SEMANTICS AND USE OF THE GENERIC VERBS

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.

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[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 classi-

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[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).

fier 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

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[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

         <u>tayimap</u>   gani-w-**arra**   <u>that dog</u>
         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, **<u>tayimap</u>** 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.

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[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

             <u>baujed</u>-**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   t**harrmarrb** 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.

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[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) <u>that's</u> <u>where</u> 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)

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[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' $\boxed{\text{x is located at a location}}$

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'*

S5-1(i)	*ga-w-iyaj*	x should (continue to) be located at a location
	'3sg-FUT-BE'	

*Pragmatic enrichment
(+ metaphor)*

S5-1(i)'	*ga-w-iyaj*	x (entity or event) should be abandoned
	'3sg-FUT-BE'	

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*

S5-1(i)   *-yu* 'BE'

x is located at a location

$\vdots$ *Semantic bleaching*

S5-1(ii)   *-yu* __ Coverb$_{State}$ /
             __ Coverb$_{Activity}$

x is (involved) in a state / an activity

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   <u>kroba</u>
         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   <u>house</u>   jalag   <u>window</u>   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)   <u>Fannie Bay</u>-bina=biya   ga-jga-ny,   <u>olegija</u>=wung,   ga-**gba** \
           <place.name>-ALL=NOW   3sg-GO-PST   altogether=COTEMP   3sg-BE.PST

           <u>Darwin</u> ..   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   <u>na</u>,   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   <u>brij</u>-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

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[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 /-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*

Prototypical 'fall' schema   Lexicalised component

Source Location

Downward
 Motion

Reaching
 Ground

-irdba 'FALL'

○ Figure at t

○ Figure at t-1

Ground /
Location
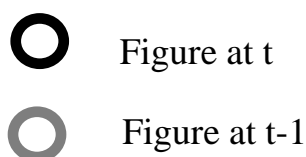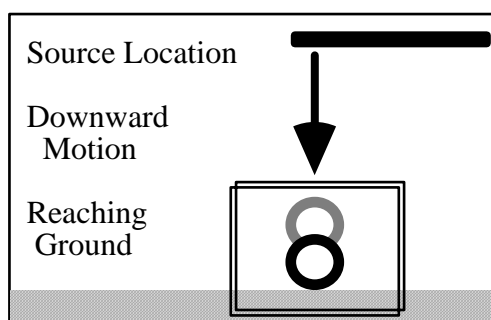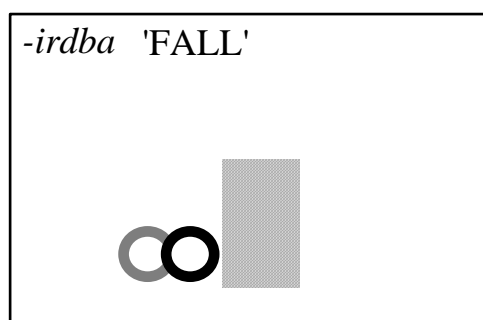
 However, a note of caution is in order, since we find a curious restriction in the applicability of *-irdba*. It is never combined with the coverb *burduj* which

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**   <u>log</u>-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) <u>klosap</u>   **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) ... <u>wa</u>   **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)

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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   <u>kap</u>-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

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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 absolute noun phrase), and their coreferentiality is indicated by the reflexive suffix.

(5-59)   <u>imin</u> ..   <u>binij</u> <u>na</u>,   **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. <u>putimon mijelb</u> '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)   <u>fish poison</u>?   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 absolute 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   <u>na</u>,   dilidilibman   bun-k**arra**-n**y**=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)

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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*   x transforms itself (y) into z
             'PUT-REFL'

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

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[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' __ 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

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[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' | x causes y to change its configuration |
            __ Coverb$_{ChangeConf/State}$

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'*

S5-4(i)   x causes y to be in a locative relation with respect to a location

Metaphor   *Metaphor*

(iia) x transforms   (iib) x (human)
       itself (y) into z   conventionally calls
                                 y by a word "z"

Metaphor

(iii) x (human) causes y to
       be accessible to z

Bleaching

(iv) x causes y to change its
      configuration
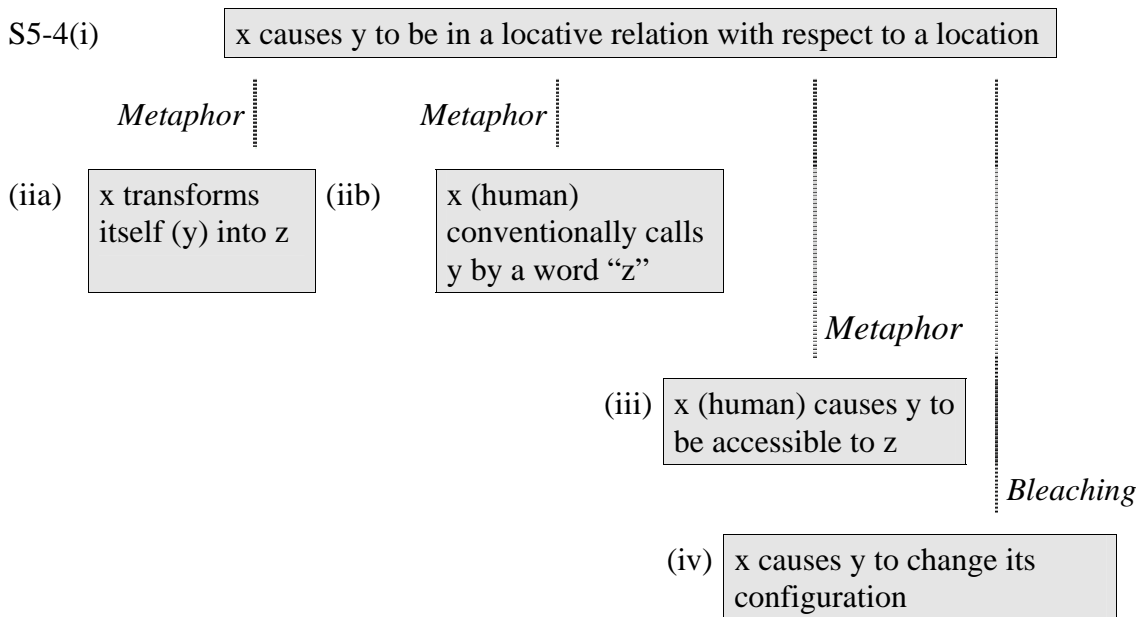
With a residual class of coverbs, it is not obvious in these cases why *-arra,* rather than another verb, is chosen to categorise the event in question. Although the choice of *-arra* may have originally been motivated by a perceived component of caused change of location, these complex verbs were here 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*
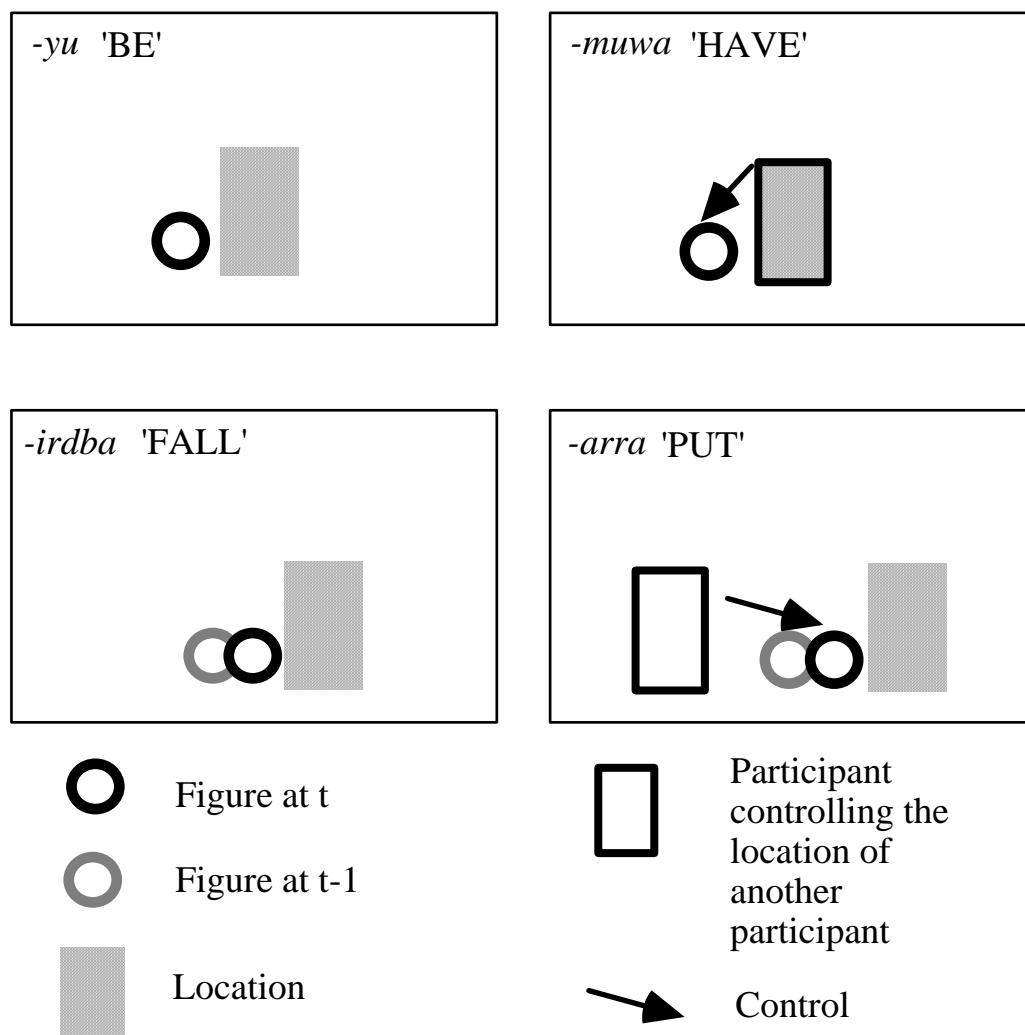
All four verbs are semantically compatible with stative positional coverbs, which specify a type of locative relation. Positional coverbs regularly form stative expressions with *-yu* 'BE' and *-muwa* 'HAVE', inchoative expressions with *-irdba* 'FALL', and causative expressions with *-arra* 'PUT'. Both *-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.

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[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)

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[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)   <u>di:ja</u>-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)

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[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]

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[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-

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[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, <u>bottle</u>=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   **<u>juwurlab</u>**   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

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[104]   E.g. Ikegami (1984), Langacker (1986), Radden (1988), Talmy (1975, 1991), Goldberg
         (1991, 1995).

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 (...)"

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' __ Coverb$_{ChOfState}$ 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)   <u>en banana</u>   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' __ Coverb$_{State}$ / | x is (involved) in a state / an activity
             __ Coverb$_{Activity}$ | **for a long time**

S5-1(ii)   *-yu* 'BE' __ Coverb$_{State}$ / | x is (involved) in a state / an activity
            __ Coverb$_{Activity}$

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'*
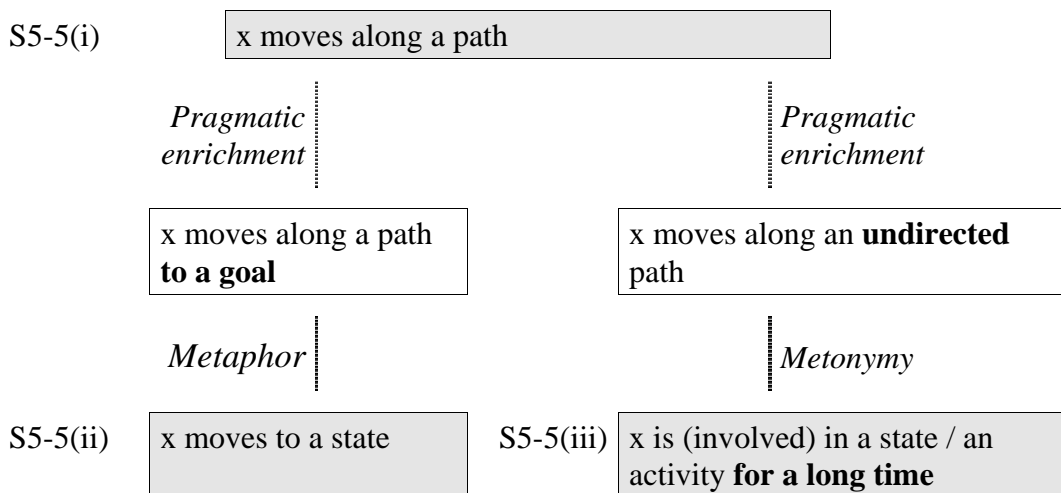
5.3.3   *-ruma* 'COME'

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).

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[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 |
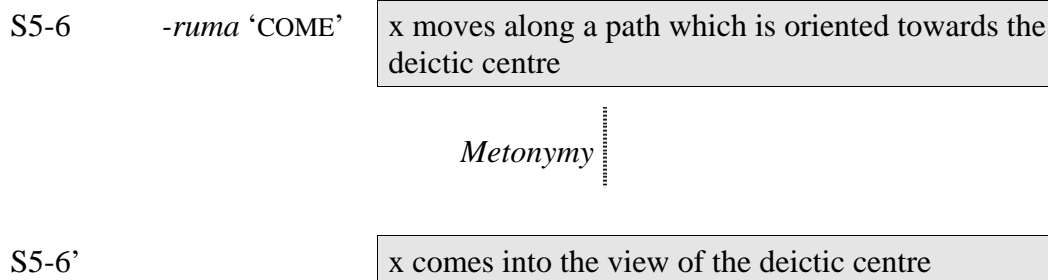
5.3.4   *-uga* 'TAKE'

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

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[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**   <u>na</u>,   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   <u>na</u>   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*

	Stative verbs			Locomotion verbs	
S5-1(i)	-*yu* 'BE'	x is located at a location	S5-5(i)	-*ijga* 'GO'	x moves along a path
S5-1(ii)	-*yu* 'BE'	x is (involved) in a state / an activity	S5-5(iii)	-*ijga* 'GO'	x is (involved) in a state / an activity **for a long time**
			S5-7(i)	-*uga* 'TAKE'	x moves along a path; y is located at x; x controls the location of y
S5-2	-*muwa* 'HAVE'	y is located at x; x controls the location of y	S5-7(ii)	-*uga* 'TAKE'	y is located at x **for a long time**; x controls the location of y

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' __ Coverb$_{Hearing}$ | 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

        <u>motika</u>-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**   <u>barrigi</u>
        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   <u>na</u>   murag,
          3sg:3sg-FUT-SEE   NOW   shade

           nganjin-k**uga**   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)   <u>drangkenbala</u>-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'*

S5-7(i)

> x moves along a path
> y is located at x
> x controls the location of y

Metonymy   *Metonymy*

(ii)

> y is located at x for a long time
> x controls the location of y

(iv)

> x applies force on y by means of x's body weight

Metaphor   *Metonymy ??*

(iiia) | x has y in mind | (iiib) | x hears y |
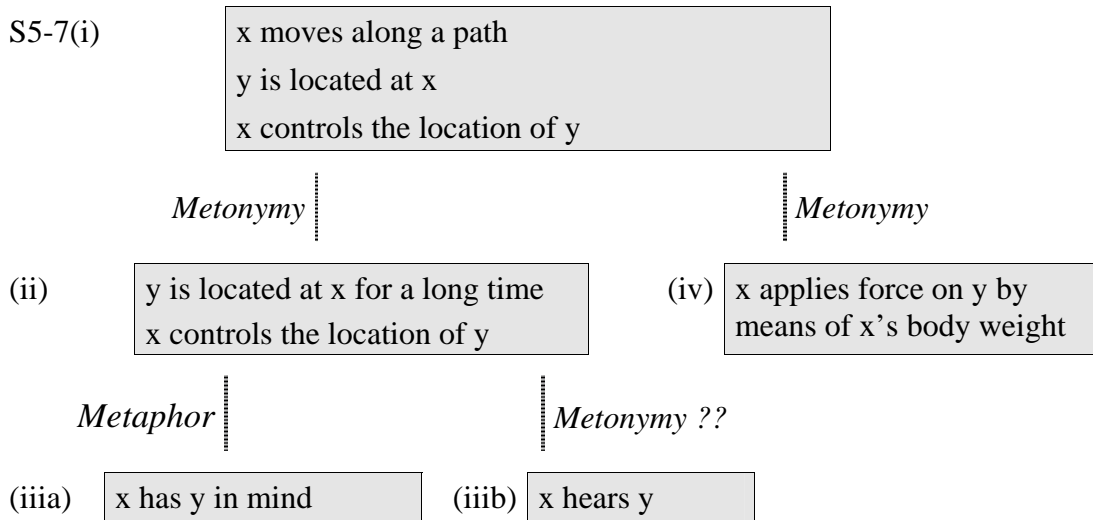
The basic sense of accompanied locomotion gives rise to two different metonymical readings; in both of these, actual locomotion is backgrounded and the component of spatial contiguity is foregrounded. The metonymic link from the basic sense to sense (ii) is one from accompaniment during an actual locomotion 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’*

S5-9   -*unga* ‘LEAVE’ | x purposefully moves along a path which is oriented away from y

                                          Pragmatic enrichment (+ metaphor)

S5-9’ | x leaves y alone/gives up y (entity or event)
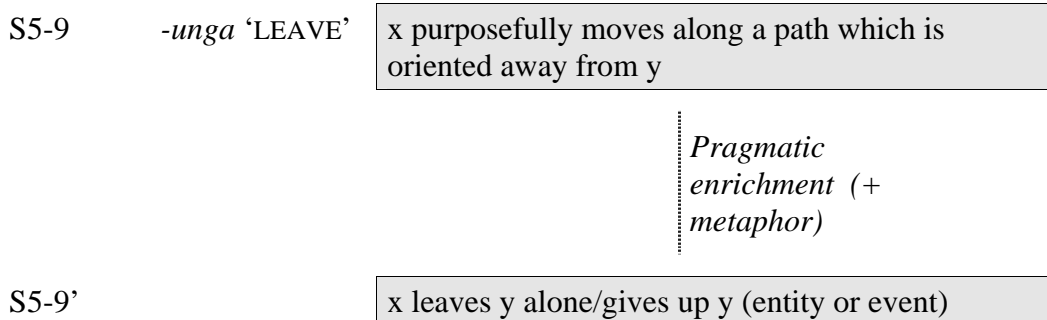
5.3.7   *-arrga* ‘APPROACH’

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) **<u>jinikap</u>**   gan-k**arrga**
        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*
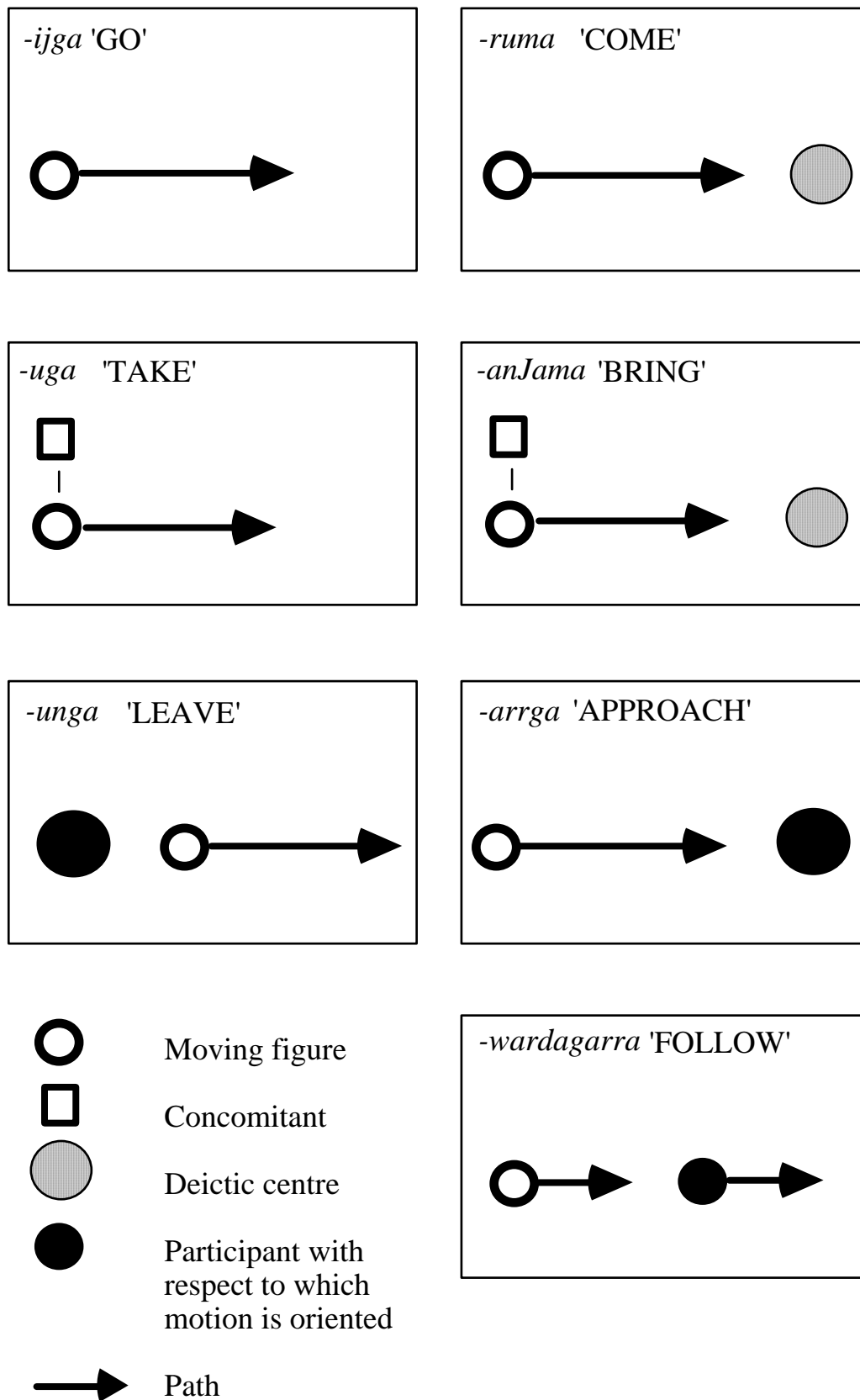
It will be noticed that the most general locomotion verb, *-ijga* 'GO', which only encodes 'motion along a path', is semantically included in all other locomotion verbs. With respect to deixis, it was argued that *-ijga* 'GO' is in privative opposition to *-ruma* 'COME', in that only the latter is semantically 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   Jiminy   ^<u>na,</u>
        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   <u>tharrey</u>   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)   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)

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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

          <u>juga</u>   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)   **<u>reikim</u>**   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.

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[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   <u>skul</u>,
         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* | x is in physical contact with y with a movable (body) part or instrument
            'GET/HANDLE' | 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'

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[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

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[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) <u>yu maitbi tayimap sweg</u>

          'you tie up a swag, maybe' (MJ, E04006)

(5-177a) dirrg   ba-**rra**
          tied.up   IMP-PUT

          'tie it up!'

     b) <u>tharran yu tayimap maiti dog, cheekiwan</u>

          '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) **<u>miksimap</u>** 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)

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[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.: <u>ai bin gittim got mai binji</u> 'I got it with my belly') (DR, NGA117)

(5-182) yinju-ngala <u>yu</u>..   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

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[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' | x is in the same place as y |
|---|
| __ Coverb | 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) <u>laik</u>   **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 <u>*miksim*</u> '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**   <u>na</u>   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**   <u>bishilain</u>
         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) <u>**lujim**</u>   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'*

S5-12(i) | x is in physical contact with y with a movable (body) part or instrument
                | x affects y

Semantic bleaching   *Semantic bleaching*

(ii) | x (animate) is in contact with y through its lower senses   (iii) | x is in the same place as y
                                                                                              | x affects y

Semantic bleaching

(iv) | x attempts to make contact with y
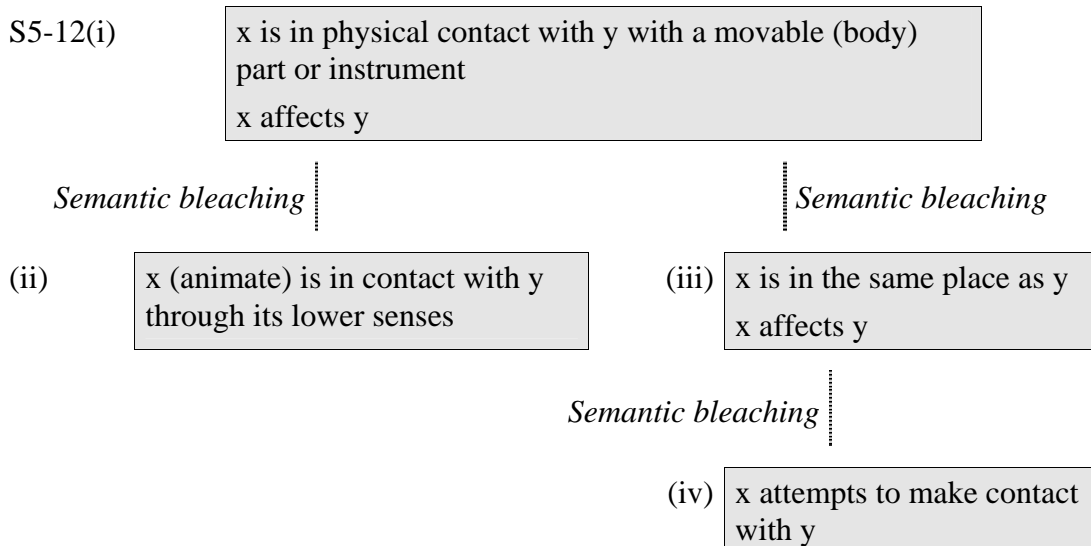
Admittedly, the differences between these senses are not as clearcut as this representation suggests: It has already been pointed out that at least tactile perception is also covered by the basic sense of *-mili/ -angu,* and that it is not always clear whether *-mili/ -angu* is applied in its interaction 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,   <u>naib</u>-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) <u>bablu</u>-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

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[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) <u>that</u> <u>much</u> 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)

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[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

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[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.

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[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..   mununggu
          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).

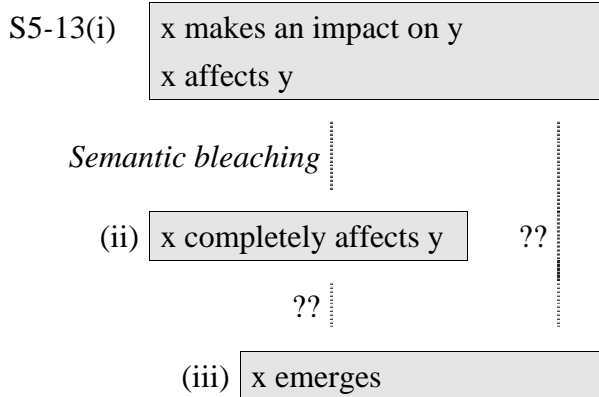S5-13(iii)   *-ma* 'HIT' __ Coverb_Emerge | x emerges |

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.

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[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'*

S5-13(i)
| x makes an impact on y |
| x affects y |

Semantic bleaching

   (ii) | x completely affects y | ??

        ??

    (iii) | x emerges |

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**   ga**na-**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**..   ga**na**-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   ga**na**
         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) <u>en</u>   thanthu-ni   <u>swing</u>,
         and   DEM-ERG   swing

         mama   ngarrgina ngagaj **bag**[127] ga**na**   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)**   x makes an impact on y with the edge of a body part or
           'CHOP'   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

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[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* | x makes an impact on y with the foot |
          'KICK/STEP' | 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**   ga**nama-**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**   <u>baijinggel</u> \
       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* | x makes an impact on y with the foot
           'KICK/STEP' | 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* | x makes an impact on y, **moving on a**
           'KICK/STEP' | **downward trajectory**
                       | x affects y

Fig. 5-15. *Semantic extension of* -inama *'KICK/STEP' (II)*
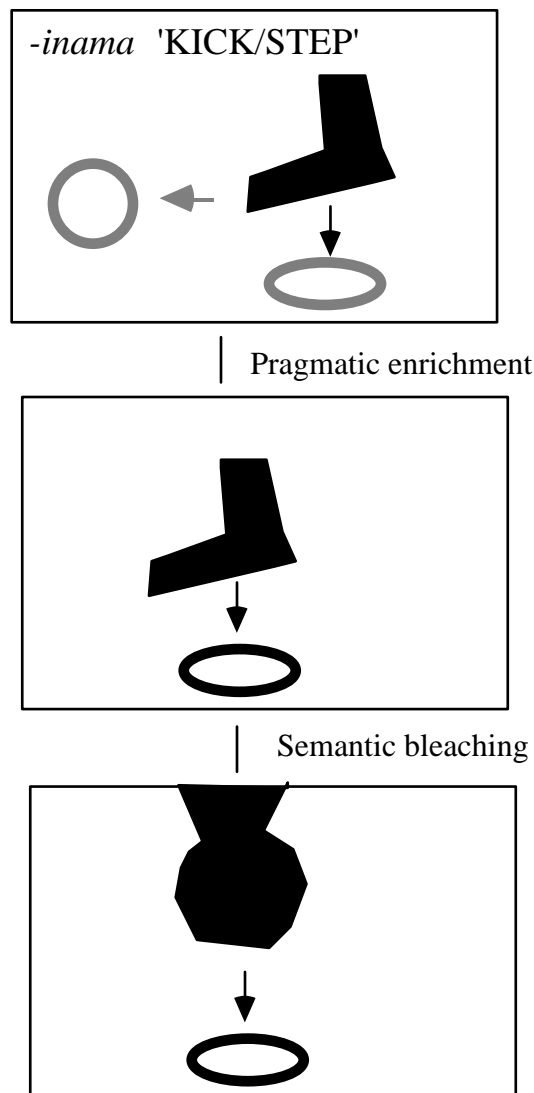
5.4.5   *-ijja / -yaluga*[128] **'POKE'**

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

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[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)   <u>naib</u>-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)

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[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: ga**na**-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

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[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.
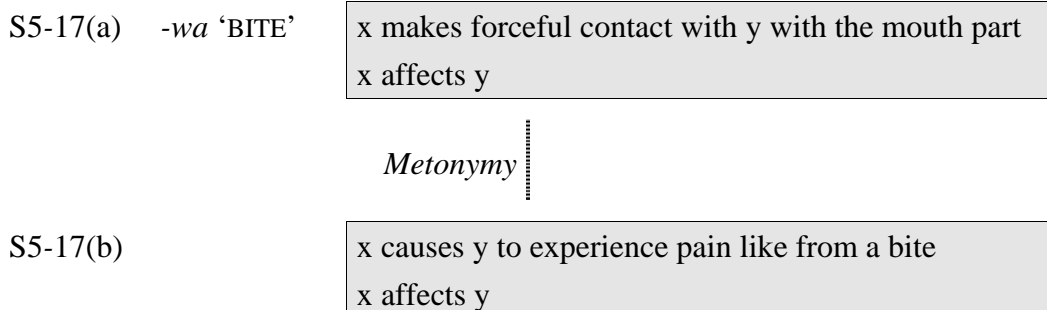
(5-252) mulurung-ni=binji=wung \
         buttocks-ERG/INSTR=ONLY=COTEMP

       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'*

S5-17(a)   *-wa* 'BITE' | x makes forceful contact with y with the mouth part
                          | x affects y

                   Metonymy

S5-17(b) | x causes y to experience pain like from a bite
           | x affects y

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, *didid* '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 <u>en</u> 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   <u>road</u>-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).

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[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

        <u>en</u>   **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)
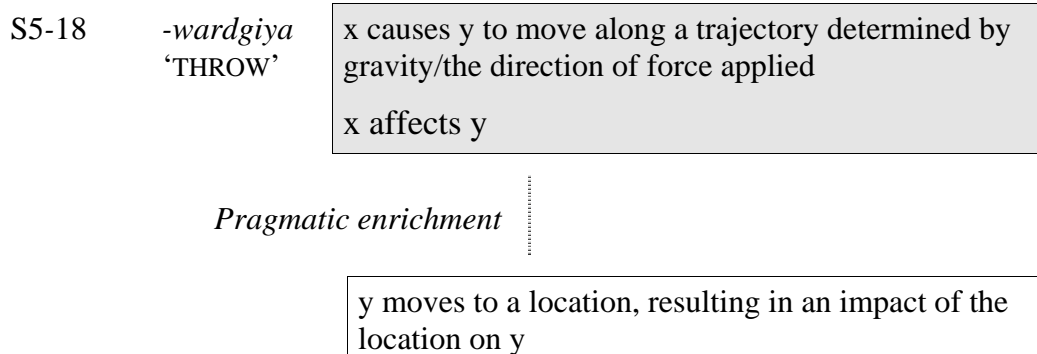
Taken together, these differences suggests that -*yu(nggu)* 'SAY/DO', in combination with coverbs of induced ballistic motion, can only describe the fact of release. This is consistent with the other functions of this verb, e.g. in combination with coverbs of internal motion and of sound emission, and 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.
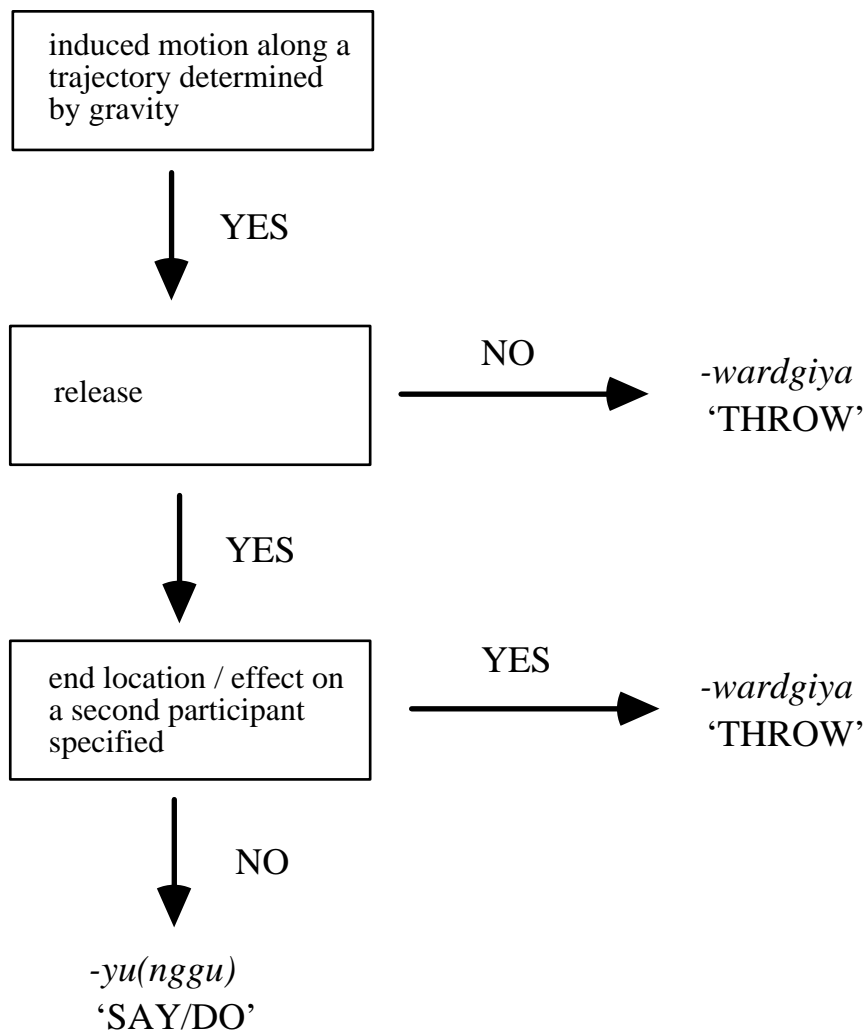
Still, as was also shown above, -*wardgiya* is compatible with the specification of an end point of the trajectory. Only in this context does this verb enter into opposition with -*arra* 'PUT' (e.g. with positional coverbs like *bayirr* 'supported' in (5-262); compare this to (5-6) in §5.2.1). Most importantly, 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'*

S5-18 -*wardgiya* 'THROW'

> x causes y to move along a trajectory determined by gravity/the direction of force applied
>
> x affects y

Pragmatic enrichment

> y moves to a location, resulting in an impact of the location on y

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.

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[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 Ungarinyin, 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'*

```
┌─────────────────────────┐
│ induced motion along a  │
│ trajectory determined   │
│ by gravity              │
└─────────────────────────┘
            │
            │ YES
            ▼
┌─────────────────────────┐        NO
│                         │ ──────────────────▶   -wardgiya
│ release                 │                        'THROW'
│                         │
└─────────────────────────┘
            │
            │ YES
            ▼
┌─────────────────────────┐        YES
│ end location / effect on│ ──────────────────▶   -wardgiya
│ a second participant    │                        'THROW'
│ specified               │
└─────────────────────────┘
            │
            │ NO
            ▼
       -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'

(§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 inadvertently 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*
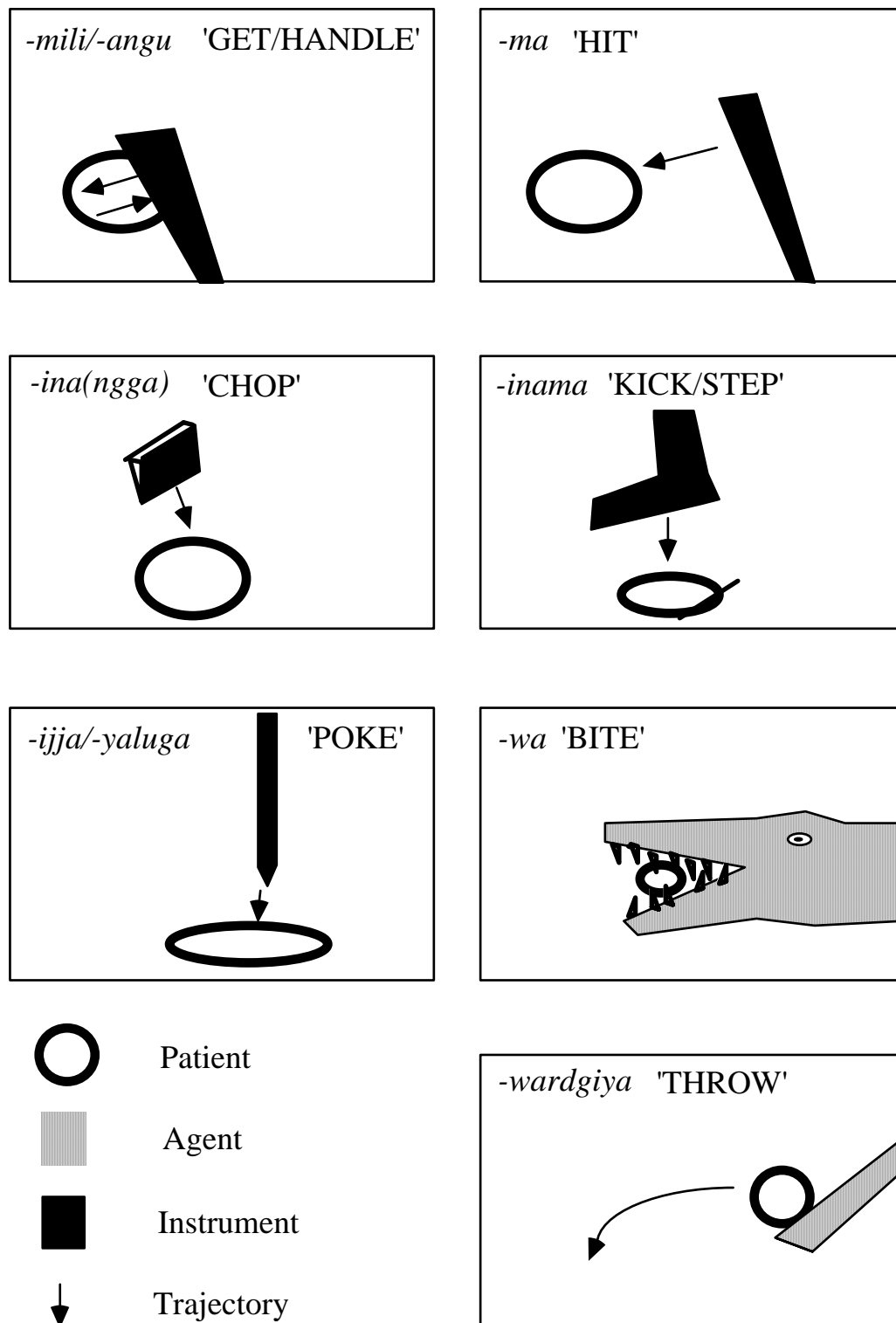
The verbs of contact/force are also in opposition with other transitive verbs; these are the verbs of cooking/burning, *-irna* 'BURN' and *-irriga* 'COOK', which encode affectedness by heat, and two verbs which encode affectedness in their extended, but not their primary, senses, *-uga* 'TAKE' (in its 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)

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[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.

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[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-k**irriga**   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

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[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').

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[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 absolute – 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)

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[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 absolute, 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.

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[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,   <u>nathing</u>,   **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   <u>nau</u>   **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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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 perfor-mance 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 | x internally causes, and gives
          __ [NSpeech]E | immediate evidence of, an event E
          __ [CoverbActivity]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

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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.).

moving'. [148] It 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.

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[148]   The bivalent coverbs of induced ballistic motion also have a 'thrower' participant, but *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 over-lapping 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'*
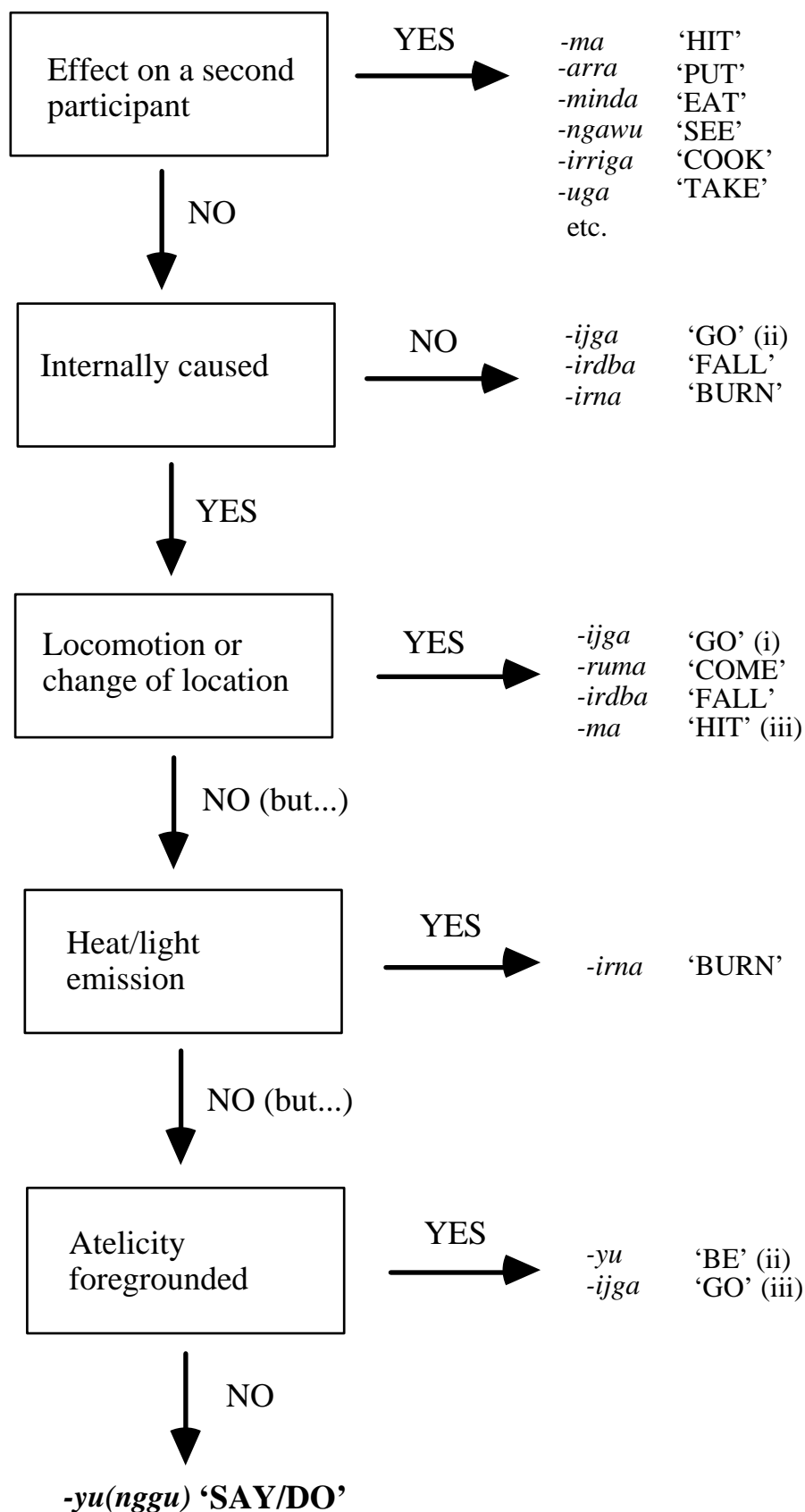
Fig. 5-21. *Possible network of uses of* -yu(nggu) *'SAY/DO'*
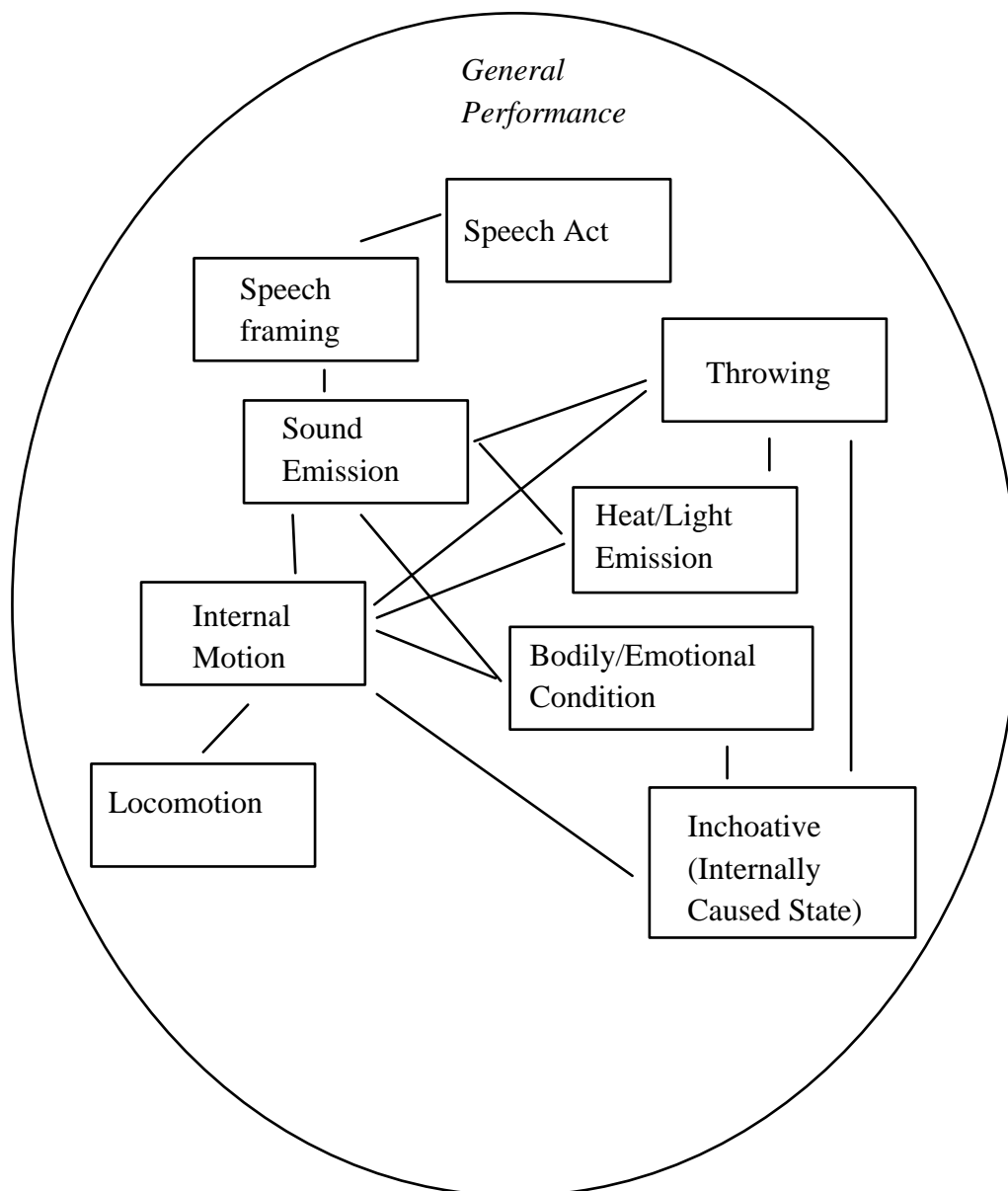
5.7   Verbs of caused change of possession

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 straight-forwardly 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**,   munmunggu   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) mululurru   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)

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[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' [__
           Coverb$_{Contact/Effect}$]E
                    [__ Coverb$_{IndirectEffect}$]E

x (animate) directs event E at z

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'*

S5-22(i) | x (animate) causes y to be located at z (animate), such that z controls y

Metaphor   *Metaphor*   *Metaphor*

(ii) | x (animate) transmits y (information) to z (animate)

(iii) | x/z (animates) say "y" to one another

(iv) | x (animate) directs event E at z

x affects z

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   <u>na</u>   buru   nga-w-uga,
          big   NOW   return   1sg:3sg-FUT-TAKE

          nuwina-bina   <u>femili</u>,   burru-wu-**ngawu**   **gujugu**   <u>na</u>,
          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,   <u>this long time</u>   nyunga   <u>na</u>,
          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)

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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'*

S5-24(i)   *-ngawu* 'SEE'

> x (animate) directs one's eyes at y
> x visually perceives y

Metonymy +
semantic bleaching

S5-24(ii)   *-ngawu* 'SEE' __ Coverb$_{Aggr}$

> x (animate) directs aggressive behaviour at y

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.*

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[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)   <u>mijin</u>   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 com-
bine 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)

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[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

              <u>**mad**</u>-**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-k**ilinyma**-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-**nangga**-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.

S5-26(i)   *-(ma)linyma* 'MAKE'

x brings y into existence (from something)

Metaphor

S5-26(ii)   *-(ma)linyma* 'MAKE'
            __ [Coverb$_{+monov., +Int.Cause}$]E

x causes y to bring about an event E

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.

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[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 be used to

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[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).

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* | x causes y to be outside x's body |
           'excrete'

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)

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[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

Verb		GLOSS		Semantic Characterisation
-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(iiia)	x (animate) has y in mind
			S5-7(iiib)	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 same direction as a goal which 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 and

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[158] As shown in §5.6.1.2.2, -*yunggu* 'SAY/DO' may be used for some types of locomotion.

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 in-cluded; 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.
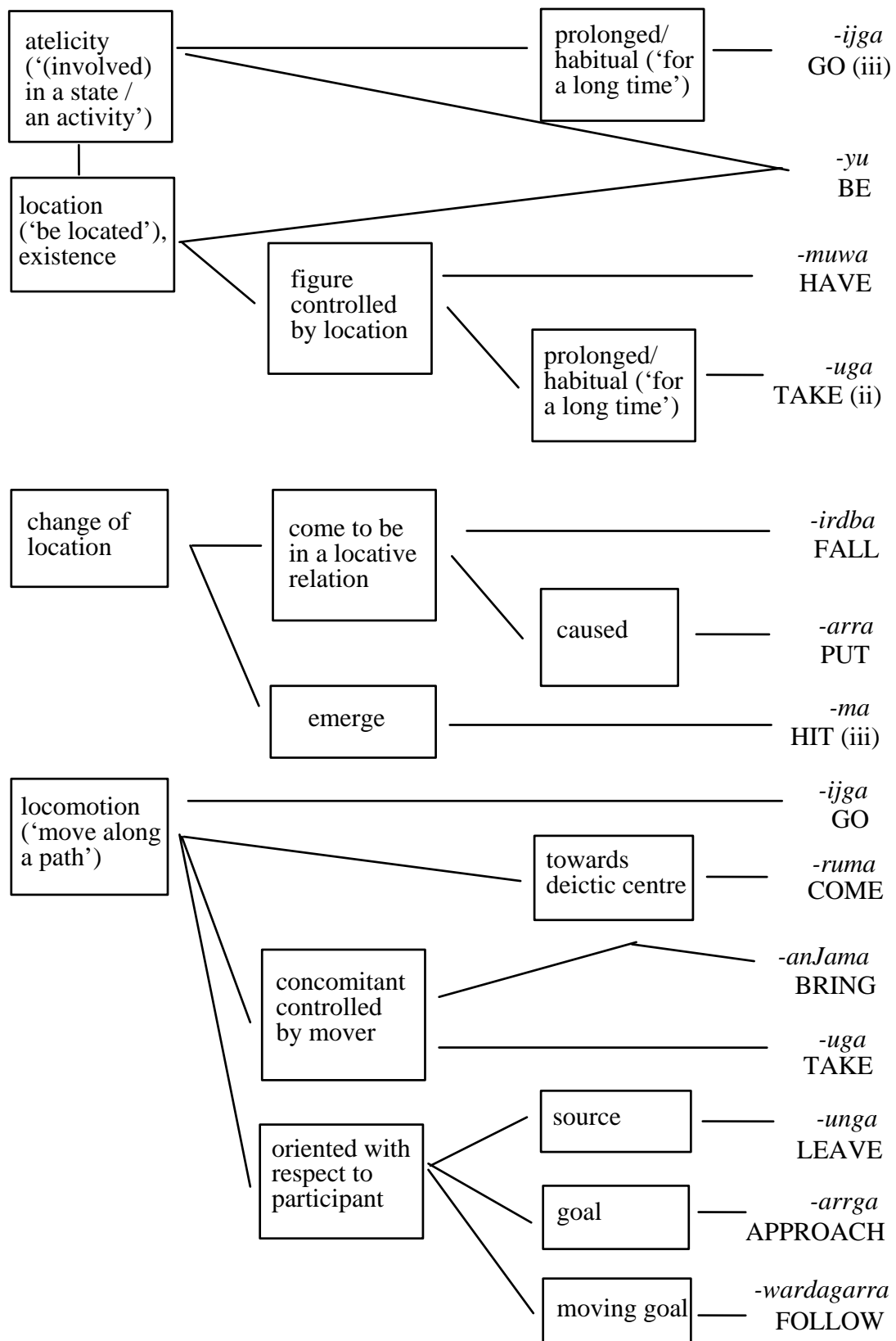
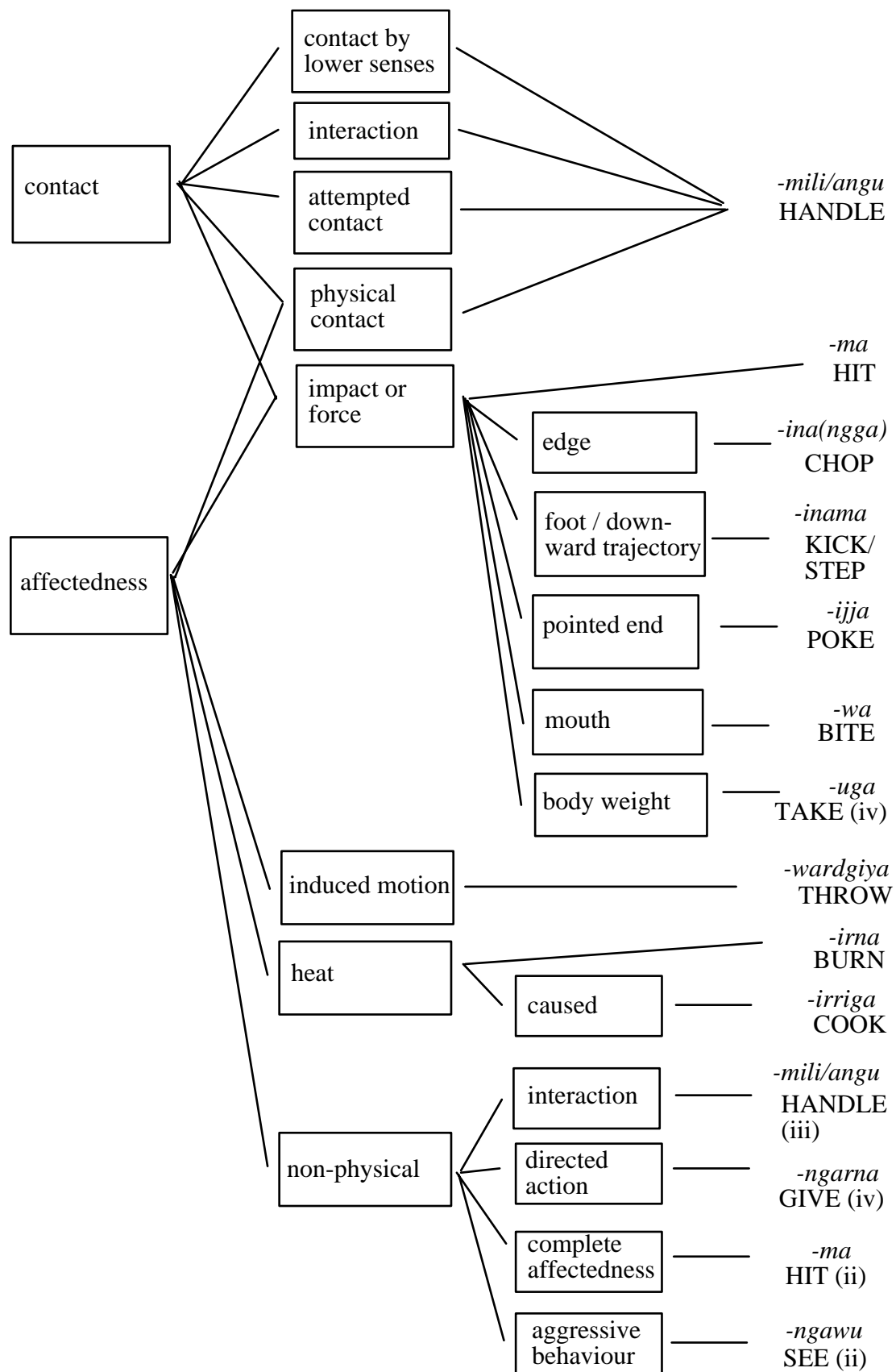Fig. 5-24. *Features relevant for the categorisation: location and locomotion*
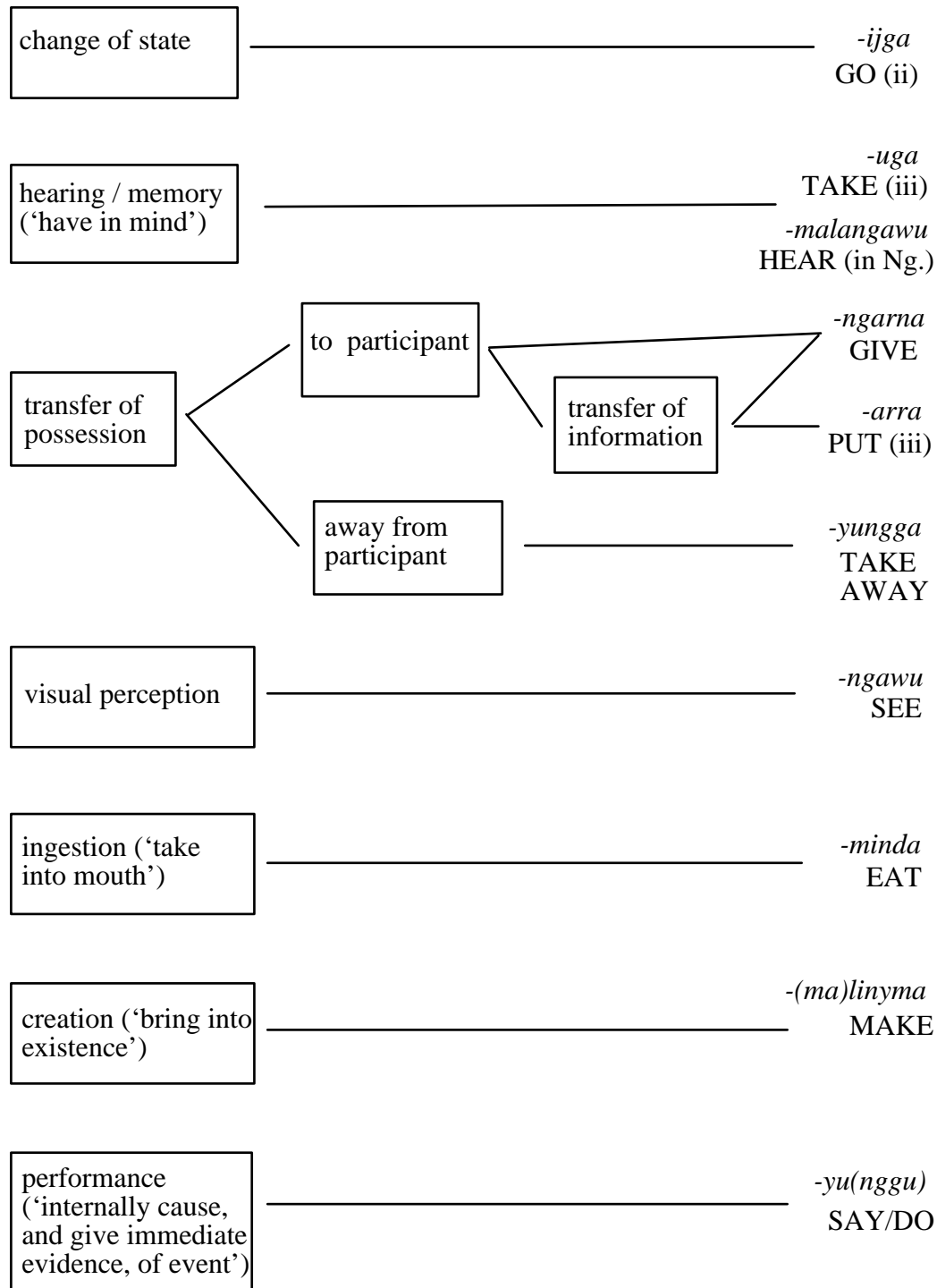
Fig. 5-25. *Features relevant for the categorisation: contact/affectedness*

Fig. 5-26. *Features relevant for the categorisation: other features*

change of state	—————————————————————————— *-ijga* GO (ii)

hearing / memory ('have in mind')	*-uga* TAKE (iii) —————————————————————— *-malangawu* HEAR (in Ng.)

transfer of possession

to participant

transfer of information

-ngarna GIVE

-arra PUT (iii)

away from participant —————————— *-yungga* TAKE AWAY

visual perception	——————————————————————————— *-ngawu* SEE

ingestion ('take into mouth')	——————————————————————————— *-minda* EAT

creation ('bring into existence')	—————————————————————— *-(ma)linyma* MAKE

performance ('internally cause, and give immediate evidence, of event')	—————————————————————— *-yu(nggu)* SAY/DO

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 more-over 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)liny-ma* '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 to 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*

Location / Change of locative relation

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
-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

Verb form	Gloss	Total frequency	Simple verbs vs. complex verbs		Number of coverbs
-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	Simple verbs vs. complex verbs		Number of coverbs
		% of all verb tokens	% of all verb tokens	% of tokens / verb	n of types
-mili/-angu	GET/	7.8	2.3	30	
	HANDLE		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	Simple verbs vs. complex verbs		Number of coverbs
		% of all verb tokens	% of all verb tokens	% of tokens / verb	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.