chosen here.

(6-41) **wurdbaj**=biya buny-**ngayi**-na, birang \
look.around=NOW 3du:3sg-SEE-IMPF behind
'they were searching for him, behind' (Frog Story) (DB, E02077)

Table 6-27. *Coverbs of hunting*

Coverb	Dial	Translation	Loc. Verbs	Other verbs
wurdbaj **walagab**	J/Ng Ng	look around, search	√	*-ngawu* 'SEE': 'search s.th.'
murdab	J/Ng	go hunting (of women)	√	
lalabang	J/Ng	go hunting for kangaroo (of men)	√	
yurrgulab	Ng	follow tracks	√	
Jawud	J/Ng	hang around, sneak around	√	

6.5.3 Coverbs of direction of motion

A number of coverbs describe the direction of motion, e.g. the shape of a path taken in a motion event, a direction defined with respect to verticality (e.g. *burduj* 'move upwards), a transit path (e.g. *malang* 'go past'), or a direction of motion defined with respect to an end location (e.g. *ngabulg* 'enter water, dive').

All directional coverbs can combine with verbs of locomotion. However, the class can be further subdivided into three subgroups according to whether a combination with a verb of change of locative relation, *-irdba* 'FALL' or *-arra* 'PUT', is also possible, or not. An example for a coverb from the first subgroup, termed 'coverbs of change of location', is *jag/jid* 'go down'. In (6-42), it is shown with an intransitive and a transitive locomotion verb and with *-irdba* 'FALL' (for further examples, see §5.2.3.1 and §5.3.1.3).

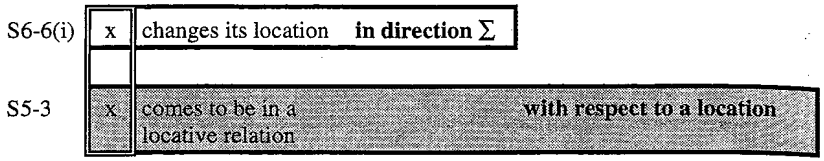
(6-42a) **jag** yirr-**ijga**-ny binka-bina
go.down 1pl.excl-GO-PST river-ALL
'we went down to the river' (DM, TIM007)

b) **jid** gan-**arrganthi**-ya=biyang gani-bili
go.down 3sg:3sg-APPROACH-PRS=NOW 3sg:3sg-FUT:GET/HANDLE
'it is approaching it now going down, and will catch it' (hawk -> prey) (DB, D13121)

c) thanthu=gun bardag ba-rra **jag**=ma ga-**rdba**-ny
DEM=CONTR tight.fit IMP-PUT go.down=SUBORD 3sg-FALL-PST
'fasten that one that fell down' (pipe of washing machine) (DR, CHE080)

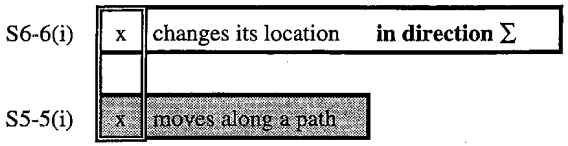
A direction defined with respect to verticality, like that encoded by *jag* 'go down', can be described in terms of just two points, one of which is higher or lower than the other in the vertical dimension. The same holds for a 'return path' (cf. *buru* 'return'), and other types of change of location (e.g. *yirrbag* 'move over' or *wirriny* 'turn around'). This may explain why these coverbs can also form complex verbs with *-irdba* 'FALL' or *-arra* 'PUT'. In this case, the second point that defines the direction has to be construed as identical to the end location encoded in the verb. This is captured by a component of 'change of location' (rather than 'motion along a path') in the semantic representation of coverbs of change of location in S6-6(i). The partial overlap with *-irdba* 'FALL', as in (6-42c), can then be represented as in Fig. 6-24.

Fig. 6-24. *Coverb of change of location and* -irdba *'FALL'*



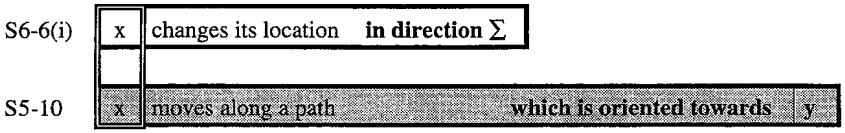
The overlap between a coverb of change of location and an intransitive verb of locomotion (as in (6-42a)) is represented in Fig. 6-25. The components of 'change of location' and 'motion along a path', even though they do not overlap completely, are compatible: a direction can be defined by two points, but also by more than two points.

Fig. 6-25. *Coverb of change of location and* -ijga *'GO'*



In Fig. 6-26, both the coverb and the transitive verb of locomotion *-arrga* 'APPROACH' contribute to the specification of the direction of motion (cf. (6-42b)). The coverb encodes the path type (e.g. downward motion), while the verb encodes the orientation of the path with respect to a second participant.

Fig. 6-26. *Coverb of change of location and* -arrga *'APPROACH'*



Some of the coverbs listed in Table 6-28, e.g. *burduj* 'go up' and *wirriny* 'turn', may also combine with *-yu(nggu)* 'SAY/DO' (see §5.6.1.2.2). Others, e.g. *buru* 'return, go back', are cross-listed as phase coverbs in §6.19, since they combine with a wider range of verbs and do not always have strictly spatial readings.

Table 6-28. *Coverbs of direction of motion: CHANGE OF LOCATION*

Coverb	Dial	Translation	Loc. Verbs	*-irdba* FALL	*-arra* PUT	Other verbs
burduj[179]	J/Ng	climb up, move upwards	√	–	√	*-yu(nggu)* 'SAY/DO': 'move up'
jid	J	move downwards	√	√		*-linyma* 'MAKE': 'make s.o. go down'
jag	J/Ng	move downwards	√	√	√	*-wardgiya* 'THROW': 'throw s.th. down' *-mili* 'HANDLE': 'get s.th. down'; 'drop s.th.'
buru*	J/Ng	return, go back	√	√	√	see also §6.19
wirriny	J/Ng	turn, turn around	√	√	√	*-yu* 'BE'; *-yu(nggu)* 'SAY/DO': 'turn round' *-mili* 'HANDLE': 'stir s.th.'
yirrbag	J/Ng	move over, shift place	√		√	*-inama* 'KICK/STEP': 'kick s.th. away'
malang	J/Ng	go across, cross	√	√		*-ma* 'HIT': 'cross s.th.'
darrug	J/Ng	go down, set (of celestial body)	√	√		
wurlurlu	J/Ng	enter 3D container	√	√		
ngabulg	J/Ng	enter water, bathe	√	√		

An example for a coverb from the second subgroup, restricted to occurrence with verbs of locomotion, is *walig* 'go around'. Coverbs of this type encode a path as defined in §5.3.1.

(6-43) majani **walig** ga-**jga**-ny
maybe round 3sg-GO-PST
'(I don't know where the little boy is,) maybe he has gone around (the house)' (DB, NOT028)

A coverb encoding a path shape like *walig* 'go around, i.e. on a (semi-) circle shaped path' is not compatible with *-irdba* 'FALL' or *-arra* 'PUT', because these

179 The coverb *burduj* 'go up' is an exception in that it combines with *-arra* 'PUT' but not with *-irdba* 'FALL'. In §5.2.3.1 this is treated as a specific semantic restriction on *-irdba* 'FALL'.

verbs only encode the transition to an end location, rather than motion along a path (see §5.2.3-4.). Thus, like coverbs of manner of motion, coverbs of path have to include a semantic component of 'motion along a path'; this is represented in S6-6(ii). The semantic relationship between path coverbs and verbs of locomotion can be represented in a similar way to that between coverbs of change of location and locomotion verbs.

S6-6(ii) | x moves along a path in direction Σ |

Coverbs of path are listed in Table 6-29 below. A few coverbs of path may also combine with *-ma* 'HIT' in its reading of 'completely affect', which in this case yields the reading 'complete the path with respect to a ground'. The resultant reading with *walig* 'go around' is 'go around s.th. completely' (see §5.4.2.2); with *ngirr* 'go past' it is 'pass s.th.', as illustrated in (6-44).

(6-44) yinju **ngirr** gan-**ma**-m yirrag \
PROX go.past 3sg:1-HIT-PRS 1pl.excl.OBL
'this one is passing us' (car on road) (JM, E16415)

Table 6-29. *Coverbs of direction of motion: PATH*

Coverb	Dial	Translation	Loc. Verbs	*-irdba* FALL	*-arra* PUT	Other verbs
jarubaj	J/Ng	go back and forth	√			
laginy	J	take a turnoff	√			
marraj **ngirr**	J Ng	go past (point), go through (volume)	√			*-ma* 'HIT': 'pass s.th.'
walig	J/Ng	round, around (in circle- or semi-circle-shaped path)	√			*-ma* 'HIT': 'go around s.th.'
jurdug*	J/Ng	straight	√			see §6.1.2, §6.20
buyi*	J/Ng	continue, keep going in same direction	√			see §6.19
gabarl*	J/Ng	come close	√			see §6.9.2

The third, semantically defined subgroup of directional coverbs comprises three coverbs of 'rising/separating' (with animate participants), and two coverbs of 'detachment' in a narrow sense (with inanimate participants). Like the coverbs of path, the coverbs in this set do not combine with *-irdba* 'FALL', but only with locomotion verbs, as illustrated in (6-45) and (6-46).

(6-45) **bunburr** yurru-w-**ijga** yagbali-bina buru
take.off.multiply 1pl.incl-FUT-GO place-ALL back
'let's all take off to go back to the camp' (VR?, JAM237)

(6-46) nginthu guru nganthi-**bili** **bawu** \
PROX screw 2sg:3sg-FUT:GET/HANDLE open
(...) **gub** ga-**ram** \
come.off 3sg-COME.PRS
'you should loosen this screw (...) it comes off' (IP, F01098-9)

This restriction was explained in §5.2.3.1 by semantic incompatibility: the verb *-irdba* 'FALL' entails a change of locative relation with respect to a location that can be specified, while coverbs of detachment lexically conflate the source point, and not the end point, with the change of location. Coverbs of detachment regularly form complex verbs in a causative reading with *-mili/-angu* 'GET/HANDLE', as illustrated in the first line of (6-46) above and in (6-47) below.

(6-47) **gub** nga-**ngu** biri
come.off 1sg:3sg-GET/HANDLE.PST guts
'I took the guts out' (DR, NOT017)

The coverbs *gud* 'get up, rise' and *bib* 'move up, rise' are somewhat exceptional in that they may also combine with *-yu* 'BE' in a complex verb with a dynamic reading ('get up'), which semantically contrasts with the complex verbs formed with the verbs of locomotion ('get up and go').

Table 6-30. *Coverbs of direction of motion: RISING AND DETACHMENT*

Coverb	Dial	Translation	Loc. Verbs	Other verbs
gud	J/Ng	get up, rise (animate)	√	*-yu* 'BE': 'get up (and stay)'
bunburr	J	take off, leave (of multiple animates)	√	
bib	J/Ng	move up, rise	√	*-yu* 'BE': 'get up' *-mili* 'HANDLE': 'lift s.th. up' *-arra* 'PUT': 'push s.th. up, lift'
larara	J/Ng	separate, go separate ways (of multiple animates)	√	*-ma* 'HIT' (2): 'cause to separate'
bawu **walg**	J Ng	open up, go into the open, get out	√	*-mili* 'HANDLE': 'open s.th.' *-ijja* 'POKE': 'open s.th. by means of a pointed end'

gub	J/Ng	come out, come off (general)	√	*-mili* 'HANDLE': 'take s.th. out, take s.th. off' *-yungga* 'TAKE.AWAY': 'take s.th. out of/off s.o.'
jab	J/Ng	get detached, of long entity attached with its end point (e.g. hair, grass)	√	*-mili* 'HANDLE': 'pull out, pluck' *-ma-ji* 'HIT-REFL': 'shave'

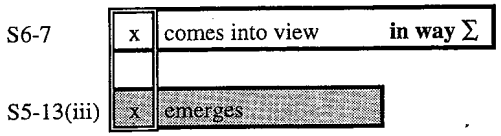
6.5.4 Coverbs of emerging

Coverbs of emerging, like coverbs of path and coverbs of detachment, do not combine with *-irdba* 'FALL', for a similar reason: they are not compatible with a verb expressing change of location to a specific location, because they encode a change of location from concealment to visibility. Instead, they combine with *-ma* 'HIT', which here serves as a functional equivalent of *-irdba* 'FALL'. The description of a sunrise in (6-48) illustrates the use of *-ma* 'HIT' and a locomotion verb, *-ruma* 'COME', with coverbs from this class.

(6-48) ya, "wulngan **bul** ga-**ra::m**", bastaim olabat tok
yes sun emerge 3sg-COME.PRS first 3pl talk
"**lany**=biyang gani-**ma**-m"
sunrise=NOW 3sg:3sg-HIT-PRS
'yes, "the sun is coming out", they say at first – "the sun comes out now"' (DB, D13138-9)

In §5.4.2.3, *-ma* 'HIT' was analysed as having a monovalent secondary sense of 'emerge', which is thus semantically included in the coverb (Fig. 6-27).

Fig. 6-27. *Coverb of emerging and* -ma *'HIT'(iii)*



Since this sense is restricted to coverbs of exactly this type, one could of course argue that the interpretation of 'emerge' is only brought about by the coverb, and does not correspond to an independent sense of the verb itself. As stated in §1.4.2.2, in this and similar cases I nevertheless postulate a secondary sense for the verb, in order to facilitate cross-linguistic comparison in the extension of verbs. In other words, the use of the verb in this reading is listed in order to

account for the knowledge that a speaker of the language in question has to have in order to use it correctly.

Table 6-31. *Coverbs of emerging*

Coverb	Dial	Translation	Loc. Verbs	*-ma* HIT	Other verbs
bul	J/Ng	emerge, appear	√	√	
yirr **wirr**	J Ng	move out, move along	√ √	√ √	*-mili* 'HANDLE': 'pull s.th. out/along' *-wardgiya* 'THROW': 'shake s.th. out'
lany	J	rise, come out (of celestial body)	√	√	
riyi*	J	look out from somewhere		√	see §6.1.3

6.6 COVERBS OF BALLISTIC MOTION AND STOPPING

The coverbs grouped together in this section do not combine with locomotion verbs, but all combine with *-irdba* 'FALL'. Since this is a monovalent verb, coverbs of ballistic motion and stopping all have to be regarded as monovalent by the criteria given in §4.1.3. Semantically, these coverbs fall into two subgroups. The first subgroup closely corresponds to a class that has been termed 'non-agentive verbs of motion' in the literature (e.g. Levin & Rappaport Hovav 1992, 1995). However, lack of agentivity is not the crucial component, because some of these coverbs, e.g. *dibird* 'jump' and *buwu* 'dive', can have an agentive interpretation, as shown in (6-49).

(6-49) burduj=ma ga-wu-rum ngunggu,
go.up=SUBORD 3sg-FUT-COME 2sg.OBL
ngayug=biyang **buwu** nga-w-**irdbaj**=ni \
1sg=NOW enter.water 1sg-FUT-FALL=SFOC1
'when it will come up for you, then I'm going to dive in' (quoting children playing 'crocodile and victim' in the pool) (DR, D27-154)

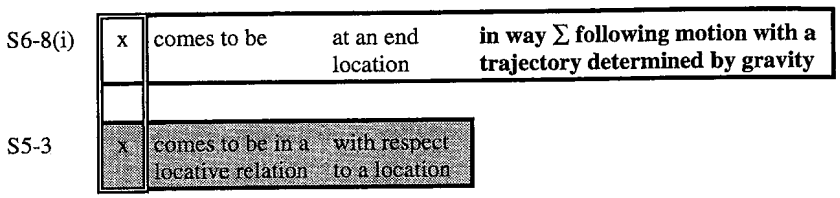
Therefore, the term 'ballistic motion' rather than 'non-agentive motion' is used here as a label for this class of coverbs. It describes a type of motion where the trajectory is determined by gravity, and therefore, even though the initiation phase of the event may be controlled, the motion phase is not controlled, and

necessarily comes to a standstill after a relatively short period of time. This is paraphrased in S6-8(i).

S6-8(i) | x comes to be at an end location in way Σ following motion with a trajectory determined by gravity

This semantic characterisation can possibly account for the fact that all coverbs in this set may combine with *-irdba* 'FALL', but are generally incompatible with locomotion verbs.[180] The lack of control over the motion phase would explain the incompatibility with locomotion verbs, which entail motion along a specifiable path. The necessary termination of the motion phase would explain the compatibility with *-irdba* 'FALL', which entails change of a locative relation with respect to a fixed end location. Thus, *-irdba* 'FALL' is semantically included in the coverb, in the way represented in Fig. 6-28. Admittedly, this account is tentative, and will have to be tested on further data, which may also necessitate further subclassification.

Fig. 6-28. *Coverb of ballistic motion and* -irdba *'FALL'*



Those coverbs of ballistic motion which allow a non-agentive interpretation – all except for *dibird* 'jump' – are also compatible with verbs of contact/force, in a causative reading. Not surprisingly, of these *-wardgiya* 'THROW' is found particularly frequently, as well as *-yu(nggu)* 'SAY/DO' in its 'throw' reading (see also §5.4.7 and §5.6.1.4). Combinations with these two verbs and with *-irdba* 'FALL' are illustrated in (6-50) for the coverb *dulb* 'fall (of multiple entities)'.

(6-50a) lubayi=gun mangarra **dulb** ga-**rda**:-m
many=CONTR plant.food fall.multiply 3sg-FALL-PST
'lots of fruits are falling down' (DB, D14055)

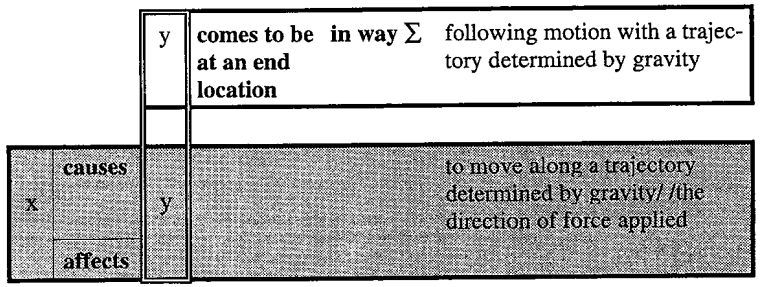
b) burdaj-di **dulb** gan-**ardgiya**-m
wind-ERG fall.multiply 3sg:3sg-THROW-PRS
'the wind makes them fall down' (DB, D14058)

180 Exceptions are *dibird* 'jump' and *didid* 'roll', which are cross-listed as manner of motion coverbs (§6.5.1). Crucially, in a 'manner' use, they have an iterative reading, in other words, iterated phases of ballistic motion can be taken to describe a manner of motion.

c) bad-bad-gina **dulb** nganyji-**yu** // mali //
RDP-cover-POSS fall.multiply 2sg:3sg-SAY/DO.PST thing
'did you shake out that blanket? ' (DM, fieldnotes Mark Harvey)

The semantic relationship of overlap between coverbs of ballistic motion and the verb of induced motion, *-wardgiya* 'THROW', is represented in Fig. 6-29. The verb contributes an agentive participant, causing the motion of a patient. However, as shown in §5.4.7, the verb itself does not entail that the patient comes to be at an end location (the verb is also used to describe swinging something around, for example). This is thus a component contributed by the coverb.

Fig. 6-29. *Coverb of ballistic motion and* -wardgiya *'THROW'*



As I also argued in §5.4.7, the verb *-yu(nggu)* 'SAY/DO' is not really interchangeable with *-wardgiya* 'THROW' in expressions of 'throwing', but conveys the interpretation of release rather than of induced motion. This is because its general meaning of 'internally cause', in the context of a coverb of ballistic motion, can be interpretated as 'cause an event that results in ballistic motion'. The resulting complex verb is bivalent, but both verb and coverb contribute only one participant; in addition, the coverb represents the 'event' participant of the verb. This is illustrated in Fig. 6-30.

Fig. 6-30. *Coverb of ballistic motion and* -yu(nggu) *'SAY/DO'*

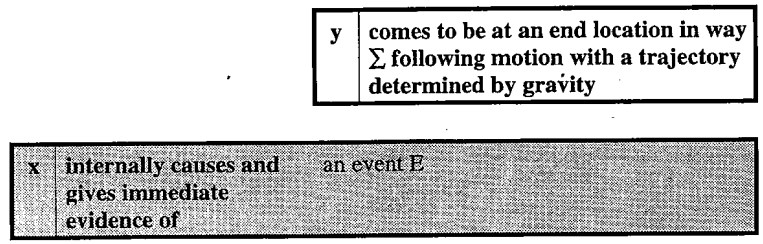


Table 6-32. *Coverbs of ballistic motion*

Coverb	Dial	Translation	*-irdba* FALL	*wardgiya* THROW	*-yunggu* SAY/DO	Other verbs
dibard*	J/Ng	jump	√			see also §6.5.1
didid*	J/Ng	roll	√	√		see also §6.5.1
jaraj **bilili**	J Ng	slip, slide	√			*-inama* 'KICK/STEP': 'step and slip'
yirrirrij	J	slide down	√			
winkirr	J	fall head down	√			*-ina(ngga)* 'CHOP': 'hit head against s.th.'
burdbaj	J	fall over	√			
diny	J	lie down, fall over	√	√		
jarndang	J	get down	√			*-mili* 'HANDLE': 'get s.th. down' Verbs of contact/force
ngad	J	get bogged	√			
buwu	J	enter water	√	√		
birdirdib	J	drip, dribble	√			
dulb	Ng	fall multiply (e.g. of dust, leaves)	√	√	√	*-mili* 'HANDLE': 'drop things' *-ma* 'HIT': 'sift flour'
burrurrug	J	scatter, get scattered	√	√	√	Verbs of contact/force
lawu	J/Ng	spill, pour	√	√	√	*-arra* 'PUT': 'pour s.th. somewhere' *xxxxxx* *-ma* 'HIT': 'sprinkle s.th.'
jurug	Ng	scatter, pour, spill (?)	√	√	√	

Unlike coverbs of ballistic motion, coverbs of stopping do not describe a motion event as such. Rather, they encode stopping in movement (*jajurr* 'halt'), or refraining from potential movement (*wilng* 'stay back'). Still, their meaning has to be characterised as a kind of change of locative relation, to account for the fact that they form complex verbs with *-irdba* 'FALL'. This is represented as S6-8(ii).

S6-8(ii) x comes to be at an end location in way Σ following motion

The coverb *wilng* 'stay back', illustrated in (6-51), is attested not only with *-irdba* 'FALL', but also in a causative complex verb with *-mili/ -angu* 'GET/HANDLE'.

(6-51a) lubayi burr-unga-ny, wurlug waga ga-gba,
many 3pl:3sg-LEAVE-PST alone sit 3sg-BE.PST

wilng ga-**rdba**-ny
stay.back 3sg-FALL-PST

'many people left, and he stayed alone, he stayed behind' (Orig. Tr.: 'imin stop back mijelb') (DP, FRA194a)

b) yugung gan-jib-unga-nyi, (...),
run 3sg:1sg-FUT-LEAVE-IMPF

ngarla **wilng** nga-**ngu**
TRY stay.back 1sg:3sg-GET/HANDLE.PST

'he was going to run away from me, (...) but I tried to hold him back' (DP, FRA219)

Table 6-33. *Coverbs of stopping*

Coverb	Dial	Translation	*-irdba* FALL	Other verbs
jajurr	J	halt, stop	√	
wilng	J/Ng	stay back	√	*-mili* 'HANDLE': 'hold s.o. back'

6.7 Coverbs of change of state

Formally, coverbs of change of state are defined by the property, unique to members of this class, of forming complex verbs with the monovalent verb *-ijga* 'GO' in a secondary sense of 'state change' (§5.3.2.2), but not with other locomotion verbs. Interestingly, all coverbs that meet these formal criteria encode a change of state which leads to some kind of abnormal result state, usually irreversible and undesirable, i.e. destruction or destabilisation (see also §5.3.2.2).

Although the members of the change of state class which have been attested to date are fairly few in number, some of them are very frequent and appear in many different types of complex verbs. This is because they may also form causative complex verbs in combination with the transitive verbs of contact/force, and sometimes also with transitive verbs from other classes. Some coverbs of change of state are also found with intransitive verbs other than *-ijga*

'GO', namely with *-irdba* 'FALL' to express a change of state arising from contact with a location, and with *-irna* 'BURN' to express change of state resulting from heat. The full range of possibilities is illustrated in (6-52) for the change of state coverb *bag* 'break', which, of all coverbs in the corpus, is the one attested with the largest number of verbs (11 verbs). In examples (6-52a) to (6-52c), *bag* combines with intransitive verbs. In (6-52d) to (6-52i), it combines with transitive verbs of contact/force, and in (6-52j) and (6-52k) with two transitive verbs which may enter into opposition with the verbs of contact/force; these are *-uga* 'TAKE' (see §5.3.4.4) and *-arra* 'PUT' (see §5.2.4.4).

(6-52a) a:, **bag** ga-**jga**-ny=ni bottle \
ah break 3sg-GO-PST=SFOC1 bottle

'ah, the bottle broke' (Frog Story) (IP, F03072)

b) miri **bag** buny-b-**irdbaj** \
leg break 3du-FUT-FALL

'the two are going to fall so that they break a leg' (IP, E09092)

c) wurlug=gung ga-**rna**-ya **bag**
alone=COTEMP 3sg-BURN-PRS break

'it breaks by itself through burning' (log in fire) (DB, CHE163)

d) nawij **bag** burr-**angga**-m \
neck break 3pl:3sg-GET/HANDLE-PRS

'they break its neck (by strangling it)' (bird) (IP, F01034)

e) miri **bag** burra-**ma**-nyi gurrubardu-ni \
upper.leg break 3pl:3sg-HIT-IMPF boomerang-ERG/INSTR

'they used to break its legs with the boomerang' (kangaroo) (IP, F01042)

f) majani **bag** yanth-**ina** thanthu mali \
maybe break IRR:2sg:3sg-CHOP DEM thing

'(don't throw a stone), maybe you will break that thing' (tape recorder) (IP, F01087-8)

g) nga-w-**inama** **bag**, bijjingman
1sg:3sg-FUT-KICK/STEP.IMPF break moist

'I wanted to break it with my foot, (but it was still) fresh (and therefore too strong)' (firewood) (DP, MJ, CHE421)

h) jurruny-ni **bag** gan-**ijja**-ny
hand-ERG break 3sg:3sg-POKE-PST

'he broke it by poking with his finger' (Change of State video) (IP, IZA054)

i) **bag** gan-**ardgiya**-ny langiny-bina
break 3sg:3sg-THROW-PST wood-ALL

'she broke it by hitting it against another branch' (firewood) (DP, MJ, CHE423)

j) **bag** gan-**uga** barrigi
break 3sg:3sg-TAKE.PST fence

'it (the bull) broke (out of) the fence' (at a rodeo) (IP, NTA001)

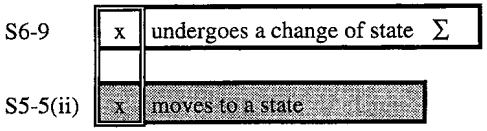
k) guyuwarn **bag** nga-**rra**-ji
bone break 1sg-PUT-REFL

'I broke a bone' (MW, CHE024)

In the literature, there has been a debate on the appropriate semantic characterisation of change of state predicates which occur in alternating inchoative/causative expressions (e.g. Dixon 1991: 291ff., Haspelmath 1993, Levin & Rappaport Hovav 1995). A problem arises in particular where, like in Jaminjung, there is no formal indication of the direction of derivation in the alternation, because inchoative and causative expressions are formally equally complex, i.e. in an equipollent opposition (cf. Haspelmath 1993: 91f.). Jaminjung coverbs of change of state are analysed here as monovalent by the criterion of complex verb formation with intransitive verbs (see §4.1.3). Under this analysis, the causative complex verbs are 'derived', in comparison with the inchoative complex verbs, in that the second argument in the causative constructions is added by the verb, and not inherent to the coverb. It is therefore problematic to state that these predicates encode an 'externally caused' change of state, a term that has been suggested in the literature (e.g. Levin & Rappaport Hovav 1995). A characterisation as 'spontaneously occuring change of state' (cf. Haspelmath 1993) is also problematic, because monovalent complex verbs formed with a coverb of this class and the verb *-ijga* 'GO' have to be distinguished from inchoative expressions formed with *-yu(nggu)* 'SAY/DO', a verb which was argued in §5.6 to encode internally caused events. I would like to suggest that coverbs of change of state can be characterised as semantically unspecified for 'internal cause'. Therefore, they do allow the specification of an external cause, either by employing a transitive verb, or one of the intransitive verbs *-irdba* 'FALL' and *-irna* 'BURN', which, although monovalent, are interpreted as encoding a causing event. On the other hand, coverbs of this class also allow for the complete absence of a specification of a cause, signalled by the use of *-ijga* 'GO'.

It is also worth noting that expressions like the one in (6-52a) above do not correspond to a decompositional representation like GO BROKEN. This is because the coverbs of change of state do not meet the criterion for stativity, which is compatibility with the stative verb *-yu* 'BE'; they only combine with dynamic intransitive verbs. Stative expressions can only be derived from these coverbs with the origin case suffix *-nyunga,*[181] which on nominals marks spatial and temporal origin and cause, but on coverbs derives resultative expressions (see §2.6.5.4 for examples). Coverbs of change of state are thus dynamic, monovalent predicates. Rather than expressing a metaphorical 'goal' of the verb *-ijga* 'GO' in its secondary sense of 'motion to a state' (see §5.3.2.2), they semantically include it (since the coverb encodes a specific type of state change). This overlap is represented in Fig. 6-31.

Fig. 6-31. *Coverb of change of state and* -ijga *'GO' (ii)*



In combination with the other two intransitive verbs, *-irdba* 'FALL' and *-irna* 'BURN', as well as with transitive verbs, coverbs of change of state receive a resultative reading. In other words, they merely specify the result of the event encoded by one of these verbs, and do not overlap with them semantically. This is represented in Fig. 6-32 for *-irna* 'BURN' (cf. (6-52c)), and in Fig. 6-33 for *-uga* 'TAKE' in its secondary sense (cf. (6-52j)).

Fig. 6-32. *Coverb of change of state and* -irna *'BURN'*

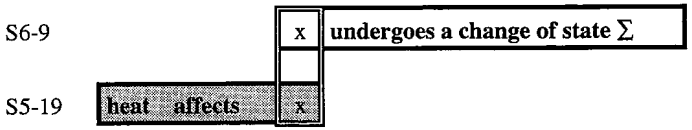
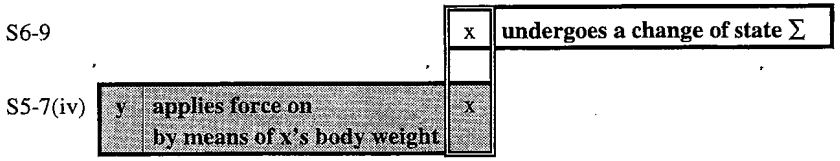


Fig. 6-33. *Coverb of change of state and* -uga *'TAKE'*



181 In Jaminjung, this is distinct from the ablative (*-ngunyi*); in Ngaliwurru, the form *-giyag* covers both functions; see §2.2.3.3.6-7.

Coverbs of change of state are listed in Table 6-34. For reasons of space, combinations with verbs of contact/force are not listed individually; only the number of verbs from this group is indicated.

Table 6-34. *Coverbs of change of state*

Coverb	Dial	Translation	*-ijga* GO	*-irdba* FALL	*-irna* BURN	Contact/ force	Other verbs
bag	J/Ng	break (into pieces)	√	√	√	6	see (6-52) above
garl	J	break	√			5	
ning	J/Ng	1. break (in two parts), break off 2. stop, finish, die	√	√		4	
lag	J	split, crack	√	√		3	
bily	J/Ng	burst open, bust	√			3	
gad[182]	J/Ng	cut, get cut	√	√		3	
jirawu	J/Ng	peel, come off (of skin/bark)	√			2	
jibug	J	get a hole	√			3	
lum	J	swell up	√				
jinku	J	go down (e.g. swelling, fire)	√			2	
mij	Ng		√				
digirrij	J/Ng	1. die 2. really suffer, get badly severed	√	√	√	5	*-irriga* 'COOK'
?nungurr	J	drown	√	√			
?jurub	Ng		√	√			
burrb*	J/Ng	finish, run out	√	√	√	4	see §6.19

6.8 Coverbs of cooking and burning

The coverbs in the 'cooking/burning' class all combine with the intransitive verb of heating/burning, *-irna* 'BURN', and thus can be considered to be monovalent. Two subclasses can be distinguished on the basis of combinatorial possibilities

182 The homophony with English 'cut' seems to be accidental; no speaker has ever pointed out this form as being a loan.

with other verbs; these are coverbs of manner of heating (§6.8.1) and coverbs of heat and light emission (§6.8.2).

6.8.1 Coverbs of manner of heating

Coverbs of manner of heating all encode conventionalised, culture-specific ways of applying heat. This includes not only manner of cooking,[183] but also drying, applying heat or smoke for medicinal purposes and ritual cleansing, and the (usually deliberate) lighting of bush fires. For example, the coverb *murl* 'heat with hot ground or stones' can describe both roasting of food in a ground oven (with stones), and heating parts of the human body by means of hot ground for medicinal purposes (see II/18-19 in the Appendix). None of these coverbs entails that a state of change results from the application of heat (e.g. consumption by fire), although a number of them may convey, by implicature, the interpretation that the cooked, edible state of food is reached.

Coverbs of manner of heating combine with *-irna* 'BURN'[184] as well as with one of a number of transitive verbs. Often, this is *-irriga* 'COOK', the transitive equivalent of *-irna*. Both verbs are illustrated in (6-53) with the coverb *bum* 'apply smoke' (see §5.5 for further examples).

(6-53a) julany-ni **bum** burr-**irna**
smoke-ERG/INSTR apply.smoke 3sg-BURN.PST
'they smoked themselves with smoke' (cleansing ceremony after the death of a relative) (DB, CHE238)

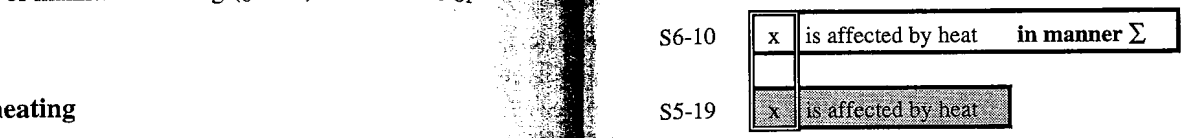
b) **bum** burru-**rriga** burrb gurrurrij
apply.smoke 3pl:3sg-COOK.PST finish car
'they finished smoking the car' (cleansing ceremony) (DB, CHE240)

The observations just made suggest that all coverbs in this class themselves have a component of 'affectedness by heat', and thus semantically include the verb *-irna* 'BURN'. This is represented in Fig. 6-34.

183 This class does not include the most general coverb of 'cooking', *wirrigaja* (cognate with the verb *-irriga* 'COOK'); this belongs to the 'continuous activity' class.

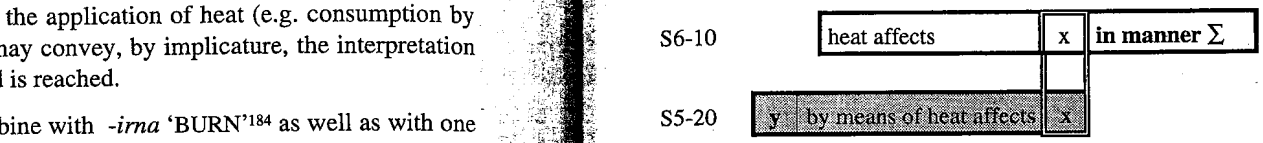
184 Exceptions in Table 6-35 are regarded as accidental gaps in the data, since they involve coverbs that are low in frequency.

Fig. 6-34. *Coverb of manner of heating and* -irna *'BURN'*



Correspondingly, the verb *-irriga* 'COOK', when combined with a coverb of manner of heating, contributes a second participant (the ultimate cause of the heating event, see also §4.2.2.1.1) but largely overlaps with the coverb semantically.

Fig. 6-35. *Coverb of manner of heating and* -irriga *'COOK'*

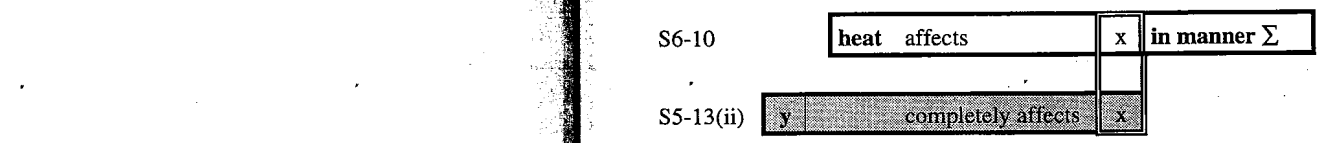


Curiously, a number of these coverbs combine with transitive verbs other than *-irriga* 'COOK'; these are always *-ma* 'HIT' or *-arra* 'PUT'. For example, (6-54) below was said in the same context as (6-53b) above.

(6-54) **bum** yirri-**ma** motika, bula
apply.smoke 1pl.excl:3sg-HIT.PST car track
'we smoked the car, the traces (of the deceased)' (ER, CHE224)

In §5.5.2 I suggested that the more specific verb *-irriga* 'COOK' is employed to foreground the nature of the event as one of cooking or applying heat, within a sequence of events of a different nature. The less specific verbs *-ma* 'HIT' or *-arra* 'PUT are employed to foreground the manner in which heat is applied. The combination with *-ma* 'HIT' – in its secondary sense of 'completely affect' (see §5.4.2.2) – is represented in Fig. 6-36.

Fig. 6-36. *Coverb of manner of heating and* -ma *'HIT' (ii)*



Coverbs that encode lighting a fire usually combine with *-arra* 'PUT', a s illustrated for *gumarl* 'burn (of country or grass)' in (6-55).

(6-55a) warnda ba-rra=nu, **gumarl** ga-w-**irna** \
grass IMP-PUT=3sg.OBL burn.country 3sg-FUT-BURN
'put (dry) grass on it, and it will burn' (DB, F02241-3)

b) thamurru-yun-ngunyi **gumarl** burr-**arra**-m,
below-L.ABL-ABL burn.country 3pl:3sg-PUT-PRS
lula burr-irda-m
lie.multiply 3pl-FALL-PRS
'they set fire underneath (the tree), and they fall down (dead) in a heap' (traditional method of hunting flying fox) (ER, MIX096)

The coverb *dalb* 'light a fire (i.e. pile of firewood)' also combines with *-arra* 'PUT'; this was not included in the class of coverbs of manner of heating because it is not attested with *-irna* 'BURN'. In §5.2.4.5 it was suggested that the use of *-arra* 'PUT' in expressions of lighting a fire may be based on the component of spatial transfer in setting fire to burning material. However, the nature of the semantic relationship between coverb and verb has to be left open in this case.

Table 6-35. *Coverbs of manner of heating*

Coverb	Dial	Translation	*-irna* BURN	*-irriga* COOK	*-arra* PUT	*-ma* HIT
murl	J/Ng	'roast', heat by means of hot ground or stones, usually in ground oven	√	√	√	
wawu	J/Ng	warm up by holding over flames, cook in the flames		√		√
bud	J	cook on coals or in hot ashes	√	√		√
bum	J/Ng	apply smoke (e.g. in ritual cleansing), surround with smoke	√	√		√
gim	J	burn s.th./s.o. by touching with a hot object; bite like a burn		√		
marl	J	apply s.th. hot (e.g. stones for cooking, or hot bandage)	√	√	√	
dag	J	warm up, warm self	√			
balarr*	J/Ng	dry, dry out[185]	√		√	
gumarl	J	burn (of grass/ country)	√		√	
burd	Ng		√			

[185] The coverb *balarr* 'be outside to dry' has been cross-classified as a positional coverb in §6.1.1 since it also combines with *-yu* 'BE'.

6.8.2 Coverbs of heat and light emission

The semantic class of heat and light emission has not been sufficiently explored to date; the attested coverbs show a somewhat heterogeneous distribution. While the coverbs included in this class all combine with *-irna* 'BURN', they are also attested with either *-yu(nggu)* 'SAY/DO' or *-yu* 'BE', and sometimes even with both verbs. This is illustrated for *malngarr* '(shine) bright' in (6-56).

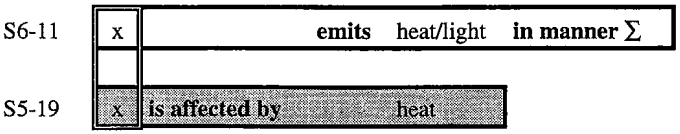
(6-56a) **malngarr** ga-**rna**-ya gugu-ni
bright 3sg-BURN-PRS water-LOC
'light is shining on the water' (reflection) (DBit, JAM315)

b) wulngan **malngarr** ga-**ram,** **malngarr** ga-**yu**
sun bright 3sg-COME.PRS bright 3sg-BE.PRS
'the sun is coming out bright, it is bright' (DP, JAM317-8)

c) **malngarr** gan-**unggu**-m
bright 3sg:3sg-SAY/DO-PRS
'the day breaks' (DB, G04-02)

Tentatively, the meaning common to all coverbs of heat and light emission can be represented as in S6-11, and the partial semantic overlap with *-irna* 'BURN' as in Fig. 6-37. The entity emitting heat or light can at the same time be characterised as affected by heat.

Fig. 6-37. *Coverb of heat and light emission and* -irna *'BURN'*



However, as pointed out above, the coverbs in this class differ in their specific meaning and distribution. Since *malngarr* 'bright' also meets the stativity criterion of combining with *-yu* 'BE', it is cross-listed in the 'colour' subclass of the stative coverbs (§6.2). The coverbs *thunkulajbi* 'emit smoke' and *ngarnarnama* 'glow' show the endings typical of coverbs of continuous activity and are cross-listed in §6.3. The coverb *burrngburrng* 'bubble, boil' also fits into the class of coverbs of internal motion (§6.4) both formally and semantically. A certain overlap between coverbs of state, coverbs of continuous activity (which both combine with *-yu* 'BE') and coverbs combining with *-yu(nggu)* 'SAY/DO' has also been observed for coverbs in the semantic class of bodily condition and emotion (see §6.4.3). The formal and semantic link between predicates of heat/light emission and predicates of internal motion, and also other

predicates of emission (e.g. sound emission) – which in Jaminjung also combine with *-yu(nggu)* 'SAY/DO' – has parallels in other languages. It is explained by Levin & Rappaport Hovav (1995: 91) in terms of their shared component of internal causation (see also §5.6.2).

Table 6-36. *Coverbs of heat and light emission*

Coverb	Dial	Translation	*-irna* BURN	*-yu nggu* SAY/DO	*-yu* BE	Other verbs
minyminy	J	be hot (of sun)	√	√		
ngarrab	Ng	be hot		√		
dili*	J/Ng	shining, bright, light (of fire, light)	√		√	see §6.1
malngarr*	J	shining, bright (of sun, reflection)	√	√	√	see §6.1
milil	Ng		√			
burrngburrng*	J/Ng	bubble, boil	√	√		see §6.4.2
thunkukjbi*	J	emit smoke	√		√	see §6.3
ngarnarnama*	J	glow, first flames coming	√		√	see §6.3

6.9 Coverbs of contact and effect

The common denominator of coverbs of contact and effect is that they all combine with transitive verbs from the class of verbs of contact and force (§5.4). However, they fall into various subclasses. All of them encode a type of contact, and many of them also a specific effect resulting from the contact. Coverbs from the subclass of impact and change of state (§6.9.1) may usually combine with several of the contact/force verbs. Coverbs from most other subclasses have an agent-oriented semantic component, such as the type of instrument used to make the contact. This higher degree of semantic specificity restricts the number of semantically compatible verbs (especially when compared with the coverbs of change of state). Coverbs of touch and manipulation (§6.9.2) mainly combine with *-mili/ -angu* 'GET/HANDLE'. Coverbs of hitting (§6.9.3) take the verbs *-ma* 'HIT' or *-ina(ngga)* 'CHOP', and coverbs of biting (§6.9.4) mainly combine with *-wa* 'BITE'.

6.9.1 Coverbs of impact and change of state

As the class label implies, the coverbs in this class encode a change of state resulting from an impact. The main formal property that distinguishes these

coverbs from the monovalent coverbs of change of state is that they are not attested with the intransitive verb *-ijga* 'GO' in its change of state reading. This suggests that the component of impact (understood to be synonymous with 'forceful contact') is crucial to their meaning, and requires a specification (by a verb) of how the impact came about. The common denominator of coverbs of impact and change of state is paraphrased in S6-12(i).

S6-12(i) | x comes into forceful contact with something, resulting in a change of state Σ of x

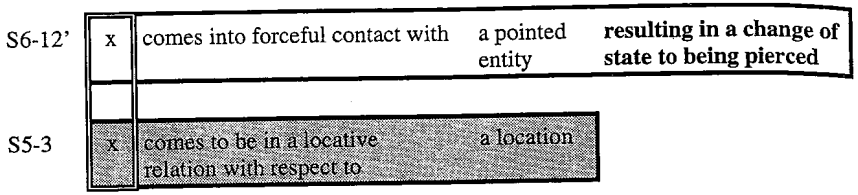
Most of the coverbs defined in this way, in fact, are only attested with transitive verbs and can be considered to be bivalent. That is, they themselves have a second, agentive participant, and a causative component. The semantic representation for bivalent coverbs of impact and change of state is given in S6-12(ii). However, this kind of subgrouping raises the problem of negative evidence. Since it cannot be reliably excluded for any of the coverbs in this class that they may not combine with intransitive verbs, a more fine-grained subclassification is left for further research.

S6-12(ii) | x causes y to come into forceful contact with something, resulting in a change of state Σ of y

Minimally, for the monovalent coverbs of impact and change of state, the manner of impact is specified by the verb of change of locative relation, *-irdba* 'FALL'. As shown in §5.2.3.1, this verb entails that a location is reached. Although it does not entail impact, the combination with a coverb of impact and change of state yields the reading that it was the impact on a location that caused the change of state in question. This is illustrated in (6-57) and in Fig. 6-38 for the coverb *lurr* 'pierce, poke'. (The semantic representation of a specific coverb is distinguished in the notation from the representation of the class as a whole by a diacritic following the sense number).

(6-57) langiny-bina **lurr** ga-**rdba**-ny
wood-ALL pierce 3sg-FALL-PST
'he fell onto a stick so that it poked him' (a boy who had climbed up a tree and fallen) (IP, E09109)

Fig. 6-38. *The coverb of impact and change of state* lurr *'pierce' and* -irdba *'FALL'*

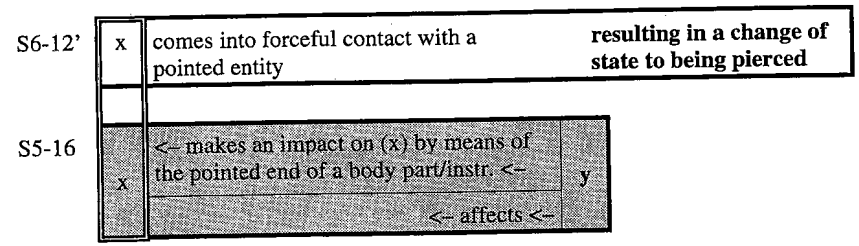


All coverbs of impact and change of state combine with the transitive verbs of contact/force, or a subset of these. For example, *lurr* 'poke, pierce' is also attested with the verb *-ijja* 'POKE', which encodes impact made by means of a pointed end, but does not entail a change of state.

(6-58) **lurr** nga-**ijja**-ny derl-derl-ngarna-ni
pierce 1sg:3sg-POKE-PST RDP-draw-ASSOC-ERG/INSTR
'I pierced it with a pencil' (paper) (JM, NUN046)

Fig. 6-39 is an attempt to represent the semantic overlap in this specific combination, although it does not capture the overlap between 'change of state' and 'affectedness'. The verb contributes an agentive participant; the pointed entity in the representation of the coverb is interpreted now not as a location, but as an instrument used by an agent. The semantic representation of the verb has to be read from right to left.

Fig. 6-39. *The coverb of impact and change of state* lurr *'pierce' and* -ijja *'POKE'*

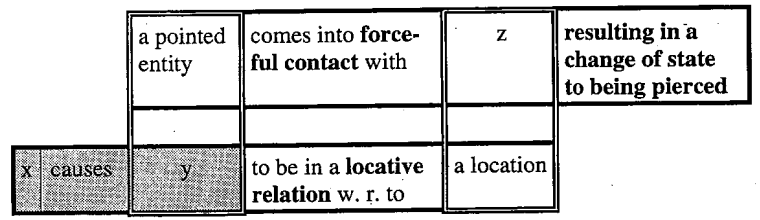


However, the choice of verb is not completely predetermined by semantic overlap of this kind. For example, *lurr* 'pierce' was also found with *-arra* 'PUT', a verb not of contact/force, but of induced change of locative relation (§5.2.4). This was in the description of the use of a sharpened stick in order to keep together the hole in the throat of a gutted goanna (6-59). Obviously, the feature of the event that is highlighted by the choice of this verb is not the piercing of the throat, but the positioning of the sharp stick which was such that it would serve its purpose.

(6-59) **lurr** gan-**arra**-ny=nu malajagu nawij-gi,
pierce 3sg:3sg-PUT-PST=3sg.OBL goanna neck-LOC
bul ya-wurum gurij
emerge IRR:3sg-COME fat
'he put it (a sharpened stick) pierced through the goanna neck, (since otherwise) the fat might come out (during cooking)' (ER, MIX006)

In order to represent the overlap in Fig. 6-40, the meaning of *lurr* 'poke, pierce' was rephrased slightly ('a pointed entity comes into forceful contact with z' rather than 'x comes into forceful contact with a pointed entity'). The components of 'impact' and 'be in a locative relation' of course do not overlap completely, but had to be aligned for reasons of space. Note that the verb's component of 'pointed entity that comes into forceful contact' overlaps with the second central participant of the verb. The central participant of the coverb, on the other hand, has to be understood as coreferential with the location inherent in the meaning of the verb. This appears to be a counterexample to the generalisation that central participants have to be expressed as core arguments across all expressions that a given predicate occurs in (see §4.1.3). However, it seems to be cross-linguistically common that predicates that have both a dynamic component (such as motion followed by contact) and a configuration component (such as being in a piercing/pierced configuration) exhibit some flexibility as to whether the containing entity or the moving entity is expressed as a core argument (Kita in prep.).

Fig. 6-40. *The coverb of impact and change of state* lurr *'pierce') and* -arra *'PUT'*



Another example of the type of semantic contrast conveyed by the use of different verbs with a coverb of impact and change of state is the combination of *lurr* 'pierce, poke' with *-ma* 'HIT' in (6-60), to describe the cleaning of teeth with a stick. By the choice of this most general impact verb, the effect of the 'poking' on the Undergoer is left unspecified, which leads to the inference that the result was not piercing of the skin.

(6-60) **lurr-lurr** ga-**ma**-ji
RDP-pierce 3sg-HIT-REFL
'he 'pokes' himself' (cleaning teeth with stick) (DR, TIM180)

Coverbs of impact and change of state are listed in Table 6-37. A coverb which formally, but not semantically, patterns with these coverbs is *ngab* 'fail, miss' (see the beginning of §5.4 for examples).

Table 6-37. *Coverbs of impact and change of state*

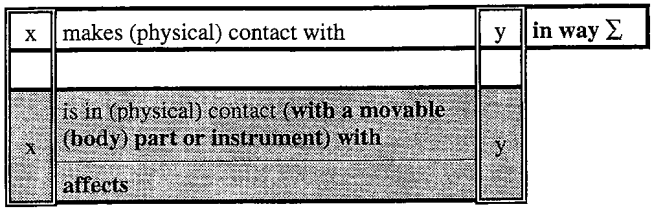
Coverb	Dial	Translation	Complex verbs
mud	J/Ng	make a hole, bust open	*-mili* 'HANDLE': 'open up s.th. by making a hole with the hands' *-ma* 'HIT': 'hit s.th. open, hit a hole in s.th.' *-ina(ngga)* 'CHOP': 'hit s.th. open with a stone/blade' *-wa* 'BITE': 'bite a hole into s.th.' *-irriga* 'COOK': 'burn a hole into s.th.'
dam	Ng	poke out, make a hole	*-ina(ngga)* 'CHOP': 'make hole with a stone/blade' *-ijja* 'POKE': 'peck/poke a hole into s.th.'
jurl	J	chip off, chisel	*-mili* 'HANDLE': 'chip s.th. off' *-ina(ngga)* 'CHOP': 'chip s.th. off with a blade'
wamib	Ng	slice up	*-mili* 'HANDLE': 'slice up s.th.' *-ma* 'HIT': 'cut s.th. in slices'
warr **garan**	J Ng	scratch	*-mili* 'HANDLE': 'scratch s.th. open' *-ma* 'HIT': 'scratch s.th. off by hitting'
barr	J/Ng	hit against, smash against, make an impact	*-ma* 'HIT': 'smash s.th. by hitting against it' *-ina(ngga)* 'CHOP': 'hit against s.th. with an edge' *-wardgiya* 'THROW': 'smash s.th. against s.th. else' *-irdba* 'FALL': 'smash against (a location)' *-wa* 'BITE': 'crush s.th. with one's teeth'
larr, lalarr	J	tear apart, tear open	*-mili* 'HANDLE': 'tear up with the hands, scratch' *-ma* 'HIT': 'cut s.th. up' *-ina(ngga)* 'CHOP': 'cut s.th. off' *-wa* 'BITE': 'tear s.th. off with the teeth' *-irdba* 'FALL': 'get torn by hitting against s.th.'
lurr **durrb**	J Ng	poke, sever, pierce	*-ijja* 'POKE': 'poke, sever, pierce s.th.' *-ma* 'HIT': 'poke self e.g. cleaning teeth' (only refl.) *-irdba* 'FALL': 'get poked by hitting against s.th.' *-arra* 'PUT': 'place s.th. in a piercing position' *-ngarna* 'GIVE' (iv): 'poke at s.o.'
?ngab	J/Ng	fail to do something, miss	*-mili* 'HANDLE': 'grab s.th. and miss' *-ma* 'HIT': 'hit at s.th. and miss' *-ina(ngga)* 'CHOP': 'hit s.th. with a stone/blade and miss' *-ijja* 'POKE': 'poke at s.th. and miss' *-wa* 'BITE': 'try to bite s.th. and miss'

6.9.2 Coverbs of touch and manipulation

The formal criterion for inclusion of coverbs in the 'touch and manipulation' class is straightforward: all of these coverbs combine with *-mili/ -angu* 'GET/HANDLE', the verb that categorises events of 'affecting s.th. through contact' (see §5.4.1), and usually not with other verbs. Four subgroups can be established on semantic grounds; these are coverbs of 'grabbing' (describing a manner of bringing something into contact), coverbs of 'pursuit', coverbs of touch (describing a manner of contact), and coverbs of manipulation.

The boundaries between these subgroups are not clearcut, and there is also some overlap between the coverbs in this class and the coverbs of impact and change of state (§6.9.1). It is notoriously difficult to determine whether the coverbs of manipulation only have a semantic component of manner (cf. Engl. *wash),* or also a component of change of state (cf. Engl. *clean*). More detailed lexicographic work is needed to tease out these subtle differences for the Jaminjung coverbs. For the purposes of the present study, however, their most important property is the behaviour in complex verb formation, and here it is clearly the feature of 'contact' (or, as we will see below, 'attempted contact'), independent of the result, that is responsible for the use of *-mili/ -angu* 'GET/HANDLE'. The overlap of coverbs of touch and manipulation with this verb is represented in Fig. 6-41.

Fig. 6-41. *Coverb of touch and manipulation and* -mili/-angu *'GET/HANDLE'*



Coverbs from the subgroup of 'grabbing' such as *lurrb* 'seize, grab' or *laburru* 'scoop up, fetch water in a container' encode different ways of bringing an entity into contact with an agent such that it remains manipulable by the agent. There is therefore some semantic and functional relationship between the class of coverbs of 'grabbing' and the class of coverbs of 'holding', which includes *durd* 'hold a single entity' (§6.1.4). Unlike coverbs of 'holding', however, coverbs of 'grabbing' do not combine with *-muwa* 'HAVE' and therefore have to be regarded as dynamic rather than stative (although again this raises the problem of negative evidence). Still, coverbs from both classes can be combined in a single complex predicate, as in (6-61). Coverbs of grabbing are listed in Table 6-38.

(6-61) **lurrb** nga-**ngu** **durd**
seize 1sg:3sg-GET/HANDLE.PST hold.one
'I grabbed her and picked her up' (someone who had fallen over) (JM, NUN048)

Table 6-38. *Coverbs of 'grabbing'*

Coverb	Dial	Translation	*-mili* HANDLE	Other verbs
lurrb	J	seize, grab	√	
lab	Ng	pick out, pick up	√	*-uga* 'TAKE': 'pick up and take'
birrg	J/Ng	take s.th. away from s.o.	√	*-yungga* 'TAKE.AWAY': 'take s.th. away from s.o.'
bunug jawurra	J Ng	steal, take s.th. illicitly	√	*-yungga* 'TAKE.AWAY': 'rob s.o. off s.th.'
laburru	J	scoop/fetch water	√	
Jarlg	J/Ng	hook up a spear (on spearthrower)	√	
wardba, warn	J/Ng	entangle; (of animate) get caught on/trip over s.th. (inanimate)	√	

Coverbs of pursuit constitute the second subgroup of coverbs of touch and manipulation. The use of *-mili/ -angu* 'GET/HANDLE' with these coverbs is in line with a more general use of this verb in expressions of attempted or failed contact (see §5.4.1.4). An example of a coverb encoding pursuit is *jarl* 'track down' in (6-62). Only very rarely, under circumstances not very well understood, this coverb combines with *-ngawu* 'SEE', as in (6-62b).

(6-62a) **jarl** gan-**angga**-m wirlga \
track 3sg:3sg-GET/HANDLE-PRS foot/track
'he follows someone's track' (DP, E05114)

b) burra-**ngayi**-rna=yirrag wirib-di **jarl**, malajagu \
3pl:3sg-SEE-IMPF=1pl.excl.OBL dog-ERG track.down goanna
'they tracked them down for us, the dogs, the goanna' (NG, E09808)

The coverb *gabarl* 'come close' has been cross-listed as a coverb of direction, since it can also combine with verbs of locomotion. The coverb *yurl* 'pursue, chase' is interesting in that *-mili/ -angu* 'GET/HANDLE' can be productively replaced by other verbs of contact/force, specifying the action that would result from a successful pursuit, e.g. 'biting' in (6-63b) (see also §1.4.3). The resulting complex verbs do not entail that the contact is successfully made .

(6-63a) (...) minyga-ni **yurl** burr-**angga**-m .. munuwi-ni \
what's.it.called-ERG pursue 3pl:3sg-GET/HANDLE-PRS bee-ERG
'(...) the what's it called are chasing him, the bees are' (Frog Story) (DBit, E07071)

b) **yurl**=biyang gani-**wa** wirib-di \
pursue=NOW 3sg:3sg-BITE.PST dog-ERG
'the dogs chased him' (DP, F02226-8)

Another coverb which should be mentioned in this context is *birdij* 'find'; so far this cannot be subsumed under any of the coverb classes. It combines most frequently with *-arra* 'PUT', but also with *-ina(ngga)* 'CHOP' (yielding the idiomatic reading 'find after pursuit'), and very rarely with *-ngawu* 'SEE'. Note that 'pursuit' can also be expressed by a simple verb of locomotion, *-wardagarra* 'FOLLOW'. As Table 6-39 shows, this verb is attested only with *yurl* 'pursue, chase' (and here only once), and not at all with the other two coverbs.

Table 6-39. *Coverbs of pursuit*

Coverb	Dial	Translation	*-mili* HANDLE	Other verbs
yurl	J/Ng	pursue, chase, follow	√	*-ma* 'HIT': 'chase s.o./s.th. in order to hit' *-ina(ngga)* 'CHOP': 'chase s.o. in order to hit (with a stone or blade)' *-wa* 'BITE': 'chase s.o. in order to bite' *-wardagarra* 'FOLLOW': 'follow s.o./s.th.'
gabarl *	J	come close, catch up	√	see §6.5.3
jarl	J/Ng	track down	√	*-ngawu* 'SEE': 'sight tracks'

As one would expect considering the semantic characterisation of *-mili/ -angu* 'GET/HANDLE' as 'be in physical contact with something and thereby affect it', coverbs encoding a manner of touching combine with this verb more or less exclusively.[186] There are some exceptions; for example, *murrurr* 'stroke, touch lightly' is also attested with *-uga* 'TAKE' in its reading of 'apply force with the body weight' (see §5.3.4.4 for an example). With *ngalyag* 'lick', some speakers prefer *-ma* 'HIT' or *-ngarna* 'GIVE' over *-mili/-angu* 'GET/HANDLE', possibly because one can construe 'licking' as impact rather than just contact.

The most general coverb of 'touch', *mard* 'touch, feel', also serves to express tactile perception, as illustrated in (6-64). It has been cross-listed as coverb of perception by the lower senses in §6.17.

(6-64) bundurr-wari **mard** nga-**ngga**-m, gunjarlg
warm-QUAL touch 1sg:3sg-GET/HANDLE-PRS ground
'I feel that it is hot, the ground' (DBit, E05030)

Table 6-40. *Coverbs of 'touch'*

Coverb	Dial	Translation	*-mili* HANDLE	Other verbs
mard*	J	touch, feel	√	see also §6.17
murrurr	J	touch lightly, stroke	√	*-uga* 'TAKE' (iv): 'brush against s.th.'
giligilig **gijigijig**	Ng	tickle	√	

186 A coverb encoding a kind of 'touch' that does not belong to this class formally, and therefore remains unclassified, is *yaa* 'stroke, touch lightly'. For reasons that are unclear, this coverb only combines with *-arra* 'PUT'.

nyittiny* **mindig**	J Ng	pinch	√	see also §6.9.4
mam*	J	hold with tight grip	√	see also §6.9.4
buny	J	kiss	√	
ngalyag*	J/Ng	lick	√	*-ma* 'HIT': 'lick s.th./s.o.' *-ngarna* 'GIVE' (iv): 'try to lick s.o.' *-minda* 'EAT: 'lick s.th. up' (see §6.10)

Coverbs from a subgroup which is semantically closely related to the coverbs of 'touch' encode manipulation of an entity, either with the hand (e.g. *gulyu* 'wash, rinse', illustrated in (6-65)), or with an instrument moved continuously over a surface (e.g. *wijwij* 'scrape', illustrated in (6-66)).

(6-65) mali nga-**bili** **gulyu**
thing 1sg:3sg-FUT:GET/HANDLE rinse
'I will wash the dishes' (JM, MW, NUN188)

(6-66) nganthan **wij-wij** nganth-angga-m?
what RDP-scrape 2sg:3sg-GET/HANDLE-PRS
'what are you scraping?' (addressee was scraping a carrot) (DB, F01391)

With two of the coverbs listed in Table 6-41, *wunyu* 'wipe' and *yurr* 'rub', *-ma* 'HIT' is also found in its secondary sense of 'completely affect',[187] to express 'wipe out completely' and 'cover by rubbing'. For *yurr* 'rub', the contrast between the two verbs *-mili/ -angu* 'GET/HANDLE' and *-ma* 'HIT' is illustrated in (6-67).

(6-67a) ngidbud-gi nga-**mili**-ja **yurr**,
night-LOC 1sg-GET/HANDLE-REFL.PST rub
'at night I rubbed myself' (with medicine) (DB, FRA013)

b) **yurr** nga-**ma**-ji wirra mangurrb-bari
rub 1sg-HIT-REFL hair dark-QUAL
'I dye (lit. 'rub') my hair black' (VP, TIM182)

The complex verb with *-ma* 'HIT' in (6-67b) is interpreted in a way similar to the combination of the same verb and a coverb of activity like *gambaja* 'laugh',

187 This is a clear difference to coverbs of induced change of state, since with the latter, *-ma* 'HIT' always has its basic 'impact' sense.

illustrated in §6.3. That is, the verb only contributes a notion of 'affectedness', non-specific with regard to the manner or type of contact, and the coverb is interpreted as specifying the manner in which a second participant is affected. This is represented in Fig. 6-42.

Fig. 6-42. *Coverb of touch and manipulation and* -ma *'HIT' (ii)*

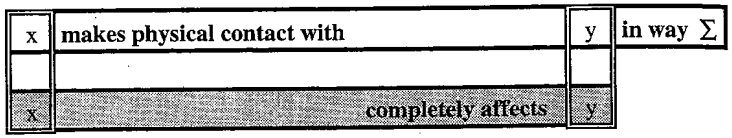


Table 6-41. *Coverbs of manipulation*

Coverb	Dial	Translation	*-mili* HANDLE	Other verbs
warrany	J/Ng	uncover, scratch open (e.g. ground oven)	√	*-arra* 'PUT': 'remove a cover by fastening it' (re Landrover cover)
wij	J	scrape	√	
gurr	J	dig (ground)	√	*-ijja* 'POKE': 'dig with a stick'
garal	J	dig a soak	√	
gulyu	J	rinse, wash	√	
wurlmaj*	J	splash water over s.th.	√	see §6.11
wunyu	J	wipe out, clean, rub out	√	*-ma* 'HIT': 'wipe out s.th., clean s.th., rub out s.th.
wirrb	Ng	wipe, rub out, clean	√	
yurr	J/Ng	rub something on, rub s.o. with s.th.	√	*-ma* 'HIT': 'cover s.o./ s.th. by rubbing s.th. on'
nyirrng jil	J Ng	squeeze	√	
ngarrg	J	strangle, twist neck	√	
binyinyi	J/Ng	use a firedrill, i.e. roll the drill between palms	√	*-ma* 'HIT': 'light fire by using a firedrill'
jarrg	Ng	pull quickly, jerk	√	

6.9.3 Coverbs of hitting

Coverbs which encode a type of hitting generally only take the verbs *-ma* 'HIT' or *-ina(ngga)* 'CHOP'. An exception to this generalisation is *barr* 'smash, hit against something', which is attested with a number of other verbs, possibly due to the fact that it is the most frequent coverb of this group. Furthermore, *du* 'knock' also combines with *-ijja* 'POKE' with a specific reading of 'shoot' (see §5.4.5). Coverbs of hitting only encode a manner, not a result, of an impact, and are quite clearly sound-symbolic, imitating the sound made during the impact. An example is *wany* 'beat, belt' in (6-68).

(6-68) gurrany **wany-wany** yanthi-**ma**=biyang,
NEG RDP-beat IRR:2sg:3sg-HIT=NOW
ba-wurr-iyaj=bulu ganma \
IMP-2pl-BE=COLL not.do
'don't beat him up now, be peaceful together' (IP, F03566)

The semantic relationship of these coverbs to the more general verb *-ma* 'HIT' is simply one of inclusion. The verb *-ina(ngga)* 'CHOP' contributes the specific component that the impact made with an edged instrument (including the knuckles/fist; see §5.4.3). Fig. 6-43 indicates the contribution of both verbs in combination with a coverb of 'hitting' (components that are specific to *-ina(ngga)* 'CHOP' are in brackets).

Fig. 6-43. *Coverb of hitting and* -ma *'HIT'* (-ina(ngga) *'CHOP')*

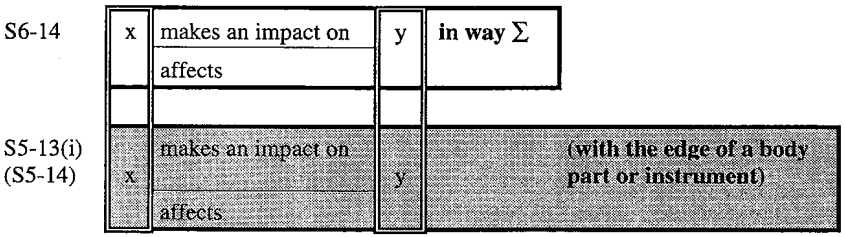


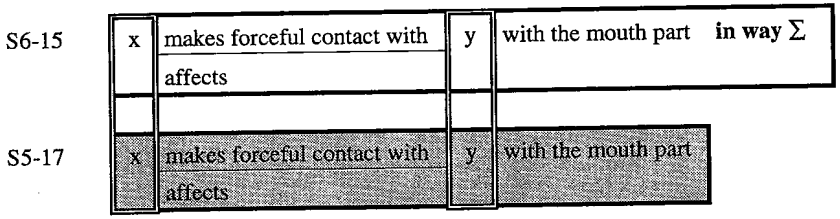
Table 6-42. *Coverbs of hitting*

Coverb	Dial	Translation	*-ma* HIT	*-ina(ngga)* CHOP	Other verbs
wany	J/Ng	belt, beat	√	√	
lirrb	J	rattle with two boomerangs	√	√	
burrg	J/Ng	hit with hands (on ground or other body part), clap, pat	√	√	
thurrg	J	sweep	√		
Jaburr	J/Ng	smash up with a stone	√	√	
deb	J	knock down	√		
du	J/Ng	knock, hit, shoot	√		*-ijja* 'POKE': 'shoot with a gun'

6.9.4 Coverbs of biting

Coverbs of biting all combine with *-wa* 'BITE'; they do not only encode events of force applied with the teeth (e.g. *jang* 'chew'), but more generally, manipulation with the mouth (e.g. *Jung* 'suck'), as opposed to ingestion (see §6.10). Their common meaning components, and the semantic overlap with *-wa* 'BITE, are represented in Fig. 6-44.

Fig. 6-44. *Coverb of biting and* -wa *'BITE'*



The coverb *Jung* 'suck' is also attested with *-ma* 'HIT' in its sense of 'completely affect' (§5.4.2.2). With the latter verb, a specialised reading results, in reference to the traditional healing method of sucking the cause of an illness out of someone's body (6-69b). The semantic interpretation is one of manner (i.e. 'completely affect by means of sucking'), in a way similar to that described for coverbs of touch and manipulation with the same verb in §6.9.2.

(6-69a) garrngan **thung** yani-**wa**=ngunggu yurlgiying-ni
blood suck IRR:3sg:3sg-BITE=2sg.OBL leech-ERG
'it might suck your blood, the leech' (ER, STO015)

b) ja- jalag yaniny-gilinyma \\ <u>like a doctor</u> \
<false start> good IRR:3sg:2sg-MAKE
mhm // **thung** yaniny-**mangu**
hm suck IRR:3sg:2sg-HIT
'he might make you well, like a doctor; mhm, he might suck (something out of) you' (IP, E17215-6)

The coverbs *nyittiny* 'pinch' and *mam* 'hold with tight grip' are cross-listed as coverbs of 'touch' in §6.9.2. Coverbs of biting are listed in Table 6-43.

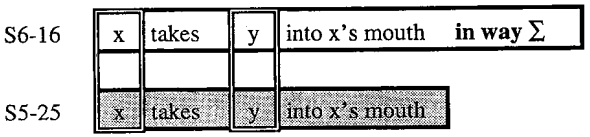
Table 6-43. *Coverbs of biting*

Coverb	Dial	Translation	*-wa* BITE	Other verbs
Jung	J/Ng	suck	√	*-ma* 'HIT': 'suck (s.th. from) s.o.'
Jang	J/Ng	chew	√	
murrgmurrg	J	crunch	√	
nyittiny*	J	pinch	√	see also §6.9.2
mam*	J	hold with tight grip	√	see also §6.9.2

6.10 Coverbs of ingestion

Coverbs of ingestion form a small class. They have been grouped together on the basis of combining with *-minda* 'EAT', although some are much more frequently attested with other transitive verbs. All coverbs of ingestion are bivalent. Two of them (*burlug* 'drink' and *yib* 'sip') describe specific ways of taking in food, and lexically conflate properties of the food (see §5.8.2 for examples). The semantic overlap with *-minda* 'EAT' is represented in Fig. 6-45. Note that the most general coverb of 'eating', *Jawaya,* is not in this class, but in the 'continuous activity' class (§6.3).

Fig. 6-45. *Coverb of ingestion and* -minda *'EAT'*



The other two members of the class have to be considered as marginal. *Ngalyag* 'lick' was only found with *-minda* 'EAT' in one instance, example (6-70), where it is clear that the licking is at the same time the means of consumption. This coverb is cross-classified as coverb of touch and manipulation.

(6-70) **ngalyag** gani-**mindi**-ya
lick 3sg:3sg-EAT-PRS
'it (the dog) is licking it up (leftover food on plate)' (DB, NOT070)

The coverb *ngilJig* 'swallow' usually combines with *-arra* 'PUT' but occasionally occurs with *-minda* 'EAT'; see §5.8.2 for discussion and examples.

Table 6-44. *Coverbs of ingestion*

Coverb	Dial	Translation	*-minda* EAT	Other verbs
burlug	J	drink	√	*-mili* 'HANDLE': 'drink' *-yu(nggu)* 'SAY/DO': 'drink' *-ngarna* 'GIVE': 'give s.o. s.th. to drink'
yib, yibuj	J	sip	√	
? ngalyag*	J/Ng	lick	(√)	see also §6.9.2
? ngilJig	J/Ng	swallow	(√)	*-arra* 'PUT': 'swallow'

6.11 Coverbs of indirect effect and recognition

Members of a small class of bivalent coverbs encode events where a patient is affected in the absence of direct contact. Formally, this is reflected in the selection of *-ma* 'HIT' in its sense of 'completely affect' (§5.4.2.2), or of *-ngarna* 'GIVE' in its secondary sense of 'directed action' (see §5.7.1.4).

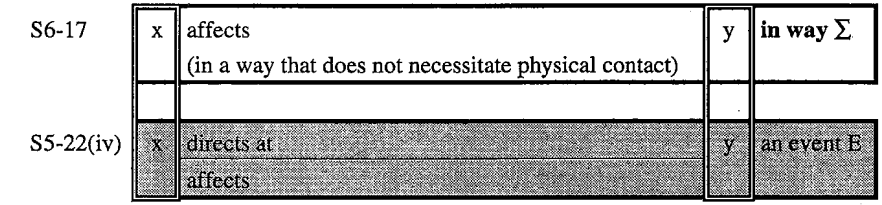
For the first subgroup of coverbs, the effect is achieved by an indirect force, e.g. by the medium of an airstream or water, or by threat. An example is the coverb *wurlmaj* 'splash water over s.th.'; this is attested with both *-ma* 'HIT' and *-ngarna* 'GIVE', in a similar context.

(6-71a) gugu-ni biya **wurlmaj** nga-wu-**ngarna**
water-ERG/INSTR NOW splash.water 1sg:3sg-FUT-GIVE
'I'm going to put it out with water' (fire) (VP, NUN167)

b) **wurlmaj** ba-wurru-**ma** guyug gugu-ni gabugabu
splash.water IMP-2pl:3sg-HIT fire water-ERG/INSTR afternoon
'put out the fire with water in the afternoon' (Cleverly 1968: 51)

The semantic relationships between coverbs of this type and the two verbs are represented in Fig. 6-46 and Fig. 6-47. Since some of the coverbs do allow an interpretation of physical contact, the component common to all of them is 'affect in a way that does not necessitate physical contact', rather than 'affect in absence of physical contact'. In combination with *-ngarna* 'GIVE' in its secondary sense, this component overlaps with the component of 'direct an action at someone/something and thereby affect it'. The coverb at the same time fills the third participant slot of this verb, which in this sense of the verb is a propositional ('event') participant (see §4.3.3.2 and §5.7.1.2).

Fig. 6-46. *Coverb of indirect effect and* -ngarna *'GIVE'* (iv)



When a coverb of this class combines with *-ma* 'HIT' in its secondary sense, only the components of 'affectedness' overlap; all specific information is contributed by the coverb.

Fig. 6-47. *Coverb of indirect effect and* -ma *'HIT'*(ii)

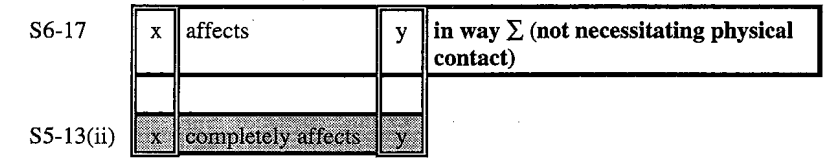


Table 6-45. *Coverbs of indirect effect*

Coverb	Dial	Translation	*-ma* HIT	*-ngarna* GIVE	Other verbs
yurruyi	J	drive s.o., round up	√		*-uga* 'TAKE': 'drive s.th. along'
junggaj	J/Ng	hunt s.o. away	√	√	
wurlmaj*	J	splash water over s.th.	√	√	see §6.9.2, §6.14
jibu	Ng		√		
buwu	J	blow (airstream from mouth)		√	*-arra* 'PUT': 'blow air'
birl	J/Ng	blow on s.th. (airstream not from mouth), fan	√		

Two other coverbs that combine with *-ma* 'HIT' in its sense of 'completely affect' express notions of recognition and 'forgetting/neglect'. The coverbs *ngurrgayij* 'recognise' and *wagga* 'not recognise, forget' have connotations of social obligation, including obligation towards country. The second participant is always an animate or a place; an example of the latter is given in (6-72). This may explain why the effect on the 'recognised' or 'neglected' participant is emphasised by the choice of the verb *-ma* 'HIT'. Note that where the 'forgetting' does not affect a second participant, it is expressed instead with an idiomatic phrase, *langa gardbany*, lit. 'his/her ear fell'.[188]

(6-72) yatha jurriya nga-yinji bifo,
right know 1sg-GO.IMPF before

wagga=biyang nga-**ma**-m yagbali \
forget=NOW 1sg:3sg-HIT-PRS place

'I used to know (it) alright before, now I don't recognise the place' (IP, EV03019-20)

With *ngurrgayij* 'recognise', the verb *-yu(nggu)* 'SAY/DO' may also be used.[189] The contrast between the use of these verbs is illustrated in (6-73). Both clauses were overheard in the same context; the speaker was anticipating the reaction of her husband on our return to their home. In order to describe his recognition of

[188] Note also that coverbs of 'memory' pattern with coverbs of 'hearing' (see §6.16), and coverbs of knowledge and familiarity, such as *jurriya* 'know' in (6-72), are formally members of the 'state' class (§6.2).

[189] A further coverb, *nyiny* 'neglect', is only attested with *-yu(nggu)* 'SAY/DO' and has been left out of consideration here. Because of its low frequency, its exact meaning is not known.

an inanimate entity, the car, the verb *-yu(nggu)* 'SAY/DO' is used. In order to describe his recognition of the speaker herself, the verb higher in semantic 'effectiveness', *-ma* 'HIT', is used.

(6-73a) **ngurrgayij** gani-wu-**yu** motika
recognise 3sg:3sg-FUT-SAY/DO car

'he will recognise the car'

b) **ngurrgayij** gan-**ma**-m
recognise 3sg:1sg-HIT-PRS

'he recognises me' (JM, fieldnotes 1999)

Table 6-46. *Coverbs of recognition*

Coverb	Dial	Translation	*-ma* HIT	*-yunggu* SAY/DO	Other verbs
ngurrgayij	J	recognise s.o., know s.o. well	√	√	
wagga	J	forget s.o., not recognise s.o.	√		

6.12 Coverbs of induced change of configuration

A small set of coverbs, including *gardaj* 'sharpen, grind' and its dialectal equivalents, and *yajyaj* 'straighten (wooden implement)', combine with *-arra* 'PUT' more or less exclusively. At first sight, this is puzzling, because the events encoded by these coverbs appear to involve contact and manipulation. One might therefore expect the verb *-mili/ -angu* 'GET/HANDLE' (which was explicitly rejected in the context of these coverbs). However, the coverbs also have a semantic component of induced change of configuration of an entity: being sharpened or ground up counts as a different configuration of the entity in question, and likewise for sharpening and erecting. This presumably is responsible for the restriction of these coverbs to a combination with *-arra* 'PUT', a verb which itself encodes induced change of locative relation. It was argued in §5.2.4.4 that *-arra* 'PUT' also has a secondary sense of induced change of configuration (some examples can also be found in §5.2.4.4). The overlap can then be represented as in Fig. 6-48.

Fig. 6-48. *Coverb of induced change of configuration and* -arra *'PUT' (iv)*

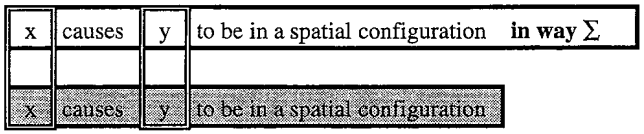


Table 6-37. *Coverbs of induced change of configuration*

Coverb	Dial	Translation	*-arra* PUT	Other verbs
gurdu **yudurrb** **gardaj**	J J/Ng J/Ng	sharpen, grind (with a stone)	√	
yajyaj	J	straighten wooden implement, e.g. spear	√	
jardij	J	erect, build	√	*-ma* 'HIT': 'erect s.th., build s.th.'

6.13 Coverbs of induced change of location

Coverbs of induced change of location can also be defined by their ability to combine with *-arra* 'PUT'. They do not combine with monovalent verbs and therefore have to be regarded as bivalent. In other words, the coverbs themselves have an 'agentive' or 'causative' component; this is not just contributed by the verb *-arra* 'PUT'. The class defined in this way does not include expressions of 'picking up'; these are formed with the stative coverbs of 'holding' (some of which however may also combine with *-arra* 'PUT'; see §6.1.4) , or with coverbs of 'grabbing' (see §6.9.2), in combination with *-mili/ -angu* 'GET/HANDLE'.

Coverbs of induced change of location are, however, not only found with *-arra* 'PUT', but are also compatible with transitive locomotion verbs, as illustrated in (6-74) for *jarr* 'put down a single entity' (see also §4.1.3).

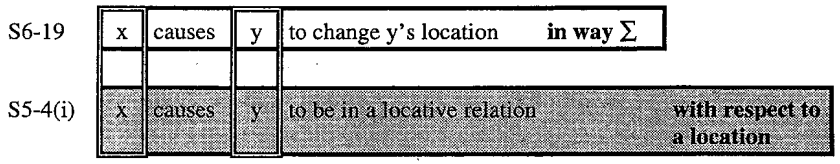
(6-74a) garrb-mayan ga-gba, **jarr** gan-**arra**-ny jiya-bina
gather-CONT 3sg-BE.PST put.down.one 3sg:3sg-PUT-PST chair-ALL
'she was picking them up, and she put them down (one by one) on a chair' (books, in TEMPEST videos) (IP, E08212-3)

b) ngabuny-**guga** **jarr**
1sg:FUT:2sg-TAKE put.down.one
'I'm going to take you and drop you off' (DP, RIV038)

c) **jarr** nganyi-b-**unga**, buru nga-w-ijga
put.down.one 1sg:2sg-FUT-LEAVE return 1sg-FUT-GO
'I'm going to drop you off and leave you, I want to go back' (DP, RIV037)

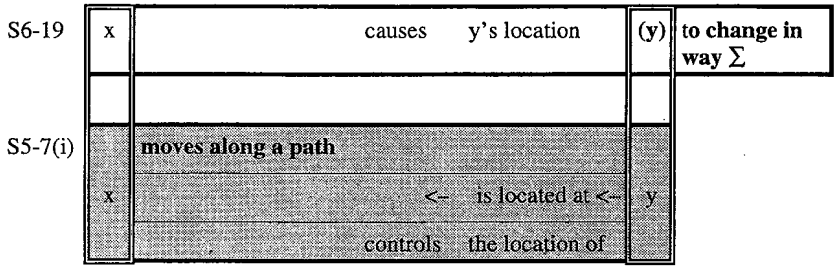
The meaning components that are common to coverbs of induced change of location are given in S6-19, as part of Fig. 6-49 which represents their (partial) overlap with *-arra* 'PUT'.

Fig. 6-49. *Coverb of induced change of location and* -arra *'PUT' (i)*



The combination with *-uga* 'TAKE' is represented in Fig. 6-50. The participant responsible for the change of location here obviously corresponds to the moving participant of the verb. The representation of the meaning of the coverb in S6-19 should still read 'x causes y to change y's location in way Σ', but the alignment with the location component of the verb made a reordering necessary.

Fig. 6-50. *Coverb of induced change of location and* -uga *'TAKE'*



The three attested coverbs translating as 'push' (apparently dialectal variants of one another, since they are used in the same contexts) behave somewhat differently from coverbs of induced change of location. They also combine with *-arra* 'PUT' in a transfer reading ('push forward'), but in addition are attested with *-wardgiya* 'THROW' and *-yu(nggu)* 'SAY/DO' in the resultant reading 'push away, push over' (see §5.4.7, §5.6.1.4).

(6-75) **jurlg** ba-**rra** thanthu gulban
push IMP-PUT DEM ground
'push out this earth' (while digging for yam) (JM, CHE140)

(6-76) larndi-ni **durl** gan-**ardgiya**-ny
hip-ERG push 3sg:3sg-THROW-PST
'he bumped it with his hip' (Change of State videos) (JM, NUN067)

Most frequently, they are found in a semi-idiomatic combination with *-uga* 'TAKE', which here occurs by virtue of its secondary sense of 'apply force by body weight' (§5.3.4.4).

(6-77) **durl** ganuny-b-**uga** motika-ni=biyang
push 3sg:3du-FUT-TAKE car-ERG=NOW
'the car is going to run over the two' (toy car –> toy cows used in elicitation) (NR, CHE367)

Table 6-48. *Coverbs of induced change of location*

Coverb	Dial	Translation	*-arra* PUT	Other verbs
jarr	J	put down (single entity)	√	*-uga* 'TAKE': 'take single thing and put it down' *-unga* 'LEAVE': 'put down single thing and leave it'
luny	Ng	put down and leave	√	*-uga* 'TAKE': 'take s.th. and put it down'
dalag	J/Ng	send somewhere, send away, set free	√	
durl **jurlg** **garlg**	J/Ng Ng J	push, bump, knock over	√	*-uga* 'TAKE': 'run s.th. over, push s.th. over' *-wardgiya* 'THROW': 'push s.th. off, push s.th. away'

6.14 Coverbs of induced ballistic motion

Coverbs of induced ballistic motion would appear to be semantically related to coverbs of induced change of location, but have very different properties formally. Instead of *-arra* 'PUT', they combine with *-wardgiya* 'THROW' and *-yu(nggu)* 'SAY/DO' (in this context, these two verbs are more or less interchangeable; see §5.4.7 and §5.6.2 for details and further examples). Only

diwu 'fly; throw' also combines with locomotion verbs; it is regarded as polysemous and cross-listed as a coverb of manner of motion (see §6.5.1). The use of both *-wardgiya* 'THROW' and *-yu(nggu)* 'SAY/DO' with the same coverb is illustrated in (6-78) for the coverb *Jubbany* 'spit'.

(6-78a) **jubbany** ba-**wardgiya** jarrawul
spit IMP-THROW saliva
'spit out (your spittle)' (NG, FRA183)

b) **jubbany** gan-**unggu**-m
spit 3sg:3sg-SAY/DO-PRS
's/he spits out' (Bolt et al. 1971a: 92)

The common semantic denominator of these coverbs, 'induced ballistic motion', can be characterised more precisely as in S6-20. The semantic relationships they enter into with *-wardgiya* 'THROW' and *-yu(nggu)* 'SAY/DO' can be represented in an analogical fashion to the combinations of these two verbs with the monovalent coverbs of ballistic motion (see Figures 6-29 and 6-30 in §6.6). With the bivalent coverbs of induced ballistic motion, however, the agentive or performer participant and the causative component of the verbs also correspond to semantic components of the coverbs.

S6-20 | x applies energy to set y onto a trajectory, in way Σ, which is not further controlled by x |

Expressions of induced ballistic motion are formally distinguished from expressions of transfer to a goal location which are categorised by *-arra* 'PUT' (see e.g. §6.13 above). They are also distinguished from from simple 'dropping', categorised by *-mili/-angu* 'GET/HANDLE' (see §5.4.1.5); compare (6-79) with (6-78a) above.

(6-79) ganggung **jag** nga-**mili**-ny
saliva go.down 1sg:3sg-GET/HANDLE-PST
'I lost spittle' (i.e. saliva dribbling down) (DB/ER, TIM211)

Table 6-49. *Coverbs of induced ballistic motion*

Coverb	Dial	Translation	*-wardgiya* THROW	*-yunggu* SAY/DO'	Other verbs
wurrg	J	chuck, throw away	√	√	
diwu*	J/Ng	1. fly 2. throw	√	√	see §6.5.1
wurdij	J	throw a spear		√	
wurlmaj*	J	splash water		√	see §6.9.2, §6.11
Jubbany	J/Ng	spit	√	√	

6.15 Coverbs of transfer

The distinctive formal property of coverbs of transfer is that they are trivalent, that is, complex verbs formed with these coverbs always allow for a third core argument, representing a semantic recipient. The coverbs identified in this way fall into two distinct subclasses, each with only a couple of members. These are coverbs of 'giving' (§6.15.1) and coverbs of transfer of a message (§6.15.2). Coverbs included in the 'transfer' class do not occur in expressions of 'receiving, obtaining', which are always bivalent and formed with *-mili/-angu* 'GET/HANDLE', either as a simple verb (§5.4.1.1), or with coverbs of 'holding' or 'grabbing'.

6.15.1 Coverbs of 'giving'

Only two coverbs of 'giving', i.e. of caused change of possession of concrete entities, are attested to date; *-ngarna* 'GIVE' as a simple verb covers this semantic area most of the time. One of the coverbs is *juwi* 'pass, hand over'; it is restricted to a combination with *-ngarna* 'GIVE' and semantically includes this verb (see §5.7.1.1). The other coverb is *nyilng* 'promise a wife'; it only combines with *-ma* 'HIT' (presumably in its secondary sense of 'completely affect', see §5.4.2.2). Coverb and verb here form a trivalent complex verb where the recipient is cross-referenced on the verb and the 'wife promised' may be expressed as a third core argument. This is illustrated in (6-80) and Fig. 6-51.

(6-80) gurrany nami **nyilng** bunyu-**ma**-nyi,
NEG 2sg promise.wife 3pl:2sg-HIT-IMPF
ngayug **nyilng** bun-**ma** \
1sg promise.wife 3pl:1sg-HIT.PST
'not to you they promised her, to me they promised her' (DP, F02276)

Fig. 6-51. *The coverb of 'giving'* nyilng *'promise a wife' and* -ma *'HIT' (ii)*

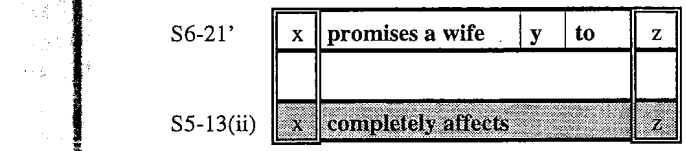


Table 6-50. *Coverbs of 'giving'*

Coverb	Dial	Translation	Complex verbs
juwi	J	pass, hand over	*-ngarna* 'GIVE': 'pass s.o. s.th., hand s.th. over to s.o.'
nyilng	J	promise a wife, bestow	*-ma* 'HIT': 'promise s.o. a wife'

6.15.2 Coverbs of transfer of a message

Three other trivalent coverbs are *yurrg* 'show by pointing, teach', *thirrang* 'show by holding up', and *yanggi* 'ask', the latter illustrated in (6-81). Following Levin 1993, I have labelled them 'coverbs of transfer of a message'.

(6-81) gurrany **yanggi** yawun-**karra**=yinyag mangarra-wu!
NEG ask IRR:2du/pl:1-PUT=1du.excl.OBL plant.food-DAT
'don't ask us two for food, you two!' (IP, F03696)

These coverbs only form complex verbs with *-arra* 'PUT', which itself takes on a secondary sense of transfer of a message (§5.2.4.3; for further examples see also §4.1.3 and §4.3.2.5). The verb, in this sense, is semantically included in the coverb, in the way shown in Fig. 6-52.

Fig. 6-52. *Coverb of 'transfer of a message' and* -arra *'PUT' (iii)*

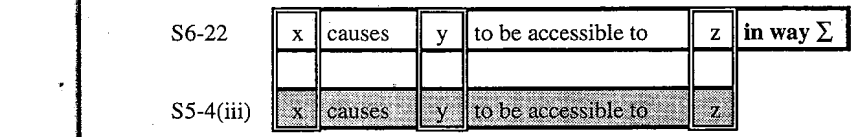


Table 6-51. *Coverbs of transfer of a message*

Coverb	Dial	Translation	*-arra* PUT	Other verbs
yurrg	J/Ng	show by pointing, teach	√	
thirrang	J	show by holding up	√	
yanggi	J/Ng	ask	√	

6.16 Coverbs of hearing and memory

The domain of perception is lexicalised in heterogeneous ways in Jaminjung. Visual perception is covered by a specific verb, *-ngawu* 'SEE'. This verb may combine with coverbs of direction of gaze which are formally a subclass of coverbs of spatial configuration (see §6.1.3). Perception by the lower senses is encoded by coverbs which consistently combine with *-mili/-angu* 'GET/HANDLE' (see §6.17 below).

Coverbs of hearing and remembering pattern together in that they consistently form complex verbs with *-uga* 'TAKE' in its reading of 'hear/have in mind' (§5.3.4.3), at least in the Jaminjung dialect. Ngaliwurru has a special transitive verb *-malangawu* 'HEAR' (see §5.9.3). The semantic link between 'hearing' and 'memory' has been discussed in some detail in §5.3.4.3, with a number of examples. However, it is not easily possible to find an English paraphrase that captures this semantic link and includes the semantic components common to all coverbs in this class.

The coverbs of 'hearing' (*malangayij* and its dialectal equivalent *gurru*) have been cross-listed as coverbs of continuous activity (§6.3). The coverb *jilag* 'report, tell an experience' is cross-listed as a coverb of speech act in §6.4.1, since it also combines with *-yu(nggu)* 'SAY/DO'. Apparently it combines in its meaning both a component of 'remembering' ('having in mind' the event/person that one is going to report) and a component of the actual speech act of 'reporting'. The use of *jilag* with *-uga* 'TAKE' is illustrated in (6-82) and in Fig. 6-53.

(6-82) majani **jilag** bun-b-**uga**=yurrag \
maybe report 3pl:1-FUT-TAKE=1pl.incl.OBL

'maybe they will report us' (to the station manager, after spearing cattle) (IP, GV09-02)

Fig. 6-53. *The coverb of 'hearing/memory'* jilag *'report' and* -uga *'TAKE' (iii)*

S6-23'

x	has in mind	y	**and speaks about (y)**

S5-7(iiia)

x	has in mind	y

Table 6-52. *Coverbs of hearing and memory*

Coverb	Dial	Translation	*-uga* TAKE	*-malangawu* HEAR	Other verbs
girr	J/Ng	remember	√		
biga	Ng	remember a place as good for hunting	√		
jilag*	J	report, tell an experience	√		see §6.4.1
malangayij* **gurru***	J Ng	hear, listen	√	√	see §6.3

6.17 Coverbs of social interaction and perception by the lower senses

Both coverbs of social interaction and coverbs of perception by the lower senses combine with *-mili/-angu* 'GET/HANDLE' in its sense of 'non-physical interaction' (§5.4.1.3). Both subgroups only have a few attested members. Again, it is difficult to capture the semantic component that is common to all of them, beyond a component of 'non-physical contact' that was also attributed to the verb in all its secondary senses. This tentative characterisation is given in S6-24.

S6-24 | x is in non-physical contact with y in way Σ |

Coverbs of social interaction are listed in Table 6-53 below. Of these, *wamam* 'face s.o.' in (6-83) is cross-listed as a coverb of spatial configuration. It has no 'interaction' reading in and of itself, since in combination with the stance verb *-yu* 'BE' it simply describes the position of two people facing each other. The component of 'interaction' in (6-83) is therefore contributed by the verb *-mili/-angu* 'GET/HANDLE'.

(6-83) majani **wamam** yiny-**jibili** gamurr
maybe face.up 1du.excl:2sg-FUT:GET/HANDLE middle
'maybe the two of us will meet you halfway' (VP/DR, STO022)

The coverb *wuru* 'care for' is also attested with *-ma* 'HIT' (presumably in its secondary sense of 'completely affect'), with no clear semantic difference. By stretching the definition of 'social interaction' somewhat, *nij* 'say someone's name' can be included in this class. Even saying the name of a dead person, as in (6-84), may count as interaction in the sense that this is said to bring back the spirit of the dead person, and is therefore strictly avoided.

(6-84) klosap **nij** nga-**mili**-ny jawijiny-guluwa,
almost say.name 1sg:3sg-GET/HANDLE-PST MoFa-KIN2
'I almost said the name of your grandfather'; 'I almost called your grandfather by name' (recently deceased) (DB, E10188)

Table 6-53. *Coverbs of social interaction*

Coverb	Dial	Translation	*-mili* HANDLE	*-ma* HIT	Other verbs
nij	J/Ng	call s.o./s.th. by name	√		
wamam*	J	face s.o. / meet	√		see §6.1.1
ngi'iny	J	wake s.o. up	√		
wuru	J/Ng	care for s.o., look after s.o.	√	√	

Coverbs of perception by the lower sensesare listed in Table 6-54 below; most of them have also been cross-listed in other classes. The coverb of tactile perception, *mard* 'feel' has been subsumed under the coverbs of 'touch' (§6.9.2). The coverbs of 'smelling' (*ngabuj* and *nguyang)* have been cross-listed as stative coverbs, since they can also have an 'emit smell' reading. Further coverbs of perception by the lower senses that are attested to date are *bankiyaj*[190] 'dream', *munungmunung* 'perceive by telepathic twitch', and, arguably, *ngunthug* 'like, desire'.

(6-85) ngarrgina babiny bankiyaja ngag –
1sg:POSS elder.sister dreaming 3sg-BE.PST?
bankiyaj nga-**ngu**
dream 1sg:3sg-GET/HANDLE.PST
'my sister, I was dreaming – I dreamt (of) her' (DP, E05070)

190 As example (6-85) shows, *bankiyaj* 'dream' also has a counterpart in the 'continuous activity' class, *bankiyaja*.

(6-86) gurrany **ngunthug** gan-**angga**-m giliny
NEG like 3sg:3sg-GET/HANDLE-PRS bait
'they don't like the bait' (fish) (VR, JAM235)

Table 6-54. *Coverbs of perception by the lower senses*

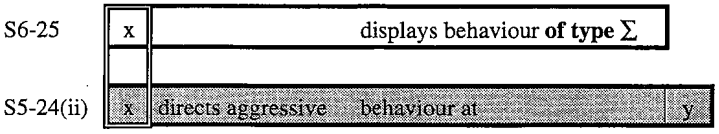
Coverb	Dial	Translation	*-mili* HANDLE	Other verbs
mard*	J	touch, feel	√	
nguyang*	J	smell	√	see also §6.1
ngabuj*	Ng			
bankiyaj	J	dream	√	
munungmunung	J	perceive by telepathic twitch	√	
ngunthug	J	like, want	√	

6.18 Coverbs of non-physical aggression

Coverbs of non-physical aggression form a small class; the formal criterion for inclusion in this class is co-occurrence with the verb *-ngawu* 'SEE' in its secondary sense of 'direct aggressive behaviour at someone'. All of these coverbs encode a kind of behaviour that is displayed. The behaviour in question is not necessarily interpreted as aggressive, but can have this effect under certain circumstances. In other words, the meaning of the coverb does not have to overlap with that of the verb, but has to be compatible with it, in that it can be interpreted as a manner of directing aggressive behaviour at someone. Thus, the combination of *gambaja* 'laugh' and *-ngawu* 'SEE' is necessarily interpreted as 'laugh at someone', as illustrated in (6-87) and Fig. 6-54 (see also Fig. 6-21 and ex. (6-27) in §6.3).

(6-87) **gambaja** gani-**ngami** guragurang
laugh 3sg:3sg-SEE:PRS RDP:old.man
'he is laughing at the old men' (DBit, CHE324)

Fig. 6-54. *Coverb of non-physical aggression and* -ngawu *'SEE'* (ii)



Except for *jirrija* 'jealous' (see §5.8.1.2 for an example), all coverbs of non-physical aggression are cross-listed in other classes. The most frequent of them, *wirrij* 'aggressive, violent, angry', may function as an 'adverbial' coverb with a large number of verbs. The coverbs *nyul* 'sulk' (see IV/23 for an example) and *ngarl* 'bark' may also combine with *-yunggu* 'SAY/DO' and have been cross-listed in the classes of sound emission and bodily/emotional condition, respectively.

Table 6-55. *Coverbs of non-physical aggression*

Coverb	Dial	Translation	*-ngawu* SEE	Other verbs
wirrij*	J/Ng	aggressive, violent, angry	√	see §6.20
nyul*	J	sulk	√	see §6.4.3
jirrija	J	jealous	√	*-muwa* 'HAVE' (see §5.2.2)
gambaja*	J/Ng	laugh	√	see §6.3
ngarl*	J/Ng	bark	√	see §6.4.1

6.19 Phase coverbs

Phase coverbs correspond closely to what have been called 'aspectual satellites' by Talmy (1985: 114ff), in that they lexicalise the termination, initiation, or continuation of the event encoded by a – simple or complex – verb. It is difficult to capture this common property in a characterising paraphrase. The semantic characterisation of phase coverbs would have include a slot – to be filled by a verb – for the event which respect to which the phase is specified, in a way illustrated for *jawug* 'for a short time' in Figures 6-55 and 6-56 below. This is consistent with the only formal property common to these coverbs, which is that each combines with a rather large number of verbs (the lists given in Table 6-56 are quite certainly not exhaustive).

Burrb 'finish, do V to all', illustrated in (6-88) below, is by far the most frequent phase coverb. In the terminology of Dowty (1991), it indicates the full affectedness of an incremental theme. Occasionally, it has been found in a less restricted use with a general reading of 'finish', e.g. 'finish eating (even though there is still food left)' rather than 'eat up'. It is cross-listed as a coverb of change of state, because it can combine with *-ijga* 'GO' in its change of state sense, yielding 'x run out'.

(6-88) wagurra **[walig** gani-**ma**-m] **burrb**
rock around 3sg:3sg-HIT-PRS finish
'he goes all the way round the rock' (DB, D05065)

Two coverbs, *jawug* 'for a short time' and *durlma* 'altogether', encode the duration of the post-state of the event encoded by the verb. The use and interpretation of the coverb *jawug* is illustrated in (6-89) and in Figures 6-55 and 6-56. It includes in its scope the derived pragmatic interpretation that the verb may receive, of moving to a location (indicated in the figures by thinner lines and absence of shading). Thus the interpretation of (6-89a) is 'let us go somewhere and stay there for a short time' (I do not have examples where the intended interpretation clearly is that the motion itself should take a short time, but this also does not seem inconceivable). Similarly, the interpretation of (6-89b) is that the entity transferred should stay with the recipient for a short time.

(6-89a) **jawug** mind-**angga**
short.time 1du.incl-GO.PRS
'let's go (away) for a short time' (IP, F01216)

b) **jawug** **bana** yinju mali
short.time IMP:2sg:1sg:GIVE PROX thing
'give it to me for a short time' / 'lend it to me' (JM, NUN204)

Fig. 6-55. *The coverb of phase* jawug *'for a short time' and* -ijga *'GO'*

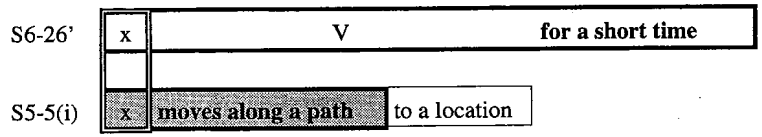
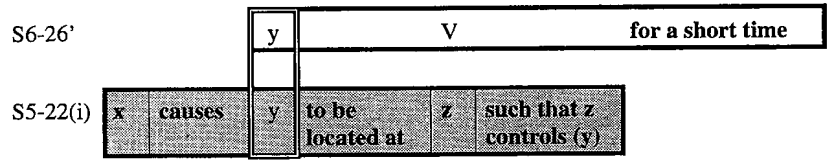


Fig. 6-56. *The coverb of phase* jawug *'for a short time' and* -ngarna *'GIVE'*



Coverbs encoding termination may combine with *-yu(nggu)* 'SAY/DO' in its function as a non-specific performance verb, in the reading of 'finish (unspecified event)' (see §5.6.1.5). In this respect, *girrb* 'quiet', although formally a coverb of state, patterns with the phase coverbs in that it can be used to express 'stopping'.

(6-90) ga-ram yina-ngunyi::, gamurr **girrb** gan-**unggu**-m
3sg-COME.PRS DIST-ABL middle quiet 3sg:3sg-SAY/DO-PRS
'he comes from over there, halfway he stops' (DB, D13019)

Most phase coverbs are very infrequent, and their specific properties have therefore not been explored in much detail. Some of the coverbs listed here, e.g. *buru* '(do in) return' and *buyi* 'keep going', are most commonly used with motion verbs, and are cross-listed as coverbs of direction.

Table 6-56. *Phase coverbs*

Coverb	Dial	Translation	Complex verbs	See also
burrb*	J/Ng	do V to all, finish V	*-yu(nggu)* 'SAY/DO': 'finish (x)' *-minda* 'EAT': 'eat x up' *-mili* 'HANDLE': 'get all x' *-irdba* 'FALL': 'all x fall' *-irna* 'BURN': 'x burn up' and others	§6.7
girrb*	J	quiet	*-yu* 'BE': 'be quiet' *-yu(nggu)* 'SAY/DO': 'stop' *-mili* 'HANDLE': 'turn s.th. off'	§6.1
dum **burral** **darnku**	J J Ng	V to satiation, get full	*-yu(nggu)* 'SAY/DO': 'have one's fill' *-minda* 'EAT': 'eat one's fill' *-mili* 'HANDLE': 'get one's fill' *-ngarna* 'GIVE': 'give s.o. enough to eat'	
bujag	J/Ng	1. start off V, initiate V 2. start off a fight	*-ijga* 'GO': 'start off, get up and go' *-irna* 'BURN': 'start up (of fire'), start burning' *-ma* 'HIT': 'start off a fight' *-mili* 'HANDLE': 'get s.th. started, start s.o. off'	
durlma*	J	1. whole, in one piece 2. V altogether	*-ijga* 'GO': 'go away for good' *-unga* 'LEAVE': 'leave s.th. for good'	§6.1.1
jawug	J	V for a short time	*-yu* 'BE': 'be somewhere for a short time' *-ijga* 'GO': 'go somewhere for a short time' *-ngarna* 'GIVE': 'give s.o. s.th. for a short time'	

buru*	J/Ng	do V back/in return	*-mili* 'HANDLE': 'get s.th. back' *-ngarna* 'GIVE': 'give s.o. s.th. back' and others	§6.5.3
jaru	J	V in the same way as before	*-ruma* 'COME': 'come the same way as before'	
buyi*	J/Ng	continue V, keep on Ving		§6.5.3
walyang*	J/Ng	do something first	*-inama* 'KICK/STEP': 'come to a place first'	§6.1.1

6.20 Adverbial coverbs

A residual class of coverbs is subsumed under the label 'adverbial coverbs'; note that a class of adverbs could not be clearly separated from the coverb class on semantic grounds (§2.3.1.1). The common property of adverbial coverbs, just as that of phase coverbs, appears to be a lack of restrictions in their combination with verbs. (For reasons of space, only a subset of the attested combinations are listed in Table 6-57.) Adverbial coverbs, as opposed to phase coverbs, describe the manner in which the event encoded by the verb is performed. Their common semantic denominator is something like S6-27, where V is a variable for the event encoded by a (simple or complex) verb.

S6-27 | x V in way Σ |

Adverbial coverbs may relate to properties of the agentive participant in an event, e.g. *marlma* 'unable, clumsy, helpless' or *wirrij* 'violent, aggressive, angry', or evaluate the outcome of an event, e.g. *bijirr* 'in the right way, in the right place'.

(6-91) **bijirr** ba-**rra** thuwa-thuward \
be.right IMP-PUT RDP-across
'put it in the right place, crossways' (wire on the roof of bough shade) (IP, F03926)

Some adverbial coverbs can also be made the (semantic) main predicate by combining them with *-yu* 'BE' in its auxiliary function; this is illustrated for *ganma* 'not do, do wrongly' and *wirrij* 'aggressive, violent' in (6-92).

(6-92) ya, **ganma** ba-wurr-**iyaj**, gurrany=biya **wirrij-wirrij** \
yes not.do IMP-2pl-BE NEG=NOW RDP-aggressive
'yes, don't do anything (= be peaceful), don't fight' (IP, F03564)

The contrast of several verbs with the same adverbial coverb is illustrated with *malany* 'test, try out'. With *-minda* 'EAT', the resultant reading is 'taste' (6-93a) (alternatively, the verb *-mili/ -angu* 'GET/HANDLE' can also be used to yield this reading). With *-ma* 'HIT', predictably, the reading of the complex verb is 'hit to try out', as in (6-93b). Only where none of the more specific verbs applies, *-arra* 'PUT' is used, e.g. to describe trying out a tape player (6-93c).

(6-93a) **malany** nga-**bida** mangarra jalag
test 1sg:3sg-FUT:EAT plant.food good
'I want to taste the good food' (JJ, D18019)

b) **malany** gani-**ma**, digirrij ga-jga-ny
test 3sg:3sg-HIT.PST die 3sg-GO-PST
'he felt it, it was dead' (buffalo -> crocodile that it had fought) (Cleverly 1968: 129)

c) majani ngiyiya=ma **malany**.. birri nga-w-**arra**,
maybe PROX=SUBORD test TRY 1sg:3sg-FUT-PUT
'maybe this one, I will try and try it out' (tape player) (DBit, E05038)

Table 6-57. *Adverbial coverbs*

Coverb	Dial	Translation	Complex verbs	See also
wirrij*	J/Ng	aggressive, violent, angry	*-yu* 'BE': 'behave violently, be angry' *-ma* 'HIT': 'fight s.o.' *-ngawu* 'SEE': 'scold s.o.' *-manka* 'get angry (?)': 'get angry'	§6.18
ganma	J/Ng	1. not do anything 2. do in the wrong way, mistakenly	*-yu* 'BE': 'be quiet, be peaceful' *-ma* 'HIT': 'hit s.o. by mistake/in the wrong place' *-ijja* 'POKE': 'pierce/weave/sew s.th. in the wrong way' *-arra* 'PUT': 'put s.th. in the wrong way, say the wrong word'	
bunug* **jawurra**	J Ng	stealthily, taking s.th. illicitly	*-yungga* 'TAKE.AWAY': 'rob s.o. off s.th., steal s.th. from s.o.' *-mili* 'HANDLE': 'steal s.th.' *-uga* 'TAKE': 'steal and take away' *-minda* 'EAT': 'steal food from s.o.'	§6.9.2
malany	J	test, try	*-mili* 'HANDLE': 'try by feeling; taste' *-arra* 'PUT': 'test s.th., try s.th.' *-ma* 'HIT': 'hit to try s.th. out' *-minda* 'EAT': 'taste s.th.'	

marlma	J	unable, helpless, clumsy	*-yu* 'BE': 'be clumsy, be unable' *-mili* 'HANDLE': 'be unable to help'	
bijirr	J	in the right place, in the right way	*-irdba* 'FALL': 'get in the right position' *-arra* 'PUT': 'put in the right place' *-mili* 'HANDLE': 'handle s.th. in the right way' *-ma* 'HIT': 'hit s.th. properly' ('kill')	§6.1.1
jurdug*	J/Ng	1. straight 2. properly, correctly	*-yu(nggu)* 'SAY/DO': 'say s.th. straight out, say s.th. correctly, sort s.th. out' *-ijja* 'POKE': 'pierce/weave/sew s.th. properly'	
wulug	J/Ng	alone, by itself, separate	*-yu* 'BE': 'be alone' *-arra* 'PUT': 'place s.th. by itself'	
yirrginy* **yulij***	J J/Ng	1. symmetrical 2. reciprocating	*-ma* 'HIT': 'fight against one another' *-ngarna* 'GIVE': 'give reciprocally, swap'	§6.1.1

6.21 Summary

This chapter has been devoted to an account of the meaning of the coverbs, and their use in complex verbs. In the case of the coverbs, too, the principle of monsemy was applied, such that the meaning of a coverb was only taken to correspond to those components that are present in all of its combinations with verbs. The unification of meaning components of coverbs and verbs in canonical complex verbs was then described for coverbs from each class.

The classes of coverbs that were established in this chapter are summarised again in Table 6-58. The table also repeats the semantic characterisations that were proposed in order to represent the meaning components that are common to all members of a class, and the properties that were considered criterial for the inclusion of coverbs in the class. In most cases, these properties will correspond to a list of one or more verbs with which all members of the class combine, or sometimes to restrictions in the combination with verbs. Where the verbs form disjoint sets, this is indicated, otherwise they form conjoint sets. Verbs in brackets only combine with a subset of coverbs in the class.

Table 6-58. *Coverb classes: Summary*

Section	Class	Semantic characterisation		Criterial verbs
6.1	**Spatial configuration**			*-yu* 'BE' and/or *-muwa* 'HAVE'
6.1.1	Position	S6-1(i)	x is in a spatial configuration Σ with respect to a location	*-yu* 'BE', *-muwa* 'HAVE', *-irdba* 'FALL', *-arra* 'PUT'
6.1.2	Posture	S6-1(ii)	x is in a spatial configuration Σ	*-yu* 'BE', not *-irdba* 'FALL'
6.1.3	Direction of gaze	S6-1(iii)	x is in a spatial configuration Σ involving the direction of its gaze	*-yu* 'BE', *-ngawu* 'SEE'
6.1.4	'Holding'	S6-1(iv)	x is in a spatial configuration Σ with respect to y & y controls the configuration of x	*-muwa* 'HAVE', *-mili* 'HANDLE' and/or *-arra* 'PUT'
6.2	**Property and state**	S6-2	x is in a state Σ	*-yu* 'BE' (ii), *-ijga* 'GO' (iii)
6.3	**Continuous activity**	S6-3	x is involved in an activity Σ (with respect to y)	*-yu* 'BE' (ii), *-ijga* 'GO' (iii)
6.4	**Speech etc.**			*-yunggu* 'SAY/DO'
6.4.1	Speech and sound emission	S6-4(i)	x internally causes and gives immediate evidence of a sound/speech act of type Σ	*-yunggu* 'SAY/DO'
6.4.2	Internal motion	S6-4(ii)	x internally causes and gives immediate evidence of a movement of type Σ	*-yunggu* 'SAY/DO'
6.4.3	Bodily / emotional condition	S6-4(iii)	x internally causes and gives immediate evidence of a bodily / emotional condition of type Σ	*-yunggu* 'SAY/DO'
6.5	**Motion**			Locomotion verbs
6.5.1	Manner of motion	S6-5	x moves along a path in a manner Σ	Locomotion verbs, not *-irdba* 'FALL'
6.5.2	Hunting	(S6-5)		Locomotion verbs
6.5.3	Direction of motion	S6-6(i)	x changes its location in direction Σ	Locomotion verbs and *-irdba* 'FALL'
		S6-6(ii)	x moves along a path in direction Σ	Locomotion verbs
6.5.4	Emerging	S6-7	x comes into view in way Σ	Locomotion verbs, *-ma* 'HIT' (iii)

6.6	**Ballistic motion and stopping**	S6-8	x comes to be at an end location in way Σ following motion (with a trajectory determined by gravity)	*-irdba* 'FALL', no Locomotion verbs
6.7	**Change of state**	S6-9	x undergoes a change of state Σ	*-ijga* 'GO' (ii)
6.8	**Cooking and Burning**			*-irna* 'BURN'
6.8.1	Manner of heating	S6-10	x is affected by heat in manner Σ	*-irna* 'BURN', *-irriga* 'COOK'
6.8.2	Heat / light emission	S6-11	x emits heat/light in manner Σ	*-irna* 'BURN', *-yunggu* 'SAY/DO' or *-yu* 'BE'
6.9	**Contact and effect**			Verbs of contact/force
6.9.1	Impact and change of state	S6-12	(x causes) y (to) come(s) into forceful contact with something, resulting in a change of state Σ of y	several verbs of contact/force possible
6.9.2	Touch and manipulation	S6-13	x makes (physical) contact with y in way Σ	mainly *-mili/-angu* 'GET/HANDLE'
6.9.3	Hitting	S6-14	x makes an impact on y in way Σ & x affects y	mainly *-ma* 'HIT'
6.9.4	Biting	S6-15	x makes forceful contact with y with the mouth part in way Σ	mainly *-wa* 'BITE'
6.10	**Ingestion**	S6-16	x takes y into x's mouth in way Σ	*-minda* 'EAT'
6.11	**Indirect effect**	S6-17	x affects y in way Σ (not necessitating physical contact)	*-ma* 'HIT' (ii) and/or *-ngarna* 'GIVE' (ii)
6.12	**Induced change of configuration**	S6-18	x causes y to be in a spatial configuration in way Σ	*-arra* 'PUT' (iv)
6.13	**Induced change of location**	S6-19	x causes y to change its location in way Σ	*-arra* 'PUT'
6.14	**Induced ballistic motion**	S6-20	x applies energy to set y onto a trajectory, in way Σ, which is not further controlled by x	*-yunggu* 'SAY/DO', (*-wardgiya* 'THROW')
6.15	**Transfer**			(form trivalent complex verbs)

6.15.1	'Giving'	S6-21	(x gives y to z in way Σ)	*-ngarna* 'GIVE' (i) or *-ma* 'HIT' (ii)
6.15.2	Transfer of a message	S6-22	an animate x causes y to be accessible to an animate z in way Σ	*-arra* 'PUT' (iii)
6.16	**Hearing and memory**	S6-23	(x has y in mind in way Σ/ with the intent Σ; x hears y)	*-uga* 'TAKE' (iii), *(-malangawu* 'HEAR' (Ng.))
6.17	**Social interaction / perception by lower senses**	S6-24	x is in non-physical contact with y in way Σ	*-mili/-angu* 'GET/HANDLE' (iii)
6.18	**Non-physical aggression**	S6-25	x displays behaviour of type Σ (that can be interpreted as aggressive)	*-ngawu* 'SEE' (ii)
6.19	**Phase**	S6-26	(phase Σ of Event V)	many verbs
6.20	**Adverbial**	S6-27	(Event V in way Σ)	many verbs

This investigation confirmed that coverbs cover, by and large, a semantic area that is equivalent to the semantic area covered by members of the verb class in European languages. In addition, coverbs also express notions of property (e.g. colour) and state (here the boundary to the adjectival subclass of nominals is somewhat fuzzy), and of posture and spatial configuration. Members of the latter classes partly correspond semantically to adverbs, prepositions and preverbs in European languages, but often lexicalise rather fine-grained semantic distinctions. Coverbs may also provide information on the boundary or duration of events (the 'phase' coverbs), and on the general manner in which the event is performed (the 'adverbial' coverbs). Most of the formally defined coverb classes could be shown to also form semantically coherent sets, and to overlap, to a considerable extent, with predicate classes that can be established for other languages. For example, coverbs of spatial configuration, manner of motion, direction of motion, and internal motion constitute clearly defined and distinct subclasses. It was also possible to identify classes of change of state, impact and change of state, contact and effect, induced ballistic motion, and transfer.

On the other hand, some language-specific principles of lexical encoding, which were already commented on in the context of the description of the semantics of the closed-class verbs, also play a role in the coverb lexicon. For example, volitionality and control are usually irrelevant for the classification; the classes of coverbs of activity, manner of motion, and internal motion all subsume 'controlled' as well as 'uncontrolled' events. More important for lexicalisation in Jaminjung is a component of 'internal cause', independent of volitionality. This can account for the similar behaviour of coverbs from the classes of speech and

sound emission, internal motion, and physical or emotional condition, which all combine with the verb *-yu(nggu)* 'SAY/DO'. Another language-specific principle appears to be the strict distinction between locomotion on the one hand, and change of location on the other hand, and the further subdivision, in the domain of change of location, of change of locative relation with respect to a location (events categorised by *-irdba* 'FALL'), and change of location away from a location, or emerging (categorised by *-ma* 'HIT' in a secondary sense).

A peculiarity of Jaminjung is also the existence of a rather large class of activity coverbs which mainly combine with the auxiliary verbs *-yu* 'BE' and *-ijga* 'GO'; this reflects a likely origin of these complex verbs in productive progressive expressions (see §3.3.1). This class subsumes a number of predicates in the semantic fields of e.g. motor pattern, sound emission, bodily function, and manipulation, which might have been expected to belong to other formal classes on semantic grounds.

The organisation of the coverb lexicon obviously reflects a certain division of labour between coverbs and verbs, since the verbs, although forming a closed class, have to be taken into consideration in the investigation of predicate classes. Verbs encode certain notions that are not covered by coverbs. For example, while only coverbs, but not verbs, lexicalise distinctions of spatial configuration, direction, and manner of motion, only locomotion verbs, but not coverbs, encode deictic direction. Verbs further complement coverbs in that verbs can be employed to form expressions with alternating valencies based on one and the same coverb, in a manner already outlined in §4.3. This may explain why monovalent coverbs, e.g. from the classes of spatial configuration, direction of motion, ballistic motion, change of state, or manner of heating, appear to have a much higher functional load than bivalent or trivalent coverbs. The latter encode relatively specific notions of contact and effect or transfer, but are less frequent both in terms of types and tokens and are usually restricted to combining with a small set of verbs with which they overlap semantically. Monovalent coverbs, on the other hand, may form complex verbs with a larger number of verbs.

This leads us to some comments on the types of semantic relationships that may hold between coverbs and verbs in Jaminjung. In the view maintained here (see also §1.4.1.3), canonical complex verbs have a dual nature: they are licensed by a productive construction, and at the same time constitute lexicalised collocations (at least usually, if one allows for occasional on-the-spot combinations, especially those involving Kriol loans). By describing restrictions on complex verb formations, one therefore simultaneously describes lexicalisation patterns (after all, the majority of predicates in Jaminjung are complex rather than simple), and restrictions on the fillers of a construction. In the construction-based approach followed here, lexical items can be said to combine with each other, and to function as fillers of constructions, by way of unification. Throughout this chapter, I have attempted to represent the unification of coverbs and verbs within

a complex predicate by way of alignment of overlapping semantic components (admittedly, propositional representations do not always lend themselves easily to this task).

Unification is seen at work most easily where coverb and verb overlap to some degree semantically. Not surprisingly, given the fact that the verbs form a closed class, coverbs are, with almost no exception, semantically more specific than verbs. In some marginal cases, summarised in §5.10.3, verbs tend to collocate with a coverb which apparently more or less completely semantically overlaps with the verb. More frequently, a verb is semantically included in a coverb. For example, positional coverbs have a component of locative relation with respect to a location, and all combine with the general verb of location and existence, *-yu* 'BE' (§6.1). The restrictions on the use of coverbs of manner of motion can be accounted for by postulating a semantic component of 'motion along a path' common to all of them, which is also the meaning of the most general motion verb, *-ijga* 'GO' (§6.5). Members of the class of coverbs of speech/sound emission, internal motion and bodily/emotional condition (§6.4) can be analysed as having a semantic component of 'internally cause, and give immediate evidence, of an event', which is exactly the meaning proposed in §5.6 for the verb *-yu(nggu)* 'SAY/DO' with which they all combine. Coverbs encoding types of touch and physical manipulation combine with the general contact verb *-mili/-angu* 'GET/HANDLE', which they semantically include (§6.9.2). Coverbs of manner of heating all combine with *-irna* 'BURN', the verb that describes their semantic component of 'affectedness by heat' (§6.8) – and so on.

Some combinations that I have described as instances of semantic inclusion may be handled differently in a more radically monosemic account, where they would be accounted for as instances of contextual modulation or 'coercion' of a verb sense in the context of a coverb of a certain type (see also §1.4.2.2). Thus, complex verbs formed with the locomotion verb *-ijga* 'GO' and coverbs of change of state, not surprisingly, receive an overall interpretation of 'change of state' (§6.7). As in many other languages, the general verb of location and existence, *-yu* 'BE', can be used with predicates of state and activity and here only indicates atelicity (§6.2 and §6.3). Complex verbs consisting of a coverb of 'emerging' and the impact verb *-ma* 'HIT' have an interpretation of 'emerge' (§6.5.4), and in the context of coverbs of transfer of a message, *-arra* 'PUT' is not interpreted as a verb of induced change of locative relation, but of metaphorical transfer (§6.15.2).

The frequency of relationships of semantic inclusion might lead one to believe that verbs always have to be hyperonyms of coverbs (in this case, the verbs would 'classify' coverbs). However, there are many cases where the meanings of coverbs and verb overlap only partially, that is, the verb and the coverb share some semantic components, but each constituent also contributes a component to the complex verb that is not included in the other. Examples are coverbs of

manner or direction of motion with locomotion verbs other than *-ijga* 'GO'; here the coverb contributes the information on manner and direction, and the verb contributes the specification of the path as oriented towards the deictic centre, or with respect to another participant (§6.5). Positional coverbs, in combination with the verbs *-irdba* 'FALL' and *-arra* 'PUT', contribute the specification of the (static) location relation holding at the end location, while the verbs contribute the dynamic component of change of locative relation (§6.1). An example of partial overlap was also given in §6.1.3, involving coverbs of direction of gaze (which are more like positionals in that they do not encode visual perception of a second participant, but a specific direction of the gaze) and the verb of visual perception *-ngawu* 'SEE'. Coverbs of ballistic motion show partial semantic overlap with *-wardgiya* 'THROW' (§6.6). Coverbs of impact and change of state combine with a number of verbs of contact/force, which contribute the more specific information on the type of impact made, while the coverb contributes a specific component of change of state (§6.9.1).

A different type of partial semantic overlap has to be recognised where one predicate contains a semantic slot for the contribution of the other. The general performance verb *-yu(nggu)* 'SAY/DO', and also the verb *-ngarna* 'GIVE' in its secondary sense of 'direct action at', were argued to have a propositional participant, and thus require the expression of an event that is performed (§4.2.3.3 and §5.6). This event can be expressed by a coverb (among other possibilities such as quotations), which may or may not, at the same time, also show semantic overlap with the verb. An example of non-overlap in this case are coverbs of ballistic motion in combination with *-yu(nggu)* 'SAY/DO' (§6.6). Finally, coverbs of phase (§6.19) and adverbial coverbs (§6.20) are best analysed as having a slot for an event expressed by the verb, with respect to which they encode a phase, or a manner.

In a number of coverb-verb combinations, on the other hand, we find no semantic overlap at all between the constituents. For example, coverbs from a number of classes other than manner or direction of motion are attested with locomotion verbs in complex verbs with an 'associated motion' reading. Positionals (§6.1) clearly have no component of motion themselves, but rather specify either a position held during motion, or a position subsequent to motion (see also §5.3.1.4). An interpretation of simultaneity, and hence manner, is given to coverbs of activity (e.g. *gambaja* 'laugh' in §6.3) or coverbs of manner of motion (§6.5.1) in combination with a verb that encodes affectedness of a non-physical type. This could be *-ma* 'HIT' in its secondary sense of 'completely affect', but also *-ngawu* 'SEE' in its secondary sense of 'direct aggressive behaviour at someone' (see also §6.18). In the most frequent type of combination in the absence of semantic overlap between verb and coverb, the verb is interpreted as encoding a 'causing event', and the coverb as encoding a 'resulting event' (this is frequent e.g. for the monovalent coverbs of ballistic motion (§6.6) and of change

of state (§6.7). It is not possible to account for these combinations in terms of the semantic representations of the predicates alone. Thus, contrary to what has been claimed by Wilson (1999) for the comparable complex predicates of the neighbouring language Wagiman, unification of predicates is not restricted to cases of overlap in their semantic representation. (Unless one simply postulates such overlap, e.g. by assigning a semantic component of 'move' to a predicate like 'laugh' where it occurs with a locomotion verb in an associated motion reading, as Wilson (1999: 158) does.)

Obviously, combinations of this type are not unrestricted. They have to be interpretable as possible macro-events in order to be unified with the canonical complex verb construction, with its constructional meaning of 'unitary macro-event' (see §3.2). As already indicated, the construal of subevents expressed by non-overlapping predicates as a unitary macro-event in Jaminjung is restricted to combinations that can be construed as cause-result, manner, associated (simultaneous) motion, and 'motion cum purpose'. These restrictions are consistent with types of macro-events that can be expressed by complex predicates cross-linguistically. It is in the case of non-overlap that coverb and verb are most clearly interpreted as encoding distinct subevents of the overall macro-event. In cases of partial semantic overlap and especially semantic inclusion of the verb in the coverb it becomes increasingly more difficult to distinguish multiple subevents. It has been stated repeatedly that this distinction is one of semantic interpretation only – there is only one type canonical complex verb construction.

Sharing of participants is a further (but obviously related) restriction on the construal of subevents as unitary macro-events. Thus, at least one participant has to simultaneously fulfil a participant role in all subevents in order for them to be interpretable as a unitary macro-event. This, in fact, seems to be a universal restriction on complex verb formation. In Jaminjung, moreover, the valency of the coverb is usually included in the valency of the verb. The patterns of argument sharing have been described in more detail in §4.3.

Importantly, the discussion devoted to coverbs of each class in this chapter, and the lists of attested combinations that have been provided for each coverb, have shown that the combination of a coverb with more than one verb – referred to as 'multiple classification' in §5.1.1 – is the rule rather than the exception. By contrasting different verbs with coverbs from the same class, and applying the principles of monosemy and unification, it has been possible – at least for a large part of complex verbs – to distinguish the semantic contribution of the verb and of the coverb to the complex expression. Thus, further evidence was provided not only for the claim that the combinations are to a large extent semantically compositional, but also for the claim that verbs do not categorise coverbs, but events.

JAMINJUNG SIMPLE AND COMPLEX PREDICATES IN A CROSS-LINGUISTIC PERSPECTIVE

CHAPTER 7

In this thesis, I have investigated the properties of simple and complex verbs in Jaminjung and Ngaliwurru, two varieties of a typologically unusual Australian language. Its unusual characteristic is that two distinct lexical categories take over the functions that verbs have in most other languages. One of these is a closed class consisting of only 30 members or so. Since these roots take verbal inflections, they were identified as verbs proper or 'generic verbs' (§2.4). These verbs may constitute predicates on their own in a finite clause (§3.1). The other class consists of uninflecting predicative elements, termed 'coverbs' (§2.3). Coverbs may function as the sole predicate only in non-finite clauses, which are either subordinated by means of a case marker (§2.6.5), or semi-independent, but stylistically marked and highly dependent on contextual information in their interpretation (§3.4). The main function of coverbs is the formation of complex verbs, together with a generic verb. In canonical complex verbs (§3.2), one or sometimes two unmarked coverb(s) combine with a verb in a single intonation unit. Some additional constructions consist of a verb and a marked coverb, among them a highly productive progressive construction (§3.3). The most interesting consequence of this 'division of labour' between coverbs and generic verbs is that the verbs can be shown to categorise events: Since a verb from a closed class is obligatory in every finite clause (either as a simple verb or as part of a complex verb), all event expressions are sorted into a small number of categories by the choice of verb (§5.1).

A number of questions, posed in the introduction in §1.1, were addressed in this study. The first main question concerns the **conceptual basis for event categorisation** by generic verbs. Throughout Chs. 5 and 6, I have shown that Jaminjung verbs are far from being 'meaningless' carriers of verbal inflections (as has sometimes been claimed to be the case in descriptions of other languages of this type). Rather, the use of verbs is motivated in various ways. First, the verbs are semantically general (this general meaning may not correspond to the nearest – or even the most frequently applicable – translation equivalent in English). Second, verbs may have secondary senses which are motivated by (some cross-linguistically observable, some language- or perhaps culture-specific) semantic links to the basic sense. The types of semantic links encountered include metaphorical and metonymic extension, and semantic bleaching. Third, the use of the verbs has to be seen as motivated through the paradigmatic oppositions that hold with respect to other verbs. Of course this is

true for the lexicon in any language, but it becomes particularly obvious in the case of a closed class like that of the Jaminjung verbs. Fourth, the combination of verbs with coverbs is motivated in that a given verb combines with coverbs from the semantically circumscribed classes.

The features of events that are relevant for event categorisation by generic verbs correspond to the semantic components of the verbs. The relevant components that could be identified include, among others, the number of salient participants in an event (reflected in the valency of the verb that is used), locomotion vs. change of location, contact and affectedness, transfer of an entity to or away from a third participant, internal cause, some more specific features like ingestion, visual perception, and creation, and finally, to some extent telicity. For events categorised as locomotion, further distinctions that are made pertain to the direction of motion (oriented towards the deictic centre or with respect to another participant), and the involvement of a concomitant participant. For events of contact and affectedness, mere contact is distinguished from impact, and from induced motion. Both physical contact and some types of non-physical contact are categorised by the same verb, while impact events are further subdivided according to the shape and trajectory of the agent/instrument making the impact. Some types of affectedness by non-physical means, change of state, perception and memory are covered by secondary senses of a number of verbs. The senses of these polysemous verbs form radial categories of the type that has also been described for nominal classifiers (see §5.10 for a more detailed summary).

The second main question posed at the beginning of Ch. 1 concerns the **division of labour between coverbs and verbs.** As shown in Ch. 3, verbs are used on their own, as simple verbs, in roughly 40% of all finite clauses. This is of course related to their rather non-specific meaning, which on the one hand allows them to function as classifiers of events, and on the other hand allows for pragmatic enrichment in specific contexts. As for the remaining class of coverbs, I have shown in Ch. 6 that these indeed cover the range of meanings covered by verbs e.g. in Indo-European languages, and in addition include items that are best translated into these languages as adverbs. Moreover, coverbs can be subdivided into predicate classes based on the sets of verbs they combine with, and these classes largely correspond to predicate classes found in other languages. Coverbs are highly versatile in their combi-nation with verbs (with differences depending on the subclass they belong to); in other words, the semantic relationships encountered in complex verbs can be of different types. The verb may be semantically included in the coverb, it may show partial semantic overlap with the coverb, or coverb and verb may not overlap at all semantically. In the latter case, the coverb is interpreted as expressing a phase of the event described by the verb, a manner in which it is performed, or a resulting event (where the causing event is expressed by the verb). With motion verbs, the reading can also simply be one of 'associated motion', i.e. motion simultaneous with, or followed by, another

event. However, these differences should be seen as differences in semantic interpretation only; formally, all complex verbs instantiate a single type of complex verb construction. I have argued in §3.2 that its constructional meaning amounts to the encoding of a unitary macro-event (usually consisting of subevents). The restrictions on complex verb formation thus correspond both to restrictions on the semantic compatibility of verbs and coverbs, and to restrictions on what can be construed as a unitary macro-event.

Naturally, as shown in Ch. 4, the differences in semantic interpretation may also result in different possibilities for argument sharing between verbs and coverbs. This was accounted for by employing a constructional model of argument structure, where argument expressions are not directly predicted from the lexical representation of the predicate, but where semantic participants of predicates are linked to independently existing argument structure constructions on the basis of compatibility of the predicate's meaning with the constructional meaning. Argument sharing can then be described as the linking of participants of more than one predicate to a single morpho-syntactic argument expression. In this way, for example, the single participant of a monovalent coverb can receive very different expressions depending on whether it aligns with the single participant of a monovalent verb, the first participant of a bivalent verb (represented as Actor), or the second participant of a bivalent or trivalent verb (represented as Undergoer). In the account developed here, it is not necessary to postulate polysemy for the coverb in this case; the differences in argument structure can be described as the contributions of the verb and the argument structure constructions themselves to the complex expression. The valency of coverbs, thus, cannot be inferred directly from a single type of expression they occur with, but only by taking into account the range of expressions they occur in. These can also be described in terms of restrictions on argument sharing: coverbs and verbs have to share at least one argument, and usually the argument structure of the coverb is included in that of the verb. Thus, while monovalent coverbs may combine with both monovalent and bivalent verbs, bivalent coverbs only combine with bivalent verbs (except in the progressive construction).

In the remainder of this chapter, these findings will be placed in an areal and typological context. In §7.1, Jaminjung and Ngaliwurru will be compared to other Northern Australian languages with similar types of complex predicates. In §7,2, the nature of Jaminjung coverbs, generic verbs, and complex verbs is examined from a cross-linguistic perspective, in order to clarify what is really distinctive about this language, and what reflects cross-linguistic tendencies.

7.1 Complex verbs in Northern Australia

7.1.1 Complex verbs as an areal feature

Complex verbs of the type described in the previous chapters – with constituents belonging to distinct lexical categories, one of which is a closed class – are not unique to the Jaminjungan languages. Rather, they constitute an areal feature in Northern Australia,[190] spread across almost all non-Pama-Nyungan language families, and shared with some languages of the Pama-Nyungan family. Complex verbs appear to have been a feature of these languages for a considerable time. The location of origin of this construction, and the direction of its spread, cannot be traced with any confidence; Capell (1976: 615) suggests that it spread from west to east. The area characterised by languages with complex verbs of this type is indicated by shading in Map 1 at the beginning of Ch. 1; see also Table 7-1 below.

Thus, languages that are at most distantly related genetically exhibit considerable similarities in complex verb formation. The degree of structural convergence under the influence of multilingualism can be illustrated with the pairs of translation equivalents in (7-1) and (7-2). These were offered by a speaker who is bilingual in Jaminjung and Ngarinyman, a neighbouring Pama-Nyungan language of the Ngumbin group. The Ngarinyman verb roots and inflections in (7-1b) and (7-2b) are distinctly Pama-Nyungan (note the lack of pronominal prefixes on the verbs), but the system of complex verbs is very similar to that of Jaminjung. The two languages also share many cognate coverbs, like *lurr* 'pierce' in (7-1), and *yirr* 'move out', and *wawu/wub* 'warm up/cook' in (7-2).

(7-1a) JAM
lurr gan-**arra**-ny=nu malajagu nawij-gi,
pierce 3sg:3sg-PUT-PST=3sg.OBL goanna neck-LOC
bul ya-**wurum** gurij
emerge IRR:3sg-COME fat

b) NGAR
lurr **yuwa**-rni wirriny-ga, ngaja **bad** **yan**-a-rnin
pierce PUT-PST neck-LOC maybe emerge GO-PRS-HITHER
'he pierced it/the goanna in the neck, since it/the fat might come out' (ER, MIX006)

190 Complex verbs of various types, including serial verb constructions, have also been described for languages outside the Northern Australian linguistic area, for example Diyari (Austin 1981a), Ngiyambaa/Wanggaybuwan (Donaldson 1980), Wambaya (Nordlinger 1998c), and Western Desert languages such as Yankunytjatjara (Goddard 1985; see also Blake 1987: 118). These will be left out of consideration here.

(7-2a) JAM
wawu gan-irriga-m, biri **yirr** gani-**bili**
warm.up 3sg:3sg-COOK-PRS guts move.out 3sg:3sg-FUT:GET/HANDLE

b) NGAR
wub **gamba**-rlan, garnyirri **yirr** **man**-ku=rna
warm COOK-PRS guts move.out GET/HANDLE-FUT=NOW?
'he is warming it up, (and) he is going to take out the guts' (goanna) (ER, MIX010)

It is quite possible that the greater susceptibility of coverbs to borrowing, illustrated in (7-1) and (7-2), may in itself have been a motivating factor for the rise and spread of complex verb constructions. Retaining only a closed class of verbs would reduce the need to learn a large number of paradigms of the (often irregular) verbal inflections. Most likely, the Northern Australian languages have gone through several cycles of complex verb formation, with different stages in this cycle reflected by the synchronically observable types (cf. Capell 1979a, McGregor to appear). The types of complex predicates attested in Northern Australia constitute a continuum, ranging from the clearly phrasal complex verbs of Jaminjung and some of the neighbouring languages, to languages where the two components are so tightly fused that they have lost any structural and semantic independence, and may be treated, synchronically, as unanalysable verb roots (§7.1.2).[191]

A second, interrelated, feature in which the languages differ is the size of the two word classes involved. In most languages, the uninflecting elements form an open class. The inflecting elements may form an open class as well, but most commonly form a closed class which, nevertheless, can be of various sizes. At the extreme, inflecting elements are reduced to a small class of grammatical formatives (§7.1.3 and §7.1.4).

The real similarities and differences between the languages are often obscured by differences in terminology and analysis in the available descriptions (see the beginnings of §2.3 and §2.4 for an overview of the terms corresponding to the terms 'coverb' and 'verb' used here). Overviews – mostly rather cursory – of complex verb systems attested in Australia can be found in Capell (1976, 1979a), Dixon (1980: 426ff.), Blake (1987: 118ff.), Reid (to appear), and for the Daly River subgroup of languages, in Tryon (1974). An in-depth overview is presented in McGregor (2000).

191 In order to make it possible to compare the different types of constructions, the following terminological conventions are adopted in this section (following McGregor 2000). The lexical category corresponding to generic verbs in Jaminjung is called 'inflecting verb' or 'inflecting element'. The lexical category corresponding to Jaminjung coverbs is called 'uninflecting element'. The terms used in the original sources cited are given in addition.

In the following sections, only a brief overview is attempted, sufficient to place Jaminjung and Ngaliwurru within the context of other languages in the same linguistic area. The range of attested types is summarised in Table 7-1 (which is by no means an exhaustive overview of all languages in the area). The table provides some information both about the size of the system of inflecting elements (see §7.1.3), and the tightness of nexus (see §7.1.2). The numbers in the column 'Nr of verbs' indicate (i) the absolute number of inflecting elements, and, in brackets (if the information was available), (ii) the number of inflecting elements which are attested in complex verbs (as opposed to simple verbs), and (iii) the number of inflecting elements which are restricted to occurrence in a complex verb, i.e. cannot function as simple verbs.

The abbreviations for the types of complex verbs should be read as follows. 'Phrasal' corresponds to complex verbs of the Jaminjung type. 'Bound disc(ontinuous)' refers to complex verbs of the Gooniyandi type illustrated in (7-3) below, where uninflecting and inflecting stems form a single phonological and distributional word, but are separated by inflectional morphology. Finally, 'bound cont(inuous)' corresponds to one of the types of complex verbs attested in Warlpiri (see (7-4a) below) and Mangarrayi (see (7-5b) below), where the two stems are contiguous.

Table 7-1. *Complex verbs in Northern Australia: Overview*

Language family	**Language**	**Nr of verbs or inflecting elements**	**Type of complex verb**	**References**
Marran?	Marra	35	bound disc.	Heath 1981
	Warndarang	35 (28/12)	bound disc.	Heath 1980a
	Alawa	30+ (20/?)	bound disc.	Sharpe 1976
Gunwinyguan	Bininj Gun-wok		bound cont.	Evans to appear
	Ngalakan	~200 (16/?)	bound cont.	Merlan 1983
??	Mangarrayi	36	bound cont. and phrasal	Merlan 1982
??	Wardaman	130+	phrasal	Merlan 1994
??	Wagiman	40+	phrasal	Cook 1987, 1988; Wilson 1999
"Daly River"	Malak-Malak	6 (6/1)	phrasal?	Birk 1976
	Maranunggu	18 (18/?)	phrasal	Tryon 1974
	Marrithiel	22 (22/10)	bound disc.	Green 1989
	Ngankigurungkurr / Ngan'kityemerri	29 (29/18) 31 (31/21)	bound disc.	Hoddinott & Kofod 1988, Reid 1990
	Murrinh-Patha	35	bound disc.	Walsh 1996

Jaminjungan	Jaminjung	28 (26/3)	phrasal	this study
	Ngaliwurru	36 (27/3)	phrasal	this study
	Nungali	22+	phrasal	Bolt et al 1971b
Jarragan	Miriwoong	19	phrasal	Kofod 1996a
	Gajirrabeng	24	phrasal	Kofod 1996a
	Gija	21	phrasal	Kofod 1996a, b
Bunuban	Bunuba	10 (10?/6) 6 (6/6)	bound disc.	Rumsey 2000 Nicolas 1998
	Gooniyandi	12 (12/12)	bound disc.	McGregor 1990
Worrorran	Ungarinyin	500+ (14/1)	phrasal	Rumsey 1982a, Saunders 1997
	Wunambal	14 (10/?)	phrasal	Vászolyi 1976
	Worrorra	~10	phrasal	Silverstein 1986
	Gunin	18+ (14/1)	phrasal	McGregor 1993
Nyulnyulan	Nyulnyul	200+ (~12/–)	phrasal	McGregor 1996a
	Nyikina	150+ (~12/?)	phrasal	Stokes 1996, McGregor 2000
	Warrwa	50++ (~12/–)	phrasal	McGregor 1994b
	Yawuru	82+ (~12/?)	phrasal	Stokes 1996, McGregor 2000
	Bardi	200+ (29/–)	phrasal	Metcalfe 1975, Nicolas 1998
PN: Ngumbin	Gurindji	50	phrasal	McConvell n.d.
	Ngarinyman	30+	phrasal	Jones 1994
	Bilinarra	30-40	phrasal	Nordlinger 1990
	Jaru	42	phrasal	Tsunoda 1981a
	Walmajarri	40+ (40?/3)	phrasal	Wilkins 1998[192]
PN: ??	Warumungu	~ 70	phrasal ~ bound cont.	Simpson 1998
PN: Ngarrka	Warlmanpa	43	phrasal ~ bound cont.	Nash 1998a, c
	Warlpiri	~ 120	phrasal ~ bound cont.	Nash 1986, 1998b
PN: W. Desert	Wangkajunga	200++ (25/–)	phrasal	McGregor 2000

192 Based on Richards & Hudson (1990).

7.1.2 Tightness of nexus

As the overview in Table 7-1 shows, Jaminjung occupies an intermediate position in virtually every respect between the types of complex verbs attested in Northern Australia: it has a verb class of intermediate size, of around 30 simple verbs. Naturally, complex verbs constitute the majority of verbal expressions. Nevertheless, the uninflecting coverbs maintain a relatively high degree of independence, in that they constitute separate phonological words. Evidence comes from the flexible ordering of verbs and coverbs within the complex verb, which even allows for intervening constituents, and from the possibility of more than one coverb to occur with the same inflecting verb (§3.2). Furthermore, both verbs (§3.1) and coverbs (§3.4, §2.6.5) can be used on their own, and are recognised and translated independently by native speakers. Both verbs and coverbs may also be independently replaced by a Kriol loan (§3.5).

These properties are shared by most of the closer neighbours of Jaminjung: the Jarragan languages Gija, Miriwoong and Gaijrrabeng in the west, Wardaman and Wagiman in the east and north-east, and the Pama-Nyungan languages of the Ngumbin group immediately to the south and west, comprising, in addition to Ngarinyman (illustrated in (7-1b) and (7-2b) above) also Mudbura, Gurindji, Bilinara, Jaru, and Walmatjarri. Most Eastern Kimberley languages – those belonging to the Worrorran and Nyulnyulan family – also have phrasal complex verbs (for references see Table 7-1).

In a number of other languages, the phrasal origin of the complex verbs is quite recognisable; however, they behave like single units distributionally. Their constituents are usually not used, or recognised, in isolation, and their order is fixed. On the other hand, verbal inflections intervene between the uninflecting and the inflecting component of the complex verb; in other words, the uninflecting element is joined onto the inflecting element. The phrasal origin is also reflected in the stress pattern of these complex verbs, in that word stress is assigned to both components (see e.g. Reid to appear, McGregor 1990: 126, 134). An example of a complex verb of this type from Gooniyandi, a language of the Bunuban family, is given in (7-3); the boundary between uninflecting element and inflecting element is represented as '+'.

(7-3) gárd+binggúruni[193]
GOON. HIT+FUT:2pl:3pl:HIT
'you (pl) will hit them' (McGregor 1990: 200f.)

This type of complex verb, intermediate in tightness of nexus between phrasal complex verbs and complex stems, is labelled 'bound discontinuous' in Table

193 Throughout this section, orthography and glosses for the languages cited are adapted, for ease of comparison.

7-1 (the two stems are discontinuous in that they are separated by verbal inflections, but bound in that they are part of a single distributional unit). As well as in the Bunuban languages, this type is also found in the Marran languages of South-East Arnhem land, and in the languages of the Daly River area. For one of these languages, Ngan'gityemerri, a restructuring, within less than 60 years, of complex verbs of the 'phrasal' type into bound forms has been documented (Reid to appear).

A stress pattern similar to that found in Gooniyandi is described for Warlpiri in complex verbs by Nash (1986: 111f.). In Warlpiri, at least for a subtype of complex verbs, the constituent order is variable. However, when the uninflecting element – the preverb – precedes the inflecting verb, it may have reduced word status in terms of phonological shape, and in this sense becomes a bound stem (see also Tsunoda 1981a: 177 for Jaru). For example, *wuruly* in (7-4a) is not a well-formed phonological word; it has to be augmented with the final syllable *-pa*, as in (7-4b) and (7-4c), in order to be able to follow the inflecting verb. In Warlpiri, verbs are inflected only by suffixes, and person and number are marked on second position clitics. If the preverb immediately precedes the inflecting verb, as in (7-4a), the two stems are therefore contiguous (again, the boundary is indicated with a plus sign).

(7-4a) **wuruly+ya**-ni=rli
WARL hide+go-NPST=1du.incl

b) **wurulypa**=rli **ya**-ni
hide=1du.incl go-NPST

c) **ya**-ni=rli **wurulypa**
go-NPST=1du.incl hide
'let's go and hide' (Nash 1986: 52)

Mangarrayi, a Non-Pama-Nyungan language, is unusual in that it has both phrasal complex verbs which are similar to those in Jaminjung, as in (7-5a), and compound verbs where the stems of both constituents are continuous and flanked by inflections, as in (7-5b). Compound verbs are formed with a subset of those elements that are used as inflecting verbs (Merlan 1982: 123ff.).

(7-5a) **barnbayi** ja-wurla-**wu**-yi-n
MANG tease 3-3pl-HIT-REFL-PRS
'they are joking with each other' (Merlan 1982: 135)

b) ngiyan-**galij**-**ma**-ny
MANG 3sg:1pl.excl-report-V-PST
'he reported to us' (Merlan 1982: 68)

The structural difference between compound verbs as in (7-5b), and complex verbs forming single distributional words but with intervening verbal inflections, as in (7-3), can be explained diachronically in terms of the relative ordering of the fusion of phrasal complex verbs into one-word complex verbs, and the grammaticalisation of pronominal prefixes and other verbal affixes (Heath 1976: 739): If distributional units are formed from phrasal complex predicates before the grammaticalisation of the pronominal prefixes, compounds with adjoining stems result. Otherwise, verb complexes with intervening inflections result.

A number of other non-Pama-Nyungan languages, all located in the east of the non-Pama-Nyungan area, and including languages from the Gunwinyguan family, and Nunggubuyu (Heath 1984: 423ff.), have verb stems which seem to have their origin in compounds of the type illustrated in (7-5b). However, these are clearly single phonological words, and in many cases, the closed-class components of the former compound have lost their independent status altogether.[194] Synchronically, the original 'inflecting verbs' only have the status of a recurrent submorphemic element, and are often treated as conjugation markers or 'thematic' markers in grammatical descriptions. Sometimes a semantic basis is reported for the conjugation classes, and sometimes the 'markers' still exist as simple roots and are semi-productive in compound formation. All these features reflect their origin as independent verbs. For example, the monosyllabic root *-wo* in Bininj Gun-wok may function as a simple verb root meaning 'give', but it is also found as the second element in synchronically unanalysable stems like *bawo* 'leave' (Evans to appear: §8.2).

Reflexes of such a development can even be found in the Jaminjungan languages. For example, the – now synchronically simplex – verb root *-ina+ma* 'KICK/STEP' is transparently related to *-ina* 'CHOP', and the submorphemic element *+ma* is also found in other verb roots (see §2.4.2.1 for a full list of diachronically complex verb roots). Similar reflexes of complex stems in the inflecting verb class are also found in other Non-Pama-Nyungan languages, e.g. Wardaman (Merlan 1994: 173f.), Wagiman (Wilson 1999), and the Jarragan languages (Kofod 1996a). These languages, thus, reflect two stages in the cycle of complex verb formation postulated here. Being diachronically complex, these verbs now function as simple verbs but may enter again into complex verb formation with independent, uninflecting elements.

194 Interestingly, these languages, where complex verbs form tightly-knit unit, also exhibit nominal incorporation and other manifestations of polysynthetic structure, which are completely absent from Jaminjung.

7.1.3 Size of word classes

The size of the classes of uninflecting and inflecting elements is obviously not unrelated to the tightness of nexus within the complex verb. In complex verbs with a tight nexus, that is compound verbs or stems which are complex only diachronically, the elements corresponding to inflecting verbs typically form a small class with around a dozen members. In languages with a looser nexus between the constituents of the complex verb, the size of the class of inflecting elements may vary greatly. It ranges from 6 in Malak-Malak, to more than a hundred in Warlpiri, and several hundreds in some of the Worrorran and Nyulnyulan languages (see Table 7-1 for references). In a great number of the Northern Australian languages, though, inflecting verbs form a very small closed class; in the linguistic area made up of Jaminjung and its closest neighbours – including the neighbouring Pama-Nyungan languages – the verb class typically has between 20 and 40 members (see Table 7-1 for details). Interestingly, even in languages with much larger classes of verbs, usually only between 10 and 20 members participate in complex verb formation; the others only occur as simple predicates.

In all languages with closed-class verbs, uninflecting elements form an open class. However, the reverse pattern is also described for some Arnhem Land languages which have an open class of verbs, such as Ritharngu, Nunggubuyu and Ngarndi (not included in Table 7-1). For these languages, Heath (1976, 1984) identifies small classes of uninflecting elements, which he calls root forms. These forms may be used in a separate intonation unit or as an imperative, but are also 'often used (redundantly) in juxtaposition to the corresponding verb' (Heath 1984: 425). Heath repeatedly notes that all of these uninflecting forms are "pronounced emphatically, like an interjection" (1976: 736), "serve mainly to add an expressive flavour" (1976: 737), and "have a dramatic quality which makes them popular in narratives" (1984: 425). In short, these uninflecting elements resemble ideophones as described for many other languages. An example from Nunggubuyu is given in (7-6). Heath does not provide a gloss for the root form *jarlg* in the source, but points out that it is cognate with the verb root *-yarlth-* 'go past'.

(7-6)	**jarlg**	ni-**yarlth**-iny
NUNG	??	3sg-go.past-PST
	'he went past (all of a sudden)' (Heath 1976: 737)	

Heath (1976) also proposes a diachronic scenario according to which constructions like these could have been precursors of the complex verbs formed with inflecting verbs from a closed class in neighbouring languages. Similar observations and suggestions have been made by Alpher (1994) and McGregor (1996b: 359, to appear). Indeed, as mentioned briefly in §3.2.1 and §3.4.2, Jaminjung coverbs have uses in which they show striking similarities to the

ideophones of other languages, both in terms of expressive prosody, and in syntactic behaviour (see Schultze-Berndt, to appear, for details).

7.1.4 Grammaticalisation of closed-class verbs

In §7.1.2, a brief outline was given of a diachronic scenario of complex verb formation proceeding in cycles. This was based on the observation that in the synchronically attested types of complex verbs in Northern Australia, the combinations of inflecting and uninflecting elements are lexicalised to different degrees, and even to the extent that they lose their structural and semantic independence. In other words, the two components may become part of a synchronically unanalysable verb root, which may again enter into complex verb formation, as can be shown for Jaminjung. The historical processes described so far are therefore processes of lexicalisation of a complex expression, i.e. univerbation, not of grammaticalisation (cf. Hock 1986: 336ff., Lehmann 1995: 97ff. on preverbs). However, it is implicit in the very concept of grammaticalisation that the boundary between lexical and grammatical forms is not clearcut. Since one of the classes of elements involved in the type of complex verb formation described here, i.e. the class of inflecting verbs, is closed, its members could be expected to also lend themselves to grammaticalisation, in accordance with the principle that "one element of a compound may become a derivational affix if it occurs in a large number of combinations" (Bybee 1985: 106).

Indeed, derivational morphology, including productive verbalisers for nominals and valency changing affixes such as causativisers, can be traced back to former independent verbs in some Australian languages. For example, the form *-wo* in Bininj Gun-wok, already mentioned in §7.1.2 above as a verb root with the meaning 'give' and as part of synchronically unanalysable stems, in addition functions as a factitive verbaliser, as in (7-7), from the Gun-djeihmi dialect of Bininj Gun-wok.

(7-7) ga-wok-gimuk-**wo**-n
GDJ 3sg-noise-big-FACTITIVE-NPST
'it makes a loud noise' (Evans to appear: §8.2.2)

Derivational affixes which still betray their origin as free verbs are found even outside the 'complex verb' area in Northern Australia, e.g. in the Pama-Nyungan languages Arrernte (Wilkins 1989: 261ff.), Warlpiri, and Nyangumarta (Geytenbeek 1992). These affixes function as general inchoative or causative verbalisers. For example, we have seen in §5.4.1 that the Jaminjung verb *-mili/ -angu*, by virtue of its component of 'manipulation' (i.e. 'affectedness plus extended contact'), which can be extended to non-physical interaction, is often used in complex verbs with a cause-result reading. It is therefore not surprising that semantically corresponding verbs have grammaticalised to general causative

verbalisers in Warlpiri (Nash 1986: 42f.) and Nyangumarta (Geytenbeek 1992). Typically Kriol loans are also integrated in these languages by affixation of one of these verbalisers; in other words, there is no choice of verbs with loans as in Jaminjung.

Notably, both verbalising and valency changing derivational morphology are absent from Jaminjung (see §2.2 to §2.4). At least the latter function is fulfilled by the closed-class verbs, in that coverbs may usually combine with a set of verbs to form complex verbs of different valency, as illustrated throughout Chs. 4 to 6. One could imagine that some of the high-frequency verbs in Jaminjung, which have several polysemous senses and also form complex verbs which have to be regarded as idiomatic, would be good candidates for a further grammaticalisation along these lines. These include *-arra* 'PUT' (§5.2.4), *-mili* 'GET/HANDLE' (§5.4.1), *-ma* 'HIT' (§5.4.2) and *-yu(nggu)* 'SAY/DO'.

Two other, related, grammaticalisation paths involving formerly independent verbs can be identified. First, motion verbs may develop into inflectional affixes of associated motion, as described for the Arandic languages (Koch 1984, Wilkins 1989: 270ff., 1991, 1997b). Second, a small number of verbs, typically stance and motion verbs, may grammaticalise to auxiliaries which encode distinctions of tense, aspect, modality, and possibly voice, polarity and direction, but do not add to the lexical semantics of predicates. In Jaminjung, two of the inflecting verbs, the general stance verb *-yu* 'BE' and the general motion verb *-ijga* 'GO', also function as auxiliaries in a progressive construction (see §3.3, §5.2.1.2, §5.3.2.3), although they do not show any formal signs of grammaticalisation. The use of stance and motion verbs as imperfective auxiliaries is also reported for some of the neighbouring languages, e.g. Ngan'kityemerri (Reid to appear, Hoddinott & Kofod 1988).

The 'catalytic' clitics found in the Ngumbin and Ngarrka languages and also the Barkly Tableland languages presumably also constitute further grammaticalised auxiliaries (see e.g. Capell 1956: 56, Green 1995). The Barkly languages are of particular interest here since they are distantly related to the Jaminjungan languages (Chadwick 1984, 1997; see also §1.2.1), and at least one of the three catalytic auxiliaries in Wambaya, *-amany* (Nonpast: *-ulama*) in (7-8), is a plausible cognate of a Jaminjung/Ngaliwurru verb, *-ruma* 'COME' (past tense form *-ruma-ny*). In Wambaya, in addition to tense, aspect and modality, this auxiliary carries directional information, i.e. it is functionally related to associated motion inflections (Nordlinger 1998b: 151ff.).

(7-8) dirdibulyini-nmanji **g-amany** magi-nmanji yarru
WAM peewee-ALL 3sg-PST.TOWARDS camp-ALL go
'she came to Peewee('s) camp' (Nordlinger 1998b: 246)

The view that closed-class verbs are grammatical elements has been implicitly adopted in those descriptions of Northern Australian languages where they are treated as auxiliaries, at least when they occur as part of complex verbs (see §2.4 for references). The synchronic evidence presented in Ch. 5, as well as the diachronic evidence presented in the preceding sections, supports the claim that the term 'auxiliary' is not appropriate for the class of verbs as a whole (see also e.g. Blake 1987: 123, Cook 1988: 81ff.). Although closed-class verbs carry tense, aspect, and modality information, they are not reduced to this function, in other words, they are not desemanticised to the extent that they could combine with all uninflecting, open-class elements, disregarding their meaning. Rather, complex verb formation is severely restricted by the meanings of both closed-class verbs and open-class coverbs. Correspondingly, as we have seen in the historical/comparative overview presented so far, closed-class verbs do not generally grammaticalise to inflectional morphology, but, on the contrary, tend to be lexicalised and end up as part of synchronically unanalysable stems. Only a few high-frequency forms are, potentially, subject to grammaticalisation.

However, the possibility that the closed class of verbs as a whole could grammaticalise should not be ruled out completely. Indeed, McGregor (1990) argues that the inflecting elements in Gooniyandi should be regarded as a grammaticalised system of (verbal) classifiers. Here the former verbs are reduced in number (to a class of 12 elements), and are bound forms which cannot occur independently of the lexical, uninflecting element.

The complex verb construction in Jaminjung is less strongly grammaticalised than the Gooniyandi one. It was therefore argued in §5.1 that the closed-class verbs in Jaminjung are more appropriately compared to generic nouns than to nominalised classifiers. Jaminjung generic verbs, like generic nouns, participate in a system of categorisation semantically (as was shown throughout Ch. 5), but are not reduced to a grammatical function in a classifier construction since they may also occur independently.

The two possible fates of a system of event categorisation of the Jaminjung type can be linked to the antithetic forces associated with Zipf's Law of the Least Effort, and the two antinomic pragmatic principles of 'Quantity' ("be as informative as is required") and 'Informativeness' ("be no more informative than is required") (see §1.4.2.3 for references). A productive system of event classification is maintained only as long as speakers comply with the principle of Quantity (corresponding to the Hearer's Economy), that is, if they exploit, in categorising events, the full range of categories that they have at their disposal. The Jaminjung system, as it were, supports the hearer's needs, because it forces

the speaker to give the hearer relatively specific information about the event type of the event in question.[195]

On the other hand, a system where only a few of the closed-class verbs grammaticalise to derivational morphology and/or auxiliaries would suit the Speaker's Economy, because the speaker would have to make fewer distinctions, and could rely more on the interpretations made by the hearer, following the principle of 'Informativeness'. In this case, the former system of event categorisation collapses. Most former complex verbs are lexicalised to the extent that they become synchronically simple verb stems. Only a few verbs take on grammatical functions, and are used productively.

Interestingly, the systems of event decomposition developed in mainstream semantic theory all seem to be modelled on the second type of system, built around a few semantic atoms like CAUSE, BECOME, DO or BE, which correspond to grammaticalised derivational morphology as it is indeed found in many languages. Perhaps for this reason, this type of metalanguage turns out to be not terribly well suited for the description of generic verbs of the Jaminjung type, which encode more specific event types than those captured by the 'semantic atoms' just mentioned, but are semantically general enough to resist translation by specific predicates, or decomposition along the lines suggested for these predicates in other languages.

7.2 Coverbs, generic verbs and complex verbs in a cross-linguistic perspective

In the preceding section, the particular subdivision of the lexicon in Jaminjung was placed in the areal linguistic context. In this section, the properties of coverbs (the uninflecting predicates, §7.2.1), verbs (the inflecting predicates forming a closed class, §7.2.2), and complex verbs (forming the majority of types of verbal predicates in Jaminjung, §7.2.3) will be examined again from a cross-linguistic perspective.

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195 An interesting phenomenon, in this respect, is the reduction of the size of the closed-class verbs to only one verb reported for the avoidance languages of Jaru (Tsunoda 1981a: 215ff.), Gurindji (McConvell 1982: 95ff.), and Bunuba (Rumsey 1982b: 166f.), although in the actual use of the systems, the more specific everyday verbs continue to be employed as well. That the hearer's needs here are not met to the same extent is obviously consistent with the effect of distancing and vagueness aimed at by the use of avoidance languages in general.

7.2.1 Coverbs

Both formally and functionally, Jaminjung coverbs have properties which fall in between those cross-linguistically associated with verbs, adverbs, and nominals. This has interesting ramifications for a typology of word classes.

Crucially, coverbs do not inflect. In this respect, they are first and foremost reminiscent of adverbs found in many languages. Indeed, as shown in §6.1 and §6.20, they cover meanings that are expressed by locational and manner adverbs in other languages. However, in complex verb formation, coverbs contribute to the argument structure of the resulting predicate, and therefore cannot be reduced to a modifying function. Semantically, too, they may have a variety of relationships with respect to the inflecting verb they combine with, and in this respect, too, are not interpreted as modifiers in an endocentric construction.

In order to function as part of the main predicate in a finite clause, coverbs depend on an inflecting verb (§3.2). In terms of Hopper & Thompson (1985: 172), they obligatorily "share a spotlight with another verb" and are therefore "functionally less like a verb in reporting an event than one which reports the event by itself". In other words, coverbs are less verbal in nature than the inflecting verbs.

Being inherently non-finite, coverbs can also be used in a function which is equivalent to that of nonfinite or nominalised verb forms in many other languages. Since coverbs cannot be specified for illocutionary force, person, or tense/aspect/mood to start with, they can express a typified proposition, in the terminology of Lehmann (1982b, 1988b). Thus, as shown in §4.2.3.3 and §5.6, coverbs may represent the propositional participant of a performance verb. Moreover, coverbs can function as the main predicate in subordinate clauses (see §2.6.5). Although coverbs are clearly distinct from nominals in that they cannot form part of referential noun phrases, their partly nominal nature is also in the fact that in this use, the relationship between the subordinate clause and the main clause is indicated by a subset of the nominal case markers. Functionally, these subordinate clauses correspond to the nominalised clauses or converb clauses of other languages (for converbs, see van der Auwera 1998 and the contributions in Haspelmath & König 1995). There is no need to overtly nominalise coverbs, since they already have reduced verbal properties. It is also not surprising that verbs in Jaminjung do not have nominalised or other non-finite forms; this function is already fulfilled by coverbs.

Finally, still due to their uninflecting nature, a subclass of sound-symbolic coverbs is also ideally suited to a function fulfilled by special classes of ideophonic elements in many languages. As shown in §3.2.1 and §3.4, coverbs may be used with expressive prosody in combination with a verb, and/or as semi-independent predicates in highly contextualised discourse, where they depend on the linguistic and extra-linguistic context in their interpretation with respect to

illocutionary force and temporal reference. These are exactly the types of uses that are reported for ideophones in the literature (cf. e.g. Nuckolls 1996 and the contributions in Hinton et al. 1994 and Kilian-Hatz & Voeltz, to appear). As already mentioned in §7.1.3, it has even been suggested that ideophone-verb combinations are the source of complex verbs in Northern Australian languages.

7.2.2 Generic verbs

As we have seen, the majority of notions encoded by verbs in many other languages are, in Jaminjung, encoded by members of a class of coverbs with reduced 'verbal' properties. In addition, there exists a closed class of inflecting verbs, with around 30 members. The meanings encoded by members of this 'privileged' class of predicates correspond, roughly, to those expected for so-called 'basic' verbs on a cross-linguistic basis. In Jaminjung, moreover, these basic verbs can be said to categorise events.

'Basic' or 'nuclear' verbs have been approached from a number of angles. They have been taken to correspond to high-frequency verbs in languages with, in principle, large sets of verbs (Viberg 1993, Hopper 1991, 1996), to the subset of verbs used as 'light verbs' in certain syntactic constructions (see also §7.2.3), to those verbs in language systems with a reduced vocabulary, such as avoidance or ritual languages (e.g. Dixon 1971, Pawley 1992), and to those verbs that are acquired first (Clark 1978a).

The verbs identified in this way are reported, cross-linguistically, to cover very similar notions including location and motion, contact and impact, perception, creation, and transfer of possession, in short, types of events corresponding to basic, concrete bodily experiences.

This general tendency is also reflected in the verb class in Jaminjung. All verbs, in their basic senses (i.e. as simple verbs), encode concrete bodily experiences in the domains of existence, change of location, locomotion, contact and impact, affectedness by heat, performance, visual perception, ingestion, creation and transfer of possession. However, the semantic analyses presented in this study also showed that utmost care has to be taken in equating translation equivalents across languages, that is, in making claims of the sort that every language has nuclear verbs 'meaning' GO, FALL, MAKE, HIT, DO, GIVE, EAT, or SEE. Even where verbs have the same prototypical denotata, they may differ considerably in meaning.

For example, while in some languages 'downward motion' is the central semantic component of a verb that can be used to describe scenes of 'falling', in Jaminjung the crucial component is 'change of locative relation with respect to a location'. Downward motion does not have to be involved at all for this verb

(*-irdba* 'FALL'; see §5.2.3) to be applicable. Similarly, Jaminjung motion verbs always describe motion along a path, not just change of location.

In one language, a general performance verb ('DO') may only apply to volitional or controlled performance, while in Jaminjung, the notion of 'internal cause' is central to the meaning of the verb *-yu(nggu)*, which may not only be used as a performance verb, but also as an inchoative verb (see §5.6). Even a supposedly basic verb such as 'EAT' can have somewhat different extensions, depending on whether the crucial semantic component is 'take into mouth' or 'cause to be in stomach' (see §5.8.2). And a cursory glance at the list of Kalam verbs – which undoubtedly count as generic verbs – in Pawley (1992, 1993) reveals some interesting similarities to Jaminjung verbs, but also many differences. For example, Kalam has a general verb of perception, while Jaminjung maintains a strict distinction between visual perception, auditory perception, and perception by the lower senses. This list of language-specific differences in the extension of presumably 'nuclear' verbs could be continued.

This is not even addressing the issue of the differences in the secondary senses that verbs may give rise to. For example, a verb of creation ('MAKE') is used as a verb of general performance and/or as a regular causative verb in many languages. In Jaminjung, the corresponding verb is not used as a performance verb at all, and has only a marginal causative use (see §5.8.3). The verb of visual perception, in Jaminjung, extends to events of aggression, but not of cognition (see §5.8.1). The verb of 'giving' has a secondary sense of 'schematic interaction', just as in English, but does not have a benefactive use, as it has in many other languages (see §5.7.1). Even in languages of Northern Australia that are in contact, such differences can be found. For example, the general motion verb root translating as 'GO' in Wagiman, just like its Jaminjung equivalent (see §5.3.2), has a secondary sense of habitual/prolonged state or activity, but, unlike its Jaminjung equivalent, is not used to express change of state (Cook 1987: 229ff.). And Wagiman, just like Jaminjung, maintains a difference between locomotion and change of location, but the latter, often expressed in Jaminjung by means of the verb *-irdba* 'FALL' (§5.2.3), is often expressed in Wagiman by a verb with a basic sense of 'cut' (Wilson 1999: 101).

It seems fair to say that a comparative investigation of the semantics of closed-class verbs in Northern Australian languages has only just begun. Such a comparison of verb systems could reveal which distinctions ('categories') are regularly lost and which ones are maintained in systems with fewer verbs, and which distinctions are added in systems with a larger verb class. Some of the verbs included in the closed class of Jaminjung verbs might have come as a surprise to the reader. For example, Jaminjung (unlike Ngaliwurru) does not have a specific verb meaning 'hear', but makes quite specific distinctions with respect to the type of impact and contact, i.e. there are specific verbs for impact by contact made with the edge of a body part or instrument, with a pointed end, with

the foot, and with the mouth (see §5.4). The neighbouring language Miriwoong, with a slightly smaller verb system, does not even have a specific verb for visual perception, but still has several verbs (though also fewer than Jaminjung) conveying distinctions of contact and impact (Kofod 1996a and p.c.). Furthermore, Jaminjung and Ngaliwurru have verbs encoding specific speech acts such as 'swearing', 'lying' and even 'affecting by magic' (even though these are very marginal and on the verge of dropping out of the system; see §5.9), but do not distinguish, e.g., bodily postures such as 'sitting' or 'hanging' by means of verbs, but only by means of coverbs. This is not universal tendency, since in some of the neighbouring Daly River languages, such positional verbs not only exist, but are even very frequent (see e.g. Hoddinott & Kofod 1988, Reid 1990), to the extent that in Malak-Malak, which only has 6 inflecting verbs, three of them are positional verbs (Birk 1976).

It is also quite remarkable that, in Jaminjung, seven of the 26 non-marginal verbs are verbs of locomotion, devoted to rather specific distinctions (see §5.3). Other Northern Australian languages encode similar distinctions, and their sets of locomotion verbs usually do not include verbs of manner of motion. However, the languages vary a great deal as to the number of locomotion verbs. Languages like Wardaman (Merlan 1994) and Wagiman (Wilson 1999) parallel the Jaminjung system. Languages with smaller verb sets often do not have translation equivalents for the transitive verbs encoding orientation with respect to a second participant ('leave', 'approach', and 'follow'), or they exclude deictic verbs from their class of locomotion verbs. This is the case, for example, in Miriwoong (Kofod 1976, 1996a) and Ngan'gityemerri (Reid 1990), which only have a general intransitive verb of locomotion and a general transitive verb of accompaniment. Yet other languages, including the Pama-Nyungan languages of the Ngumbin and Ngarrka families (e.g. McConvell n.d. and Nash 1998), but also Ungarinyin (Rumsey 1982: 110ff.), incorporate the deictic distinction into their verb system by derivation with directional affixes.

Ideally, a comparison of languages with closed-class or classificatory verb systems would be extended outside Australia. Productive classificatory verbs of a type similar to the Jaminjung ones have been reported for Tsafiki, a language spoken in Ecuador (Connie Dickinson p.c.), and may turn out to be more common cross-linguistically than it appears at present. Classificatory prefixes that have grammaticalised from generic verbs are also found in some Austronesian languages (Ezard 1992, Margetts 1999: 114ff.). The distinctions made by the so-called instrumental prefixes of some North American languages, for example Atsugewi, Lakhota, or Klamath (see e.g. Talmy 1975, 1985, Mithun 1996: 153, Rood & Taylor 1996, Palancar 1999) could be said to reflect categorisation of at least a subdomain of events, similar to the categorisation of events of contact and impact by the set of seven contact/force verbs in Jaminjung. Such a comparison would allow one to distinguish between categories that reflect

universal tendencies of event categorisation, and those which are shared among languages of a single linguistic and cultural area, but do not necessarily appear outside this area.

7.2.3 Complex verbs

Most verbal predicates in Jaminjung are complex, consisting of an inflecting verb and one or two coverbs. The discussion in §3.2 established these complex verbs in Jaminjung as exocentric complex predicates, acting syntactically like a single predicate, and expressing a single event. These form just one of the types of complex verbs found in Northern Australia, but are historically and structu-rally related to the other types, as shown in §7.1. The main differences between these types are in the degree of nexus and the degree of semantic transparency of the complex predicates, and the size of the class of inflecting verbs.

In arguing for the complex predicate status of the complex verbs of Jaminjung and other Northern Australian languages, I have also made reference to other types of complex predicates, and pointed out functional and structural similarities to these constructions. However, it should have become clear by now that the phrasal complex verbs in Northern Australian languages are best regarded as a distinct type of complex predicate. The similarities and differences to a number of other types of complex predicates (serial verb constructions, particle verb constructions, auxiliary constructions, light verb constructions, and the so-called 'adjunct'-verb constructions described for Papuan languages) will be summarised briefly below.

The main difference between Northern Australian complex verbs and **serial verbs** is that in typical serial verb constructions, all constituents of a complex predicate are recruited from the same, open, lexical class. All verbs may, in principle, occur as independent predicates and take verbal inflections (if the language has verbal inflection at all), as well as forming part of a serial verb construction. For example, while only the last verb in a nuclear serial verb construction in the Papuan language Kalam is inflected for person and tense, and the other verbs occur as bare stems in (7-9), these verbs may take inflections in principle (Lane & Pawley 1992: 2).

(7-9)	b	ak	**am**	mon	**p-wk**	d	**ap**	**ay**-a-k
KAL	man	that	go	wood	hit-smash	get	come	put-3sg-PST

'the man fetched some firewood' (Lane & Pawley 1992: 3)

In Jaminjung, on the other hand, the members of the open class of predicative lexemes (the coverbs) do not inflect and may not form independent predicates in the same way as the inflecting verbs, which form a closed class. (As shown in §3.4, the use of coverbs as semi-independent predicates is restricted to highly contextualised text genres.)

However, this difference may not be so clear-cut. First, there are serial verb languages like Kalam, illustrated above, which only have a closed class of semantically general verbs. These are combined with one another in serial verb constructions, as well as with words from other word classes, as complex predicates (Pawley 1987, 1993, 1994, Lane & Pawley 1992). Furthermore, it has been suggested by some authors (Sebba 1987, Foley & Olson 1985: 40, Durie 1997) that at least one position in serial verb constructions is restricted to a finite set of verbs in most or all serial verb languages. This would make serial verb languages much more similar to the Northern Australian languages, where one position is restricted to a closed class of inflecting verbs, except that these verbs, in addition, form a distinct lexical category.

Distinguishing clearly between serial verb constructions and complex predicates of the Northern Australian type is made more difficult by another fact: verbs frequently used in a serial verb construction may lose their finiteness potential and become restricted to a function as part of such a construction (see e.g. Crowley 1987, Bisang 1992, Lord 1993). However, these non-finite elements are likely to form a closed class of grammaticalised forms, while in Jaminjung, the 'dependent', uninflecting forms constitute the open class.[196]

Formally, Jaminjung complex verbs also show some similarities to the separable **particle verbs** of, e.g., Germanic languages. Like verbal particles (also called preverbs, or 'satellites', in the terminology used by Talmy 1985, 1991), Jaminjung coverbs constitute a word class distinct from verbs, occur as part of separable but lexicalised complex predicates together with verbs, and do not inflect.[197] They may form the main predicate in a strongly contextualised utterance (corresponding to English *up!*), but cannot function as the main predicate of a decontextualised, stylistically unmarked clause (**the goanna up the tree*) (see §3.4). There is also a considerable functional overlap (in terms of lexicalisation patterns) between particle verbs and complex verbs in Jaminjung.

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196 Unfortunately, the term 'coverb' adopted for the uninflected open-class elements of Jaminjung may give rise to confusion here, since one particular type of closed-class elements originating from serial verbs is also known as 'coverb' in the literature on South-East Asian and African languages (see e.g. Bisang 1992, Lord 1993, Lehmann 1995: 104ff.). These coverbs are defined as serial verbs in 'case-marking' or 'prepositional' function, e.g. locative or directional verbs introducing locational participants, or verbs with meanings like 'take' or 'give' introducing instrumental or recipient arguments. See also the beginning of §2.3.

197 This similarity is also reflected in the use, in a number of descriptions of Northern Australian languages, of the terms 'preverb' and 'verbal particle' for the uninflected, open-class elements (see §2.3 for references).

In many cases, a complex verb may be quite literally translated as a particle verb in English or German, since coverbs, like verbal particles, encode notions of position, path (as in 7-10), or completion (as in 7-11).

(7-10) **buru** **burduj** ga-**ram** \
NGALI return go.up 3sg-COME.PRS
'she comes back up' (JM, E16298)

(7-11) **burrb** nga-**minda**-ny mangarra
NGALI finish 3sg:3sg-EAT-PST plant.food
'I ate up the food' (DM, D18047)

The main difference between particle verbs and the phrasal complex verbs in Northern Australia is, of course, that the class size is reversed for the lexical categories involved: coverbs in Australian languages form an open class, and verbs a closed class, while the term 'preverb' is usually restricted to members of a closed class. In correlation with the size of the class, coverbs cover a much wider range of meanings and may be more specific semantically than the preverbs known from European languages, which usually derive from locational adverbs (Lehmann 1983, 1995: 97ff.).

In §7.1.4 above I already adduced arguments for distinguishing complex verbs in Northern Australia from **auxiliary-verb constructions**. Auxiliaries are generally applicable and form part of an inflectional system. The verbs in Northern Australian languages, on the other hand, even though they form a closed class and function as 'carriers' of the person and tense/aspect/mood inflections, are restricted by their semantics in the types of complex verbs they may enter into. (As we have also seen in §3.3.1, §5.2.1.2 and §5.3.2.3, though, a small subset of the generic verbs may be used in auxiliary function).

Jaminjung complex verbs are more profitably compared to **light verb constructions.**[198] These differ from auxiliary-verb constructions in that light verbs, like generic verbs in Jaminjung, are restricted in their occurrence to certain semantic classes of non-finite elements (see e.g. Masica 1991: 327f., Butt 1997: 120f.). Light verbs also typically enter into complex predicate constructions where both members jointly determine argument structure (see e.g. Butt 1997, Mohanan 1994, 1997, Matsumoto 1996). By these criteria, Jaminjung verbs bear more resemblance to light verbs than to auxiliaries.

[198] These are known under various terms; light verbs in Indo-Aryan languages, for example, have been called 'vector verbs', 'explicators', 'intensifiers' as well as 'auxiliaries' (Masica 1991: 326); light verbs in German are known as Funktionsverben ('function verbs'; see e.g. Persson 1992).

Several types of light verb constructions can be distinguished. One type consists of a light verb and a nominal (sometimes called 'host nominal'), which is an argument of the verb; this may be an underived nominal or a nominal derived from a verb. An example from Hindi is given in (7-12).

(7-12) Ilaa-ne Mohan-par **kripaa** **kii**
HIN Ila-ERG Mohan-LOC favour.NOM.F do.PF.F
'Ila showed kindness to Mohan' (Mohanan 1997: 454)

Another type of light verb construction consists of a light verb and a non-finite verb form, which may be a bare stem, as in (7-13) from Urdu, or a converbal form.

(7-13) Anjum **uṯʰ** **paṛ-ii**
URDU Anjum.F.NOM rise fall-PF.F.SG
'Anjum suddenly got up' (Butt 1997: 127)

Both types are comparable to the complex verbs in Jaminjung in that a non-finite form from an open class is combined with an inflecting verb from a small set of verbs. The non-finite component is itself relational, and contributes to the argument structure of the complex verb, just as a coverb in Jaminjung does. However, the non-finite components in light verb constructions of the types illustrated above do not belong to a distinct lexical category, but are either nominals or (nominalised) verbs. Moreover, light verbs appear to constitute only a subset of all verbs in languages with light verb constructions. In contrast, verbs in Northern Australian languages like Jaminjung form a closed class to begin with, and are obligatory in all finite verbal predicates, either as simple verbs or as part of a complex verb. The term 'generic verb' rather than 'light verb' was adopted here for these reasons.

Constructions which seem to be very similar to the Northern Australian complex verbs are described for a number of Papuan languages, among them Fore (Scott 1978: 50f.), Hua (Haiman 1980a: 130), Enga (Lang 1975), and Kalam (Lane & Pawley 1992: 3); see Foley (1986: 117f.) for an overview. They are usually called 'adjunct-verb' or 'root-verb' constructions, and consist of a non-inflecting element in combination with a verb from a small set of semantically generic verbs. The word class status of the 'adjuncts' is not always clear in the descriptions cited, so the degree of similarity to Northern Australian complex verbs remains a matter of further investigation.

These differences in the formal characteristics of the systems – the lexical category and size of the classes of elements involved in a complex predicate construction, and the degree to which these elements are restricted to occurrence in such a construction – are likely to also have ramifications for the semantic patterns to be observed. However, a cross-linguistic comparison of the semantic

relationships holding between the constituents of complex predicates is clearly beyond the scope of this study. The most remarkable characteristics in which the verb systems of many Northern Australian languages differ from the other systems just reviewed is that they possess a closed class of verbs which categorise event types (see Ch. 5).

To conclude: the type of complex predicate found in Jaminjung and other Northern Australian languages is formally distinct from most types of complex predicates identified in the literature. Languages like Jaminjung certainly seem 'extreme' in that they only have a very reduced set of verbs capable of functioning as simple predicates in finite clauses, and because of the resulting need to express most 'verbal' notions by complex predicates. However, cross-linguistic research has shown that complex predicates are by no means 'exotic', but a rather unmarked means of expression in many languages of the world, even though they come in different guises. Moreover, in many languages, verbs from a small, restricted set function prominently in such expressions.

Interestingly, it has been demonstrated even for spoken and 'vernacular written' discourse in English (Hopper 1991, 1996) that complex verbal expressions are preferred over simple verbs in most contexts (except for decontextualised style, from which the examples which feature most prominently in most linguistic theorising come), and that the simple verbs employed in these genres form a more or less closed class of semantically 'basic' verbs. If this would turn out to be a cross-linguistically valid principle of structuring spoken, contextualised discourse, then the most remarkable fact about Northern Australian languages like Jaminjung is, first, how deeply this principle is entrenched both in their grammatical structure and in the organisation of their lexicon, and second, that the semantically generic verbs participate in an overt system of event categorisation.

JAMINJUNG AND NGALIWURRU TEXTS

APPENDIX

The following five texts were chosen to represent different speakers from both the Ngaliwurru and the Jaminjung dialect, and different genres and topics. Most of the topics – the traditional healing methods described in Texts II and III, the historical account presented in Text IV, and the myth narrated in Text V – are of cultural or historical significance. References to the texts are made throughout the thesis, especially in Chs. 2 and 5, to supplement illustrative examples. The reference is by Text and line number, separated by a slash. For example, I/3 should be read as 'line 3 of Text I'.

Text I, 'Parachute Jumping', is a comment, co-constructed by three Jaminjung speakers, on an ongoing situation. It was chosen because it illustrates the contrasts between the use of locomotion verbs and the verb of change of locative relation, *-irdba* 'FALL'. Text II, 'Healing a broken leg', is taken from a narrative containing elements of a procedural text, in Jaminjung. Text III is a narrative, also in Jaminjung, about the experience of being bitten by a centipede. Both Text II and Text III also illustrate the degree of code-switching into Kriol often found in spontaneous texts. Texts IV and V are in Ngaliwurru. Text IV is a historical narrative, an account of a massacre that was committed on a group Jaminjung and Ngaliwurru people at the beginning of this century. Text V is a mythical narrative, a version of the 'Emu and Brolga' myth which is widespread throughout Australia.

All asides or interruptions are either included or indicated in the transcripts. Questions or prompts by myself are indicated with the initials ESB.

I Parachute Jumping

Dialect: Jaminjung

Speakers: Daisy Bitting, Mignonette Jamin, Doris Pannikin

Recorded 30/05/96, Diversion Dam, near Kununurra

This short conversation - prompted by me - was recorded while observing a group of parachute jumpers.

(...) (DP and MJ notice parachute jumpers, and MJ counts eight people in the air)

1. ESB: how do you say for that, lubayi mangurn-
   many white.person
2. DBit: dibadibard-
   RDP:jump
   'Jumping-'
3. DP: [lubayi mangurn-]
   many white.person
4. MJ: [lubayi mangurn burr-angga:,]
   many white.person 3pl-GO.PRS
   'Many white men are going (down).'
5. DBit: dibadibard burr-irda-m \
   RDP:jump 3pl-FALL-PRS
   '(They are) jumping down.'
6. DP: dibadibard-
   RDP:jump
   'Jumping-'
7. MJ: dibadibard=biyang \
   RDP:jump=NOW
8. thamirri thanyungbari dibbard ga-ngga \
   below another jump 3pl-GO.PRS
   'Jumping now. Further down another one is jumping.'
9. DBit: other one there-
10. MJ: jungulug=biyang \
    one=NOW
11. a:wu, jungulug ngiyinthu thang^ga!
    no one PROX above
    'One now. No, one is here above!'
12. ESB: a:!
13. MJ: jirrama=biyang \
    two=NOW
    'Two now.'

14. DP: yuwarnany ganiny-ngarna-m <x thamirri x>
    throw? 3sg:3du-GIVE-PRS below?
15. dibard buny-angu biya:ng,
    jump 3du:3sg-GET/HANDLE.PST NOW
    'Someone throws the two down, the two jumped off now'
16. MJ: lubayi-gurna \ dibbard burr-angu..
    many-?? jump 3pl:3sg-GET/HANDLE.PST
17. jung- jung- ^jirrama=biyang \
    one- one- two=NOW
    'Many! (Many) jumped off, one- one- two now'
18. ??: xx dibard buny-angu=biya:ng,
    ?? jump 3du:3sg-GET/HANDLE.PST=NOW
    jirrama mayi
    two person
    'The two have jumped off now, two men'
19. MJ: dibbard.. burri-dba-ny,
    jump 3pl-FALL-PST
20. dibadibard burr-irdba-ny jawagun \
    jump:RDP 3pl-FALL-PST other.lot
21. jirrama=biyang buny-angga \
    two=NOW 3du:3sg-GO.PRS
22. thanyungbari=guji biyang ga:-ngga, jid \
    other=FIRST NOW 3sg-GO.PRS go.down
    'They jumped (down), the others jumped down. Two are now going (down). Another one is already going down now'

(...) (The speakers realise that the parachutes must be practising for ANZAC day. Brief discussion in Kriol about when ANZAC day is, and why on earth people would decide to do parachute jumping.)

23. ESB: what about if they land.. gulban-gi?
    ground-LOC
24. DP: jid burr-irda-m \
    go.down 3pl-FALL-PRS
    'they get down'

25. DBit: gurdij burr-irda-m xx \
stand 3pl-FALL-PRS ??
'they land ??'

26. ESB: gurdij- [gurdij burr-irda-m gulban-gi?]

27. DP: [gurdij burr-irda-m...] gulban-gi \
stand 3pl-FALL-PRS ground-LOC
'they land on the ground'

28. MJ: <x jidjid thamirri na x>,
RDP:go.down below NOW

29. finish \
finished

30. thanyung- <x nothing x> \
another nothing
'(They are) all down below now (?). That's it. Another one- no.'

31. DP: ng:, ga-rdba-ny na \
no 3pl-FALL-PRS NOW
'No, he got down now'

32. MJ: finish \
finished
'That's it.'

II Healing a broken leg

Speaker: Eileen Roberts

Dialect: Jaminjung

Recorded 31/05/97, Wungunggiwung Site, near Timber Creek

The speaker here proudly describes how she cured her daughter's broken leg with traditional medicine, when the non-Aboriginal doctors had already given up on healing it, and even wanted to amputate it because of the complicated fracture.

1. Nanjirri-wu
<proper.name>-DAT
'To Nanjirr-'

(brief interruption)

2. Nanjirr gani-yu=rnu \
<proper.name> 3sg:3sg-SAY/DO.PST=3sg.OBL
'He said (to) Nanjirr'

3. "nganthu-rum", warnanggal-ni gani-yu=rnu,
2sg-COME.PRS? medicine.man-ERG 3sg:3sg-SAY/DO.PST=3sg.OBL
dokta-ni,
doctor-ERG
'"You come here" (?), the healer said to her, the doctor did,'

4. "thanthu minyga gurdbu ngunggina bag na-jga-ny,
DEM what's.it.called lower.leg 2sg:POSS break 2sg-GO.PST
'"That - what's it called - you broke your lower leg,'

5. yirri-w-arra ngunggu nang buru=wung"
1pl.excl:3sg-FUT-PUT 2sg.OBL stick return=COTEMP
'we will stick it back together for you."'

6. ... gani-yu=rnu \
3sg:3sg-SAY/DO.PST=3sg.OBL
'... he said to her.'

7. "woking, a:, walnginy na-w-ijga=wunthu,
walking ah walking 2sg-FUT-GO=COND
'"(But) if you walk (later),'

8. thanthu=biya thudbung na-w-ijga miri"
DEM=NOW short 2sg-FUT-GO leg
'you will then walk (with) that leg (being) short(er)."' (i.e. the doctors wanted to amputate the leg)

9. "awu", .. ji=malang=biyang gani-yu,
no 3sg=GIVEN=NOW 3sg:3sg-SAY/DO.PST
'"No!" she then said, her,'

10. "gurrany fiksim ya-wun-garra=mulu,
NEG fix:TR IRR-2pl:1sg-PUT=COLL
'"You all won't cure me,'

11. plasta eberitaim gurr-arra-m,
plaster every.time 2pl:3sg-PUT-PRS
'you always (just) put on a plaster.'

12. gujang ngarrgina-ni,
mother 1sg:POSS-ERG
'My mother,'

13. fiksim gan-jibili \
fix:TR 3sg:1sg-FUT:GET/HANDLE
'she will cure me'

14. nga-w-ijga=nu buru,
1sg-FUT-GO=3sg.OBL return
'I will go back to her,'

15. Bulla-bina" \
<place.name>-ALL
'to Bulla."'

16. ga-ruma-ny,
3sg-COME-PST
'She came,'

17. jurnku nga-rra-ny,
hot.ground/anthill 1sg:3sg-PUT-PST
'I put hot ground (from an anthill) on it,'

18. murl nga-rra-ny jurnku-ni \
'roast' 1sg:3sg-PUT-PST hot.ground/anthill-ERG/INSTR
'I treated her with hot ground.'

19. oletaim murl nga-rra-ny \
all.the.time 'roast' 1sg:3sg-PUT-PST
'I treated her with it again and again.'

20. nga-rriga,
1sg:3sg-COOK.PST
'I warmed it (like that),'

21. alibala nga-rriga,
early 1sg:3sg-COOK.PST
'in the morning I warmed it'

22. gabugabu nga-rriga,
afternoon 1sg:3sg-COOK.PST
'in the afternoon I warmed it,'

23. gabugabu alibala nga-rriga,
afternoon early 1sg:3sg-COOK.PST
'in the afternoon and morning I warmed it,'

24. ^alibala=biyang,
early=NOW
'then the (next) morning,'

25. gud ga-jga-ny walnginy na,
rise 3sg-GO.PST walking NOW
'she got up and walked.'

26. eksrei-wu ga-jga-ny dokta gani-yu=rnu,
x-ray-DAT 3sg-GO.PST doctor 3sg:3sg-SAY/DO.PST=3sg.OBL
'She went for an x-ray and the doctor said to her,'

27. "a:, xx na hiilap ngunggu=na +
ah ?? NOW heal.up 2sg.OBL=NOW
+ jarlag ngunggu=na gurdbu,
good 2sg.OBJ=NOW lower.leg
'"Ah, it is healed, it is alright now, your leg,'

28. nanggayin-ni fiksim ganarra- ganiny-garra-ny?
who-ERG fix:TR <false.start> 3sg:2sg-PUT-PST
'who cured you?"'

29. "oh, gujang ngarrgina,
oh mother 1sg:POSS
'"Oh, my mother'

30. im olden taim, gujang ngarrgina
3sg old time mother 1sg:POSS
'she is traditional, my mother,'

31. im duimap mi, en aim bete na"
3sg do.up:TR 1sg and I'm better now
'she treated me, and I'm better now"'

32. en imin toking langa im minyga-mij na, Ingglish-mij,
and 3sg:PST talking at/to 3sg what's.it.called-COMIT NOW English-COMIT
'and she said to him in, what's it called now, in English:'

33. "yu kant tek mi
'"you can't take me'

34. yu kant fiksim mi
'you can't cure me'

35. enibodi kant fiksim mi
'nobody can cure me'

36. ai go bek la Mam" (...)
'I go back to Mum"'

(The texts continues in Kriol, more or less repeating the account just given in Jaminjung.)

III Jalarriny - A Centipede Bite

Dialect: Jaminjung

Speaker: Iza Pretlove

Recorded 12/06/97, Kununurra

Centipedes are feared for their painful bites, and killed whenever encountered. This narrative is an account of how the speaker got bitten by a centipede when digging for a goanna, and of the traditional healing methods applied to soothe the pain of the bite.

ESB: [... jalarriny-ni] (prompting)

1. IP: [jalarriny-ni?]
centipede-ERG
'a centipede'

2. yawayi, ngilthig barraj yaniny-garra,
yes swallow further IRR:3sg:2sg-PUT
'yes, it might also 'swallow' you'

3. yaniny-ba=wunthu \
IRR:3sg:2sg-BITE=COND
'if it bites you'

4. ngayug ngiya gan-ba=ga,
1sg PROX 3sg:1sg-BITE.PST=YOU.KNOW
'me, I was bitten here'

5. gurrija nga-gba malajagu=gun \
digging 1sg-BE.PST goanna=CONTR
'I was digging for goanna'

6. malajagu gurrija nga-gba, thuny=mang ga-gba \
goanna digging 1sg-BE.PST buried.in.hole=SUBORD 3sg-BE.PST
'I was digging for a goanna, one that was buried in the ground'

7. <xx haj- nga:la xx> biyang nga-yu malajagu,
?? ?? NOW 1sg:3sg-SAY/DO.PST goanna
ani biggej jalarriny bin thuny mijelb \
only biggest centipede PST buried.in.hole self
'I ???? a goanna, but a very big centipede had buried itself in the ground'

8. en that Nawurla ngarrgina gujugu jayiny,
and that <subsection> 1sg:POSS big MoMo/DaCh
'and Nawurla, my big granddaughter,'

9. wuju-wuju-mindij=biyang \
small-RDP-TIME=NOW
'when (she was) really small'

10. garlagarla burr-agba Wirlma=nguji=gun, +
playing 3pl-BE.PST <proper.name>=ETC.=CONTR
+ guruwuny barr-barr burra-ma-nyi thawaya-wu, thet boltri: \
boab smash-RDP 3pl:3sg-HIT-IMPF eating-DAT that bottle.tree
'they were playing, W. and others, they were smashing up boab (nuts) for eating, those bottle tree (nuts)'

11. thawaya-wu barr-barr burra-ma-nyi, \
eating-DAT smash-RDP 3pl:3sg-HIT-IMPF
'for eating they were smashing them up'

12. ... e::n, ... ngayug=biya nga-jga-ny guyawud,
and 1sg=NOW 1sg-GO.PST hungry
'... and me, I was hungry,'

13. julag-gu yirra-mila \
bird-DAT? 1pl.excl:3sg-GET/HANDLE.IMPF
'we were catching birds (??)'

14. nga-jga-ny=biya "a:, malajagu thuny ga-yu, +
1sg-GO-PST=NOW ah goanna buried.in.hole 3sg-BE.PRS
+ ail go ... gurrija ngaj"..
I'll go digging 1sg-FUT:BE
nga-yu=burrag=burlu jarlig=mulu, +
1sg:3sg-SAY/DO.PST=3pl.OBL=COLL child=COLL
+ ngarrgina jayiny=jirram en Wirlma,
1sg:POSS MoMo/DaCh=two and <proper.name>
ngarrgina nawurlu \
1sg:POSS woman's.daughter
'I went away then, "ah, a goanna is buried in the ground, I'll go and dig it up", I told all the children, my two granddaughters and Wirlma, my daughter'

15. "go on then!, majani ngiyi=na!"
maybe PROX=NOW
'"go on then, maybe it is here!"'

16. warranya=biyang nga-gba \
uncover=NOW 1sg-BE.PST
'I was scratching then,'

17. <x mubayib, x> *(yawnś)*
dig.out?
'digging (?)'

18. that jalarriny bin wirriny ngarrgu,
that centipede PST turn 1sg.OBL
'that centipede turned on me,'

19. mam gan-ba=biyang \
hold.with.tight.grip 3sg:1sg-BITE.PST=NOW
'and bit me with a tight grip' (i.e. it didn't let go)

20. <x thambil x> durd nga yirr nga-nthama-ny +
?? hold.one no move.out 1sg:3sg-BRING-PST
+ jurruny-mij-jung \
lower.arm-COMIT=COTEMP
'I picked it up (??), no, I pulled it out together with the hand'

21. diwu' nga-yu bugu:, garrngan=binji=wung \
fly/throw 1sg:3sg-SAY/DO.PST JUST blood=ONLY=COTEMP
'I just chucked it away, just bleeding'

ESB: oh, true!?

22. IP: hm, garrngan \
hm blood
'hm, (full of) blood'

23. en yu re-.. yu reckon mugurn nga-rdba-ny?
and you you reckon sleep 1sg-FALL-PST
'and do you think I fell asleep?'

24. ngilijja na, dibard-mayan \
cry NOW jump-CONT
'(just) crying, jumping around'

25. wajjim bun-ngangu=murlu jarlig=bulu-ni hatwada-ni::::,
wash 3pl:1sg-GET/HANDLE.PST=COLL child=COLL-ERG hot.water-ERG/INSTR
'they washed me, my children, with hot water,'

26. wik=biya nga-yu \ waburl'ma \
weak=NOW 1sg:3sg-SAY/DO.PST vomit
'I got weak then, vomiting'

27. brom thet jalarriny /
from that centipede
'from the centipede (bite)'

28. "bulany-ni ganiny-ba?"
snake-ERG 3sg:2sg-BITE.PST
'"did a snake bite you?"'

29. "awu, nganthan=gun diwu nga-yu nguntharlng?"
no what=CONTR fly/throw 1sg:3sg-SAY/DO.PST heavy
'"no, what is it that I threw away, something heavy"'

30. en burru-yu=rrgu,
and 3pl:3sg-SAY/DO.PST=1sg.OBL
"maitbi jalarriny-ni ganiny-ba",
maybe centipede-ERG 3sg:2sg-BITE.PST
'and they said to me, "maybe a centipede bit you"'

31. burr-ijga-ny birdij burr-ina thet jalarriny,
3pl-GO-PST find 3pl:3sg-CHOP.PST DEM centipede
'they went and found the centipede'

32. jarriny-gi ga-gba \
hole-LOC 3sg-BE.PST
'it was in the hole'

33. "ah ngiya-ni ganiny-ba!"
ah PROX-ERG 3sg:2sg-BITE.PST
'"ah, this one bit you"'

34. ning' burru-ma mo wej bun-gilinyma-ny=na yuno,
break.off 3pl:3sg-HIT.PST more worse 3pl:1sg-MAKE-PST=NOW you.know
'they killed it and they made me worse, you know'

35. ngiyawula=ba pein nga-yu ngayug \
PROX:DIR=NOW pain 1sg:3sg-SAY/DO.PST 1sg
'I was in pain up to here, me'

ESB: oh, true!?

36. IP: yakkarrayib=biyang ngidbud-gi \
hurt=NOW night-LOC
'suffering at night,'

37. yakkarrayib=mang-gu, warlnginy, thatsol,
hurt=SUBORD-DAT? walking that's.all
olnait nga-jga-ny \ gamurrwarinyja, no mirdi \
all.night 1sg-GO.PST midnight no sleep
'because of the suffering (?), walking around, nothing else, all night I went around, in the middle of the night, no sleep'

38. jalig-di.. lukabtaim bun-ngangu ngidbud-gi \
child-ERG look.after:TR 3pl:1sg-GET/HANDLE.PST night-LOC
'the children looked after me at night,'

39. yakkarrayib=bung=gurra +
hurt=COTEMP=HORT?
+ guyug darlb burru-ma=rrgu=rndi:,
fire light.fire 3pl:3sg-HIT.PST=1sg.OBL=SFOC1
'(since?) I was in pain they lit a fire for me,'

40. dag nga-rna=rni \
warm.self 1sg-BURN.PST=SFOC1
'I warmed myself'

(...) (clarification of meaning of *dag*)

41. buyud=biyang jaburr-ni +
sandground=NOW shovel??-ERG/INSTR
+ burr-angu=rrgu=rndi,
3pl:3sg-GET/HANDLE-PST=1sg.OBL=SFOC1
'they got sandground for me with a shovel (??)'

42. buj-mawu buyud \
bush-HABITAT sand
'the bush kind of sand'

43. kill the pain \
'(to) kill the pain'

44. garrb burr-angu=rrgu=rndi buyud +
gather 3pl:3sg-GET/HANDLE-PST=1sg.OBL=SFOC1 sand
+ hotwan borom baya \
hot.one from fire
'they picked up hot sand for me from the fire'

45. putim there la bingga, jurruny \
put:TR there LOC finger lower.arm
'(and) put it on my hand'

46. that bin meik pein go,
that PST make pain go
'that made the pain go away'

(...) (brief aside to child)

47. ngiyi-ngunyi burr-arra-ny=arrgu=rndi buyud,
PROX-ABL 3pl:3sg-PUT.PST?=1sg.OBL=SFOC1 sand
'here they put sand on me'

48. thamurru-yun,
below-L.ABL
'down here,'

49. maja' nga-gba=biyang \
like.that 1sg-BE.PST=NOW
'I stayed like that then,'

50. guyug-di=biyang dag nga-rna,
fire-ERG/INSTR=NOW warm.self 1sg-BURN.PST
minyga nga-rna \ jiwuly \
what's.it.called 1sg-BURN.PST cool.down
'I got warmed by the fire, I got warmed what's it called, (so that the pain) 'cooled' down'

IV A massacre at Ngayimalang

Dialect: Ngaliwurru

Speaker: Duncan McDonald

Recorded July 1997 at Gilwi (near Timber Creek) by Mark Harvey. Transcription by Mark Harvey and myself, glossing mine.

This is the beginning of an account of a massacre occurring at the beginning of this century. Ngaliwurru people had gathered for a ceremony and were singing and dancing, when a group of white people arrived with rifles and started shooting men, women and children. *Ngayimalang* is in the country of which the

speaker is a traditional owner; it is a gorge site on the Ikymbon river north of the Victoria River (Mark Harvey p.c.)

1. Ngayimalang \
<place.name>
'(at) Ngayimalang'

2. Junba-warni burr-agba \
dance.style-MOTIV 3pl-BE.PST
'they were busy with the Junba'

3. ngajija \
dance
'dancing'

4. mangurn ga-jga-ny burrag, guyug-mij \
whitefellow 3sg-GO.PST 3pl.OBL fire-COMIT
'a white man went for them with a rifle'

5. dunggulba ganurru-wardagarra-ny \
knock? 3sg:3pl-FOLLOW-PST
'he followed them shooting (?)'

6. dawu'-mayan ganurru-ma \
shoot-CONT 3sg:3pl-HIT.PST
'he shot them'

7. xba, jarlig .. <x mirndij=biya x> 'marrug ga-gba burri \
?? child TIME=NOW hidden 3sg-BE.PST 3pl
'when he was a child, he was hiding from them'

8. ga-jga-ny burri yugung marrug ga-rdba-ny \
3sg-GO.PST 3pl run hidden 3sg-FALL-PST
'he ran away from them, and hid'

9. Wardanburru \
<proper.name>
Wardanburru did'

10. that Wally na Wardanburru \
that <proper.name> NOW <proper.name>
'that Wally, Wardanburru

11-12. mayi-nyunga \ Aboriginal name \
person-ORIG
'(that's his) Aboriginal name'

13. Wardanburru \
<proper.name>
Wardanburru

14. jarlig-mirndij \
child-TIME
'when he was a child'

15. ga-jga-ny burri marrug ga-rdba-ny burri \
3sg-GO.PST 3pl hidden 3sg-FALL-PST 3pl
'he ran away from them and hid from them'

16. langiny-ni \
wood-LOC
'behind a tree'

17. ganurr-ijja-ny=ba dunggurlba \
3sg:3pl-POKE-PST=NOW? knock?
'he shot them then'

18. jawaguny \
other.group
'the others'

19. jarriny-bina \
hole-ALL
'in the cave'

20. mangurn-ni \
whitefellow-ERG
'the white man did'

21. nyul ganurru-ngawu nganyjan-nyunga=gun \
sulky 3sg:3pl-SEE.PST what-ORIG=CONTR
'he was envious of them, why?!'

22. majani yagbali-nyunga \
maybe place-ORIG
'maybe because of the country'

23. yagbali-warni majani nyul ganurru-ngawu \
place-MOTIV maybe sulky 3sg:3pl-SEE.PST
'maybe because of the country he envied them'

24. ani yagbali=gun yirrajgina ^mayi-gina janyju \
only place=CONTR 1pl.excl:POSS person-POSS DEM
'but it is our country, the Aboriginal people's, that one'

25. yugung ga-jga-ny burri,
run 3sg-GO.PST 3pl
jarlig=marlang marrug ga-rdba-ny \
child=GIVEN hidden 3sg-FALL-PST
'he ran away from them, the child did and hid'

26. dunggulba jawaguny=biya ganurr-ujja-ny \
knock? other.group=NOW 3sg:3pl-POKE-PST
'he shot the others'

27. dawu:-mayan walaladbari \
shoot-CONT RDP:old.man
'shooting the old men'

28. mululurru-mij \
RDP:old.woman-COMIT
'together with the old women'

29. jarriny-gi \
hole-LOC
'in the cave'

30. jamurrugu \
below
'down there (towards the river)'

31. Ngayima^lang
<place.name>
'(at) Ngayima'lang'

32. burrb ganurr-ujja-ny jawaguny \
finish 3sg:3pl-POKE.PST other.group
'he shot the others dead'

33. mangurn-ni \
whitefellow-ERG
'the white man did'

34. jarlig=biya marrug ga-rdba-ny burri \
child=NOW hidden 3sg-FALL-PST 3pl
'the child then hid from them'

35. Junba-warni burr-agba badadi burru-wardagarra-nyi \
dance.style-MOTIV 3pl-BE.PST ceremonial.place 3pl:3sg-FOLLOW-IMPF
'they were busy with the Junba, following the ceremony'

36. Junba \
dance.style
'the Junba'

37. ngajija burr-agba walaladbari \
dance 3pl-BE.PST RDP:old.man
'the old men were dancing'

38. jambala ^yarrulany \ 'jawaguny 'yarrulan \
some.fellow young.man other.group young.man
'(and) some young men-- some (were) young men'

39. ngajija burr-inyji \
dance 3pl-GO.IMPF
'they were dancing'

40. janyju <x nuwina jarlig.. mirndij=ma 'ga-gba burri x> \
DEM 3sg:POSS child TIME=SUBORD 3sg-BE.PST 3pl
'that one was with them when he was a child (?)'

41. Wardanburru \
<proper.name>
'Wardanburru'

42. burr-agba=nu ngajija \
3pl-BE.PST=3sg.OBL dance
'they were dancing for him'

43. burrb ganurr-ijja-ny jawaguny mayi \
finish 3sg:3pl-POKE.PST other.group person
'he shot the other people dead'

44. jambala .. mululurru=gayi ganurr-ujja-ny guyug-di \
some RDP:old.woman=ALSO 3sg:3pl-POKE.PST fire-ERG/INSTR
'some, also women he shot with a rifle'

45. dunggulba ganurra-wardagarra-nyi \ ganurra-ma-nyi \
knock? 3sg:3pl-FOLLOW-IMPF 3sg:3pl-HIT-IMPF
'he followed them shooting (?), and killed them'

46. halidei=malang gun \
early.days?=GIVEN CONTR
'in the early days (?)'

47. burrb ganurru-ma mangurn-ni \
finish 3sg:3pl-HIT.PST whitefellow-ERG
'he killed them, the whitefellow,'

48. mularrij ga-ruma-ny burrag mangurn \
fierce 3sg-COME-PST 3pl.OBL whitefellow
'he came to them being violent, the whitefellow'

49. guyug-mij \
fire-COMIT
'with a rifle'

(Text continues after this)

V Emu and Brolga

Dialect: Ngaliwurru

Speaker: Violet Balidi

Recorded 25/05/96, Murrangginy/Timber Creek

This is a myth about two totemic ancestral ('dreamtime') women, Emu *(gumurrinji)* and Brolga *(gudarrg)* (cf. the reference to its transmission to the narrator by the elders in lines 37-39). Emu deceives Brolga by hiding her own children, and then persuading Brolga that she should kill all but two of her children, since she, Emu, already has only two. Brolga complies, but when she realises the deceit, fights Emu and breaks her wings. Afterwards, the two go separate ways. The myth explains both the characteristic features of the two birds (the emu does not fly, and the brolga - a crane species - only lays two eggs), and their difference in habitat (savannah for the emu, swamp for the brolga). Various versions of a myth about a fight between Emu and Brolga are found in a large cultural area (cf. e.g. Heath 1980b: 48 Merlan 1994: 247).

1. gudarrg \
   brolga
   'Brolga'

2. gudarrg bin go langa im,
   brolga PST go LOC 3sg
   'Brolga went up to her,'

3. ga-jga-ny nu::: gudarrg=mala:ng ganurr-uga jalig,
   3sg-GO-PST 3sg.OBL brolga=GIVEN 3sg:3pl-TAKE.PST child
   'she went up to her, Brolga, she took her children'

4. ... en thet gumurrinji,
   and DEM emu
   '... and Emu'

5. gibiman olabat,
   keep:? 3pl
   'was keeping them (i.e. hiding hers)'

6. ganurru-muwa jalig \
   3sg:3pl-HAVE.PST child
   'she kept her children'

7. ingglish-mij xxxxx LLL
   English-COMIT ??
   'in English ???' (unintelligible metalinguistic comment on speaker`s use of Kriol in previous intonation units)

8. jalig ganurru-muwa .. murag-gi \
   child 3sg:3pl-HAVE.PST shade-LOC
   'she kept her children in the shade'

9. gudarrg=biyang ga-jga-ny nu,
   brolga=NOW 3sg-GO-PST 3sg.OBL
   'Brolga now went up to her'

10. ... "hey, nami=malang jalig ^bardawurru!"
    INTERJ 2sg=GIVEN child many
    '... "hey, you (have) a lot of children!"'

11. ... gumu- .. minyga, gumurrinji bin talk la im \
    <false.start> what's.it.called emu PST talk to 3sg
    'Emu said to her'

12. gani-yu=nu gumurrinji \
    3sg:3sg-SAY/DO.PST=3sg.OBL emu
    'Emu said to her'

13. "ngayug=malang jalig jirrama=biji /
    1sg=GIVEN child two=ONLY
    '"I (have) only two children'

14. ^naburru-mangu jalig \
    2sg:FUT:3pl=HIT.PST child
    'you should kill your children'

15. jawugun=malang,
    other.group=GIVEN
    'the others'

16. ngayug=guji jirrama <x ngawunya x>, jalig, jirrama",
    1sg=FIRST two 1sg:3du-TAKE.IMPF?? child two
    'I already (only) have two children, two"'

17. gani-yu=nu, gumurrinji-ni \
3sg:3sg-SAY/DO.PST=3sg.OBL emu-ERG

'she said to her, Emu did'

18. wal gudarrg-di=biya jalig burrb 'ganurru-mangu 'nuwina \
well brolga-ERG=now child finish 3sg:3pl-HIT.PST 3sg:POSS

'well, Brolga then killed all her children'

19. gudarrg-di 'ganurru-mangu jalig bu:rrb,
brolga-ERG 3sg:3pl-HIT.PST child finished

'Brolga killed her children, all of them'

20. buru \
return

'(and went) back'

21. gumurrinji-ni=biyang bul gan-arrga \ .. gudarrg \
emu-ERG=NOW emerge 3sg:3sg-APPROACH.PST brolga

'Emu then came up to her, .. (to) Brolga'

22. "yakkarra:::yi, jalig bardawurru nganthurru-maya:::,
INTERJ child many 2sg:3pl-HAVE.PRS

ngarrgina-<x wu x> julamab,
1sg:POSS-DAT sool:up:TR

'"alas, you have a lot of children, and (about?) mine you incited me,'

23. <x julamab x> nganthin-ngarna-ny +
sool:up:TR? 2sg:1sg-GIVE-PST

+ burrb 'ngawurru-mangu ngarrgina 'jalig \"
finish 1sg:3pl-HIT.PST 1sg:POSS child

'you incited me (so that) I killed all my children"'

24. gani-yu=nu \
3sg:3sg-SAY/DO.PST=3sg.OBL

'she said to her'

25. wirrij na, buny-ma-ja,
argue now, 3du-HIT-REFL.PST

'(being) furious then, the two fought'

26. wirrij biya buny-ma-ja ^lu:ba \
argue NOW 3du-HIT-REFL.PST big

'the two fought a big fight'

27. jalig-garni \
child-MOTIV

'over the children'

28. gudarrg \
brolga

'the brolga'

29. ... buny-ijga-ny na,
3du-GO-PST NOW

'... the two went (away) then'

30. "nga-ngga biya ngayug=malang \
1sg-GO.PRS NOW 1sg=GIVEN

'"I'm going (away) now, me!'

31. gurrany yang-iyaj ngunggu" \
NEG IRR:1sg-BE 2sg.OBL

'I won't stay for (i.e. with) you"'

32. gani-yu=nu gudarrg \
3sg:3sg-SAY/DO.PST=3sg.OBL brolga

'she said to her, Brolga'

33. "yawayi, ngayug- [xxx yagbali]
yes, 1sg ?? place

'"yes, I [will go to a different?] place' (overlapping unintelligible utterance from bystander)

34. yinawula nga-w-ijga=ngarndi" \
DIST:DIR 1sg-FUT-GO=SFOC2

'I'm going to go over there"'

35. gani-yu=nu \
3sg:3sg-SAY/DO.PST=3sg.OBL

'she said to her'

36. gumurrinji=xx \
emu
'Emu'

37. thet ol pipel bin xx telimbat mi stori \
DEM old people PST ?? tell:TR 1sg story
'the old people told me (the) story'

38. marlaluga \
RDP:old.man
'the old men,'

39. warladbari, mulurru,
old.man old.woman
'old men, and old women,'

40. <x tharran na x>
that.one? NOW?
'that one (??)'

41. marndaj=biya /
later/alright=NOW
'all right now?'

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SAMENVATTING

Deze dissertatie vormt een onderzoek naar de syntactische en semantische eigenschappen van enkelvoudige en complexe werkwoorden in twee nauw verwante dialecten van een Australische taal, Jaminjung en Ngaliwurru (hierna kort aangeduid als "Jaminjung"). Deze taal laat een typologisch ongebruikelijke eigenschap zien: ze bevat twee verschillende woordklassen die als werkwoord fungeren. Eén van deze (hier genoemd 'generieke werkwoorden' of 'werkwoorden') vormt een gesloten klasse met circa 30 elementen. Deze werkwoorden kennen verplichte verbuiging naar persoon en tijd/aspect/wijs, en kunnen in een finiete zin zelfstandig als predikaat optreden. De zogenoemde *'coverbs'* daarentegen vormen een open klasse. Zij zijn eveneens inherent predikatief maar kennen geen inflectie. *Coverbs* kunnen alleen in niet-finiete zinnen als zelfstandig predikaat optreden. In finiete zinnen komen zij alleen voor als deel van een complex werkwoord, en wel in combinatie met een generiek werkwoord.

Een interessante consequentie van deze 'taakverdeling' tussen *coverbs* en generieke werkwoorden is dat werkwoorden van dit laatste type gebeurtenissen in verschillende klassen indelen. Omdat een werkwoord uit de gesloten klasse verplicht is in iedere finiete zin (hetzij als enkelvoudig werkwoord, hetzij als deel van een complex werkwoord), worden de verschillende gebeurtenisexpressies door de keuze van het generieke werkwoord in een beperkt aantal klassen verdeeld. Dit type expliciete classificatie is vergelijkbaar met wat men in talen met nominale classificatie aantreft bij expressies die naar objecten verwijzen.

In deze studie staan twee belangrijke, aan elkaar gerelateerde vragen centraal. De eerste vraag betreft de conceptuele basis die ten grondslag ligt aan deze classificatie van gebeurtenissen. De tweede vraag betreft de syntactische en semantische condities op de vorming van complexe werkwoorden, oftewel, de relatieve bijdrage van generiek werkwoord en *coverb* voor de interpretatie van een complex werkwoord.

Hoofdstuk 1 bevat enige achtergrondinformatie over de taal en haar situering. Jaminjung wordt tegenwoordig nog slechts gesproken door zo'n 100, meest oudere mensen, en wordt niet meer door kinderen geleerd. Daar geschreven documentatie nauwelijks voorhanden is, is dit proefschrift voor het grootste gedeelte gebaseerd op veldwerk verricht door de auteur zelf.

Naast achtergrondinformatie over de taal bevat hoofdstuk 1 ook een beschrijving van de theoretische en methodologische uitgangspunten van het onderzoek. Er wordt uitgegaan van een 'constructie'-gebaseerd grammaticamodel,

dat wil zeggen een model waarin grammaticale structuren worden beschouwd als schematische, complexe tekens. Voor de semantische analyse wordt als heuristisch principe monosemie gebruikt. Waar nodig wordt wel polysemie aangenomen, maar daar waar het mogelijk is worden meer specifieke interpretaties afgeleid uit contextuele informatie of uit algemene pragmatische principes.

Hoofdstuk 2 beschrijft de voornaamste grammaticale kenmerken van het Jaminjung voor zover noodzakelijk voor het begrip van de voorbeelden en de verdere argumentatie. In dit hoofdstuk wordt tevens aangetoond dat *coverbs* een zelfstandige lexicale klasse vormen waarvan de elementen in hun morfosyntactische kenmerken niet alleen verschillen van de generieke werkwoorden maar tevens van nomina.

Hoofdstuk 3 behandelt enkelvoudige en complexe predikaatsconstructies. *Enkelvoudige werkwoorden* ("simple verbs") bestaan uit generieke werkwoorden die zelfstandig als predikaat fungeren. Een vergelijking van de tekstuele frequentie van de verschillende constructies laat zien dat in 40 procent van de finiete zinnen het predikaat wordt gevormd door een enkelvoudig werkwoord, ondanks het relatief kleine aantal werkwoorden dat voor deze functie beschikbaar is. *Canonieke complexe werkwoorden* worden gedefinieerd als de combinatie van een of soms twee ongemarkeerde *coverbs* en een werkwoord in één intonatie-eenheid. In het hoofdstuk wordt beargumenteerd dat complexe werkwoorden zowel tot het lexicon behoren (op grond van het gegeven dat het grotendeels om geconventionaliseerde uitdrukkingen gaat) als tot de grammatica (aangezien zij semantisch compositioneel zijn en het resultaat zijn van een productieve constructie). Nauw verwant aan de canonieke complexe werkwoordconstructie is de *progressive* constructie, waar het *coverb* als duurvorm gemarkeerd is. Canonieke complexe werkwoorden worden tevens onderscheiden van constructies waar het (gemarkeerde) *coverb* als secundair predikaat fungeert, of waarin een (ongemarkeerd) *coverb* als 'semi-onafhankelijk' predikaat fungeert in een eigen intonatie-eenheid. Tot slot wordt in een afzonderlijke deel van dit hoofdstuk enige aandacht besteed aan de integratie van leenwoorden uit het Kriol, een op het Engels gebaseerde Creolentaal in Noord-Australië. Een veelvoorkomende strategie in het Jaminjung omvat het integreren van werkwoorden uit het Kriol als *coverbs*; net als de *coverbs* uit het Jaminjung worden deze vormen dan gecombineerd met een van de generieke werkwoorden in een canonieke complexe werkwoordsconstructie.

Zowel enkelvoudige als complexe werkwoorden coderen één samenhangende gebeurtenis. De term 'gebeurtenis' is hier op te vatten als een conceptuele eenheid die overeenkomt met de eenheden van spraakproductie en -verwerking. In het geval van complexe werkwoorden kan de gebeurtenis deelgebeurtenissen omvatten. De constructie zelf geeft in dit geval echter geen definitief uitsluitsel omtrent de semantische relatie tussen haar constituerende

delen. In de resterende hoofdstukken wordt de kwestie betreffende de betekenis van werkwoorden en *coverbs,* en hun semantische relatie in canonieke complexe werkwoorden, nader onderzocht.

Hoofstuk 4 is gewijd aan de argumentstructuur van generieke werkwoorden, *coverbs* en complexe werkwoorden. In het constructie-gebaseerde raamwerk dat als uitgangspunt wordt genomen, kunnen argumentsexpressies (in de vorm van casus-gemarkeerde zelfstandig naamwoordgroepen en/of pronominale prefixen) niet rechtstreeks worden voorspeld op grond van de valentie van het predikaat, maar worden zij als constructies op zich beschouwd. In deze benadering wordt valentie semantisch gedefinieerd als het aantal en type van de semantische participanten. Centrale participanten kunnen voor het Jamin-jung operationeel worden gedefinieerd als die participanten die verplicht worden gerealiseerd, en/of gerealiseerd als kern argumenten (pronominale prefixen of absolutieve nomina) in alle voorkomens van een gegeven predikaat. Dit criterium is vooral relevant voor het bepalen van de valentie van *coverbs*, aangezien deze meestal niet zelfstandig in een argumentstructuur constructie fungeren, maar alleen in combinatie met een generiek werkwoord.

De semantische participanten van predikaten kunnen door de onafhankelijk bestaande argumentstructuur constructies worden gerealiseerd op basis van compatibiliteit van de participantenrol met de betekenis van de constructie. Deze benadering maakt een homogene oplossing mogelijk van een aantal problemen in de syntactische analyse van het Jaminjung. Deze problemen omvatten onder andere de complexe interactie van pronominale prefixen en casus-gemarkeerde zelfstandig naamwoordgroepen; het gebruik van één en dezelfde 'ergatieve' naamval om *agens* en *instrument* aan te duiden, en de representatie van een *agens* door zelfstandig naamwoordgroepen in verschillende naamvallen.

In het bijzonder maakt de *construction grammar* benadering een simpele en elegante representatie mogelijk van de fusie van argumenten in complexe predikaten: dit kan worden beschreven als het verbinden van één participant van respectievelijk een werkwoord en een *coverb* met één enkele morfosyntactische argumentsexpressie. Zo wordt de enige participant van een monovalent *coverb* op geheel verschillende wijze uitgedrukt al naar gelang deze samenvalt met de enige participant van een monovalent werkwoord, met de eerste participant van een bivalent werkwoord, of met de tweede participant van een bivalent of trivalent werkwoord. In de beschrijving zoals deze hier wordt gegeven, is het niet nodig polysemie voor dergelijke *coverbs* aan te nemen. De verschillen in argumentstructuur zijn veeleer het resultaat van de verschillende bijdragen aan de complexe expressie van het generieke werkwoord enerzijds en de constructie zelf anderzijds.

In **Hoofdstuk 5** worden betekenis en gebruik van elk van de generieke werkwoorden nader onderzocht ter staving van de bewering dat de keuze van een werkwoord in feite neerkomt op een categorisatie-handeling, en dat de werkwoorden geen *coverbs* classificeren, doch gebeurtenissen. Met andere woorden, de categorisatie-functie van generieke werkwoorden is niet beperkt tot hun gebruik in complexe predikaten. Als enkelvoudige werkwoorden beschrijven zij een gebeurtenis van een bepaalde algemene aard, maar zij kunnen een meer specifieke interpretatie krijgen in hun context. Als deel van een complex predikaat categoriseren zij de gebeurtenis die door de combinatie van werkwoord en *coverb* wordt uitgedrukt. Deze visie wordt ten eerste ondersteund door het gegeven dat de meeste *coverbs* niet lexicaal beperkt zijn tot de combinatie met één specifiek werkwoord, maar dat de keuze van het werkwoord wordt ingegeven door de aard van de gebeurtenis die wordt beschreven. Ten tweede worden zelfs leenwoorden die als *coverb* in het Jaminjung worden geïntegreerd, productief met werkwoorden gecombineerd. Ten derde kan worden aangetoond dat de generieke werkwoorden, zowel bij gebruik als enkelvoudige werkwoord als wanneer zij deel uitmaken van een complex predikaat, dezelfde betekenis hebben. Dit resultaat is in tegenspraak met het beeld dat in talen van dit type, het werkwoord, wanneer het deel uitmaakt van een complex predikaat, semantisch 'leeg' is en slechts fungeert als drager van de verbale uitgangen, min of meer vergelijkbaar met hulpwerkwoorden. Dit wil niet zeggen dat werkwoorden nooit polyseem zijn. Hun secondaire betekenissen, als deze aanwezig zijn, kunnen echter aan hun basisbetekenis worden gerelateerd door regelmatige semantische operaties zoals metaforen, metonymie en semantische 'verbleking' (dat wil zeggen: het verlies van semantische componenten).

De voornaamste semantische componenten van generieke werkwoorden – tevens de kenmerken die relevant zijn voor gebeurtenisclassificatie in het Jaminjung – omvatten het aantal centrale participanten in een gebeurtenis (weerspiegeld in de valentie van het gebruikte werkwoord) en de componenten van locatie, verandering van locatie, voortbeweging, contact, de verplaatsing van een object naar of weg van een derde participant; 'interne oorzaak', en (tot op zekere hoogte) teliciteit. Tevens zijn er werkwoorden voor het uitdrukken van (voedsel)inname *(ingestion)*, visuele perceptie en creatie. Voor bewegingsgebeurtenissen wordt verder onderscheid aangebracht naar de richting van de beweging en de betrokkenheid van een begeleidende participant. Voor contactgebeurtenissen wordt louter contact onderscheiden van inslag of krachtige inwerking. Deze laatste worden verder onderverdeeld naar vorm en afgelegd traject van het hierbij betrokken instrument, bijvoorbeeld: 'met een spitse punt', 'met een snijkant', 'met de voet'. Beïnvloeding zonder fysiek contact, evenals toestandsverandering, niet-visuele perceptie en geheugen worden gedekt door de secundaire betekenissen van een aantal werkwoorden. Het gebruik van de werkwoorden wordt echter niet alleen door hun betekenis

gemotiveerd, maar ook door de paradigmatische opposities met andere werkwoorden en door enige algemene pragmatische principes. Hoewel nog steeds gebaseerd op componenten die over het algemeen worden beschouwd als 'basis'-gebeurtenissen, is het resulterende categorisatiesysteem sterk taalspecifiek.

Hoofdstuk 6 behandelt de betekenis van de *coverbs* en hun gebruik in complexe werkwoorden. *Coverbs* worden in verschillende formele klassen opgedeeld al naar gelang hun vermogen om met eenzelfde groep werkwoorden te combineren. Hierbij wordt beargumenteerd dat *coverbs* uit dezelfde formele klasse tevens een semantisch coherente set vormen, en dat deze klassen grotendeels overeenkomen met de predikaatklassen die in andere talen worden aangetroffen. Ook in het geval van *coverbs* wordt het principe van monosemie aangenomen, hetgeen inhoudt dat de betekenis van een *coverb* beperkt is tot slechts die semantische componenten die aanwezig zijn in alle combinaties van het *coverb* met een ander werkwoord. Vervolgens wordt de unificatie van betekeniscomponenten van *coverbs* en werkwoorden in canonieke complexe werkwoorden onderzocht voor *coverbs* uit alle formele klassen. Hierbij blijkt dat de semantische relaties in complexe werkwoorden van verschillende aard kunnen zijn. Het werkwoord kan semantisch in het *coverb* zijn vervat; het kan gedeeltelijke semantische overlap met het *coverb* vertonen; of *coverb* en werkwoord vertonen geen semantische overlap. In het laatste geval wordt het *coverb* geïnterpreteerd als een uitdrukking van een fase van de gebeurtenis die door het werkwoord wordt uitgedrukt, als een manier waarop deze gebeurtenis wordt uitgevoerd, of als een resulterende gebeurtenis (waarbij de oorzakelijke gebeurtenis door het werkwoord wordt uitgedrukt). Met werkwoorden van beweging kan de interpretatie er ook één zijn van een "geassocieerde" beweging, dat wil zeggen, een beweging die gelijktijdig plaatsvindt met, of wordt gevolgd door, een andere gebeurtenis. Deze verschillen moeten echter uitsluitend worden gezien als verschillen in semantische interpretatie; formeel reflecteren alle complexe werkwoorden eenzelfde type complexe predikaatsconstructie.

In **Hoofdstuk 7** worden de resultaten van de voorgaande hoofdstukken samengevat en in een regionale en typologische context geplaatst. Eerst wordt het Jaminjung vergeleken met andere Noord-Australische talen met vergelijkbare soorten complexe predikaten. Er wordt comparatieve evidentie aangedragen voor een diachroon scenario waarin grotere werkwoordssystemen worden gereduceerd tot een kleine klasse werkwoorden, die uiteindelijk weer vergroot wordt door volledige lexicalisatie van (voorheen) complexe predikaten. Vervolgens wordt de aard van werkwoorden, *coverbs* en complexe predikaten bestudeerd vanuit een cross-linguïstisch perspectief. Er wordt beargumenteerd dat werkwoord-*coverb*-combinaties zoals deze worden aangetroffen in het Jaminjung en in een aantal andere Noord-Australische talen als

een apart type complex predikaat moeten worden beschouwd, ondanks de functionele gelijkenis die zij vertonen met andere typen complexe predikaten, zoals seriële werkwoordsconstructies, *particle verbs* en *light verb* constructies. Tenslotte wordt gesteld dat wat in lexicon en grammatica van het Jaminjung systematisch wordt vastgelegd, als tendens in vele andere talen aangetroffen kan worden, en wellicht zelfs universeel is. In gesproken, spontane spraak hebben sprekers de neiging om gebruik te maken van een relatief kleine klasse van semantisch algemene, hoogfrequente werkwoorden die al dan niet met andere – veelal niet-finiete – elementen gecombineerd kunnen worden. Het bijzondere aan het Jaminjung en aan andere Noord-Australische talen is dat de semantisch meest algemene werkwoorden met de hoogste frequentie een aparte woordklasse vormen, en bovendien participeren in een systeem van expliciete gebeurtenisclassificatie.

CURRICULUM VITAE

Eva Schultze-Berndt studied Linguistics, Phonetics and Musicology at the Universität zu Köln (Germany) and at the University of Edinburgh (Scotland). In 1992, she received her M.A. (with distinction) from the Universität zu Köln. She has worked as a research assistant at the Universität zu Köln from 1991 to 1992, and at the Universität Bielefeld (Germany) from 1992 to 1994. In 1995, she was offered a Ph.D. scholarship at the Max-Planck-Institute for Psycholinguistics in Nijmegen, the Netherlands. The research presented in this thesis is based on fieldwork in Northern Australia conducted since 1993. Currently she is a research fellow at the Ruhr-Universität Bochum, working on a project funded by the Deutsche Forschungsgemeinschaft.