ON THE DIFFERENCE BETWEEN AUXILIARIES, SERIAL VERBS AND LIGHT VERBS

Melanie Seiss Universität Konstanz

Proceedings of the LFG09 Conference

Miriam Butt and Tracy Holloway King (Editors)

2009

CSLI Publications

http://csli-publications.stanford.edu/

Abstract

In this paper I look at light verb, serial verb and auxiliary constructions crosslinguistically and try to set up criteria to distinguish these constructions. I argue that while a coherent set of properties can be found to distinguish light verbs from auxiliaries, it is more difficult to find crosslinguistic criteria which set serial verbs apart from light verbs and auxiliaries. This is because the class of serial verbs is not coherent, i.e. it is not clear which constructions should be considered serial verbs. Nevertheless, when looking at a specific language in detail, it can be established whether a construction may be considered a serial verb.

As a case study, I look at posture verbs in Ngan'gityemerri, a Northern Australian language. In Ngan'gityemerri, posture verbs can be used as simple verbs, in verb + coverb complexes and as clitics which attach to verb + coverb complexes. I show that while these constructions seem to be very similar at first glance, they behave differently when looked at in more detail. Thus, I argue that verb + coverb complexes are complex predicates while the encliticized posture verb should be best analyzed as an auxiliary.

1 Introduction

The study of complex predictes has received a lot of attention, both descriptive and theoretical. Butt (1995) defines a complex predicate in terms of Lexical-Functional Grammar (LFG) as follows:

- (1) Definition of a Complex Predicate (Butt 1995)
 - The argument structure is complex (two or more semantic heads contribute arguments).
 - The grammatical functional structure (f-structure) is that of a simple predicate. It is *flat:* there is only a single predicate (a nuclear PRED) and a single subject.
 - The phrase structure (c-structure) may be either simple or complex. It does not necessarily determine the status of a complex predicate.

Similar definitions can also be found in Mohanan (1994, 1997) or Alsina et al. (1997). Despite this clear definition, it is not easy to distinguish complex predicates from other syntactic constructions. Complex predicate constructions can be confused with coordinated or subordinated sentence constructions when the monoclausality of the constructions is not shown properly or they can be confused with monoclausal syntactic constructions like auxiliary verb constructions or serial verb constructions. In this paper I will focus on this second problem.

[†]Many thanks go to Rachel Nordlinger for pointing me towards the Ngan'gityemerri data and to my supervisor Miriam Butt for help with the analysis and making it financially possible for me to attend the conference.

Light verbs in complex predicate constructions, auxiliaries and serial verbs are often also very similar semantically. This makes them very hard to distinguish. As an example, consider the sentences in (2). All sentences contain an inflected form of 'stand' in combination with either an uninflected or inflected "main" verb and it seems that 'stand' in these sentences conveys mostly aspectual information. Nevertheless, the constructions have been analyzed (or at least called) differently by different researchers. Lemmens (2005) treats the Dutch example in (2a) as an auxiliary construction while Aikhenvald (1999) calls the Tariana example in (2b) a serial verb construction and Bowern (2004) uses the Turkmen sentence in (2c) as an example for a complex predicate.

(2) a. Auxiliary Construction

Ik stond te wachten.

I stood to wait-INF

'I was (standing and) waiting.' (Dutch, Lemmens, 2005, 184))

b. Serial Verb

tuici-kere na-hwa nema. bird-island 3PL-stay 3PL-stand

'They stayed at the Bird Island for a long time.' (Tariana, Aikhenvald, 1999, 480)

c. Complex Predicate

Ali kitabi okuyup turdu.

Ali book-ACC read-GER 'stand'-PST

'Ali kept on reading a book. (Turkmen, Bowern, 2004, 253)

I do not want to claim here that all these constructions are the same, but I argue that a careful, detailed study to decide on the status of these multi-verbal constructions is needed. Although it it clear that there is not a clear-cut difference between the constructions, I claim that differences still exist, and that criteria can be established to decide on the status of these constructions.

Distinguishing between auxiliary, light verb or serial verb constructions goes beyond the merely terminological. A unified terminology enables linguists to compare constructions crosslinguistically and to test analyses proposed for a construction in one language against the same construction in other languages. For example, Baker's (1989) analysis of serial verbs is often criticized for only accounting for serial verbs which share their objects. Shared objecthood, however, is a defining feature for serial verbs as understood by Baker (1989). His analysis thus cannot be evaluated against serial verbs which do not share their objects.

To avoid such problems, I try to set up crosslinguistically valid criteria to distinguish between auxiliary, light verb and serial verb constructions. I briefly review the state of the art on these constructions in section 2 and propose some criteria to

distinguish the constructions. In section 3, I look at two different constructions in Ngan'gityemerri (Reid, 1990, 2000, 2002, 2003; Reid and McTaggart, 2008) as a case study. Section 4 concludes the discussion.

2 Establishing Crosslinguistic Criteria

2.1 The Problem of Serial Verbs

Serial verb constructions are an important topic in research on West African, Oceanic and Asian languages. Work on serial verbs includes among others Stewart (1963); Foley and Olson (1985); Sebba (1987); Baker (1989); Joseph and Zwicky (1990); Osam (1994); Bodomo (1996, 1997); Andrews (1997); Aikhenvald (1999, 2006); Stewart (2001); Foley (2009); Jarkey (2009); Appah (2009). In spite of this substantial body of research, still no agreed upon set of defining features of serial verbs has been established. Thus, serial verbs do not seem to be a coherent syntactic class, or, as Crowley (2002) put it, "many authors are not fully explicit about what they mean by serial verbs, with some writers simply treating any verb-verb sequence as serial verbs as long as the second verb is not obviously marked as an infinitive". For a discussion of this problem see for example also Sebba (1987) and Lord (1993).

Most importantly, researchers differ in their views on object sharing, switch-subject constructions and shared tense, aspect and polarity features, of which the issue of object sharing is the most controversial. While some researchers, e.g. Stewart (1963), Baker (1989) or Stewart (2001), require objects to be shared, others do not require objects to be shared, e.g. Crowley (2002); Aikhenvald (1999, 2006). More precisely, most researchers agree on treating sentences like (3a) as serial verbs, because *èvbàré* 'food', is the object of both verbs. Sentence (3b), on the other hand, is a combination of an intransitive and a transitive verb. Thus, the object cannot be shared and some researchers (e.g. Stewart 2001) would not treat this construction as an instance of serial verbs.

- (3) a. *Òzó dệ èvbàré rhié nè Ìfuệkò*Ozo buy food give to Ifueko
 - 'Ozo bought the food and gave it to Ifueko.' (Èdó, Stewart, 2001)
 - b. Úyì hìá lé èvbàré
 Uyi try cook food
 'Uyi managed to cook food.' (Èdó, Stewart, 2001)
 - c. Àbiệ!yúwà hìín èrhán kpàán àlìmó
 Abieyuwa climb tree pluck orange

 'Abieyuwa climbed the tree and plucked an orange. (Èdó, Stewart, 2001)

(3c) is often called 'covert coordination' and is still more controversial than the examples above. Researchers who consider object sharing a defining feature clearly reject this construction as serial verbs. However, others claim that to decide whether (3c) is a serial verb construction, semantic and pragmatic features have to be taken into account. Thus, a serial verb can only be used to denote an accepted, although maybe complex, event in a culture. For example in Alamblak, an action which involves climbing a tree in order to look for insects is a reasonable event, but an action which involves climbing a tree in order to look at the moon is not (Bruce 1988, see also Durie 1997). This meaning cannot be expressed by a serial verb and (4b) is thus ungrammatical.

```
(4) a. mɨyt ritm muh-hambray-an-m tree insects climb-search.for-1Sg-3Pl
'I climbed the tree looking for insects.' (Alamblak, Bruce 1988, 29)
b. *mɨyt guñm muh-hëti-an-m tree stars climb-see-1Sg-3Pl
'I climbed the tree and saw the stars.' (Alamblak, Bruce 1988, 29)
```

As a result of these differences, different subgroupings have been proposed by different researchers. An early distinction along with a theoretical analysis was proposed by Foley and Olson (1985) who distinguish between nuclear and core layer serialization (see also Crowley 2002), i.e. they distinguish in principle between V and VP serialization. A distinction between covert coordination and serialization of verbs which form a complex event was proposed by Osam (1994), who calls these 'clause chaining' and 'integrated serial verbs' respectively. This distinction corresponds to what other researchers have called 'linking type' and 'modifying type' (e.g. Bamgbrose, 1974).

Aikhenvald (1999, 2006) looks at the problem from a different angle and distinguishes serial verb constructions according to verb classes. In a symmetrical serial verb construction both verbs come from an open verb class while in an asymmetrical serial verb construction one of the verbs comes from a restricted verb class, e.g. from motion or posture verbs. Finally, Andrews and Manning (1999) propose formal analyses for very different serial verbs in Tariana and Misumalpan and discuss different understandings of serial verbs by different researchers.

Although researchers do not agree upon these differences, some properties are shared among all of them. Thus, Bowern (2008) lists the following concepts as properties of serial verbs in general:

- (5) Properties of Serial Verbs (Bowern 2008)
 - the clause contains two (or more) verbs under a single intonation contour
 - the verbs must be full lexical verbs which can head simple predicates in their own right

- the verbs share at least one argument
- the verbs behave as a single unit for tense, aspect, and polarity marking

While this set may be the minimal similarities of the constructions called serial verbs in the literature, it is impossible to find a proper analysis which accounts for all constructions which may fall under this definition. In the same way, these properties make it hard to distinguish serial verbs from auxiliaries and light verbs. As a consequence, serial verbs cannot be compared as a whole class to complex predicates or auxiliaries (see also Beermann and Hellan 2002). Careful language-specific studies are needed to decide whether certain kinds of serial verbs may be auxiliaries or complex predicates, for example serial verbs which do not share their object, like causative or aspectual serial verbs, may be complex predicates or auxiliaries.

Other serial verb constructions may be distinguished from complex predicates and auxiliary constructions, for example symmetrical serial verbs in which both verbs carry their full semantic content, i.e. when they are not "light" verbs. Additionally, morphological marking for tense, person etc. can be on just one, on more or on all verbs in a serial verb construction. On the other hand, morphological marking in complex predicates is usually just on the light verb. Finally, there seems to be a difference in the semantics of many kinds of serial verbs and complex predicates. Thus, verbs in serial verb constructions denote single events which constitute a complex event together while light verbs provide more information about the event of the main verb (Butt, 1995) and auxiliaries mainly provide information about tense, aspect and mood.

To sum up, as constructions called serial verbs vary in details such as object sharing etc., they cannot be compared as a whole syntactic class to auxiliaries or light verbs. Common properties of serial verbs as proposed by Bowern (2008) or Aikhenvald (2006) are useful for a typology of serial verbs. To decide whether a given serial verb in a specific language may be a light verb or auxiliary, a detailed study of this serial verb construction is needed. In the following, I discuss some properties of auxiliaries and light verbs which may help to decide if a serial verb may be analyzed as auxiliary or light verb.

2.2 Auxiliaries and their historical development

Motion and posture verbs are common sources for auxiliaries, for example the English *going-to*-future or the Catalan *go*-past (Juge, 2006). When looking at the historical development of auxiliaries, one usually finds a consensus that auxiliaries may develop from main verbs when they acquire functional properties. There also seems to be a consensus that serial verbs can be an intermediate stage on the grammaticalization cline for auxiliaries (Anderson, 2006; Heine, 1993; Lord, 1993; Delancey, 1991). However, researchers do not agree on whether light verbs are an intermediate stage between main verbs and auxiliaries. Roberts and Roussou (2003)

discuss the development of English modal auxiliaries and state that there is some evidence for assuming that the pre-modal verbs, i.e. the verbs which developed into modals, were light verbs. However, they do not discuss this in detail and do not take a definite view on the matter. Similarly, Hopper and Traugott (1993) follow Hook (1974, 1991) in his proposal that light verbs in Hindi and other Indo-Aryan languages are an intermediate stage between main verbs and auxiliaries. However, Hopper and Traugott (2003) revise this view and state that it is not clear that auxiliaries developed from light verbs. Thus, they follow Butt's view on light verbs. Butt and Lahiri (2002) and Butt and Geuder (2003) claim that light verbs do not develop into auxiliaries but are a dead end in the development of verb forms. They show that light verbs in Urdu have been used similarly for thousands of years. Bowern (2008) agrees with the view that light verbs are not a necessary step for the development from main verbs to auxiliaries but leaves it open if light verbs can develop into other verbal forms or inflections.

In this debate it becomes apparent that a difference in the application of the terms 'complex predicate' and 'light verb' by different researchers is the, or at least one, reason for their differing views. While for example Butt and Lahiri (2002) have a very clear, narrow definition of light verbs and complex predicates, Anderson (2006) includes various syntactic constructions, such as serial verb constructions, verb plus clausal complement sequences, clause-chained or conjunctive sequences, under the label 'complex predicates'. No evidence to my knowledge has been presented in the literature so far that Butt and Lahiri's (2002) kind of light verb developed into an auxiliary.

Independently of whether light verbs are an intermediate step in the development of auxiliaries, drawing a line between auxiliaries and other verb forms is complicated by the diachronic perspective. In general, we find two major terminological traditions: some researchers (e.g. Kuteva, 2001; Lemmens, 2005; Anderson, 2006) do not make a distinction as to how far a verb has been reanalysed as an aspect marker. As soon as a verb is used in this way, it is called an auxiliary. Others (e.g. Heine, 1993) acknowledge that there is a transition period where the distinction is not clear but for the constructions at the starting and end point of the historic development one can find distinguishing features. For example, in Heine's (1993) view, an auxiliary has reached its 'developmental end-point' when the auxiliary can be used with its corresponding main verb, in sentences like *He is going to go to the cinema*.

Defining auxiliaries is further complicated by the fact that auxiliaries look very different in different languages. Thus, while most researchers agree that auxiliaries in some way position the event of the main verb in context to the speech or reference time, i.e. they convey information about tense and aspect, other properties of auxiliaries differ from language to language. Thus, in some languages auxiliaries carry all morphological information relating to a predicate such as person, number, tense/aspect/modality, negation marking etc., while in other languages auxiliaries show a reduced verbal behavior.

Connected to this question is the problem whether auxiliaries can combine with inflected main verbs or if they have to carry all inflections themselves.¹ One example for a combination of an auxiliary with an inflected main verb comes from Urdu ((6)). Butt and Lahiri (2002) show that in Urdu, 'be' can be used as an auxiliary marking past tense in combination with main verbs which themselves can be marked in different ways.

- (6) a. nadya=ko xat mul-e t^h-e
 Nadya.F=Dat letter.M.Nom receive-Perf.M.Pl be.Past-M.Pl
 'Nadya had received letters.' (Urdu, Butt and Lahiri, 2002)
 - b. *nadya=ko* xat *mul-t-e* t^h -*e* Nadya.F=Dat letter.M.Nom receive-Impf-M.Pl be.Past-M.Pl 'Nadya used to receive letters.' (Urdu, Butt and Lahiri, 2002)

One question on which researchers also do not agree is whether the auxiliary may still carry some of its original semantic meaning. Heine (1993), however, points out that this is not a very reliable criterion as even with accepted auxiliaries such as in the English going-to-future, it is not always clear whether *is going to* as used in (7b) is a grammatical or verbal element.

- (7) a. He is going to town.
 - b. He is going to work.
 - c. He is going to come.

That an auxiliary still carries some of its original meaning in certain contexts is especially common of auxiliaries which developed from posture or motion verbs. For example, Lemmens (2005) looks at aspectual posture verb constructions in Dutch which are used to convey progressive, durative or habitual meaning. Examples of such constructions are given in (8).

(8) Ik zat te lezen / ik stond te wachten / ik lag te slapen.

I sat to read-INF / I stood to wait-INF / I lay to sleep-INF

'I was (sitting and) reading /(standing and) waiting / (lying and) sleeping.'

(Lemmens, 2005, 184)

In the examples in (8) it can be argued that the meaning of the posture verbs is still important as the meaning of the main predicate fits to their meaning. However, these constructions can also be used when the agent's posture is not an issue, or when the posture denoted by the auxiliary does not correspond to the posture of the main verb, for example as illustrated in (9).

(9) Wat zit ik hier toch rond te lopen? (pers. attestation) what sit I here (toch) around to walk?

'Why on earth am I walking (around) here?' (Lemmens, 2005, 185)

¹I thank Rachel Nordlinger (p.c.) for bringing up this question.

Similar examples are also discussed in Kuteva (2001). It would be very strange to call the posture verb in (9) auxiliary but exclude the posture verbs in (8) from being an auxiliary in the Dutch verbal system. Thus, in my view an auxiliary can also carry some of the original semantics of the verb it developed from.

Summing up, in my view auxiliaries developed from main verbs and can mark tense, aspect or modality. They may also carry some of their original semantic meaning and may combine with inflected main verbs. More properties can be set up to distinguish auxiliaries from light verbs, which I will discuss in the next section.

2.3 Light Verbs vs. Auxiliaries

Butt (2009) states that tests to distinguish light verbs from main verbs or auxiliaries differ from language to language. However, there are also some properties which set light verbs apart from auxiliaries crosslinguistically. Butt and Lahiri (2002) name some more properties to distinguish light verbs from auxiliaries.

- (10) Properties of light verbs (Butt, 2009; Butt and Lahiri, 2002)
 - light verbs are always form identical to the corresponding main verb whereas auxiliaries are usually just form identical at the initial stage of reanalysis from verb to auxiliary.
 - light verbs always span the entire verbal paradigm (are not restricted to appear with just one tense or aspect form).
 - light verbs do not display a defective paradigm.
 - light verbs exhibit subtle lexical semantic differences in terms of combinatorial possibilities with main verbs, are thus restricted in their combinations. Auxiliaries, on the other hand, are not restricted in their combinatorical possibilities, but do not have to combine with every main verb.

When looking at complex predicates crosslinguistically, further properties of light verbs can be observed which set them apart from auxiliaries, although sometimes a very careful look is needed to distinguish the two constructions. For example, light verbs contribute semantic information about the type of event. This can sometimes include Aktionsart information, which can be confused with aspect, especially if the light verb is encoding telicity/completeness as in (11)

(11) nadya=ne xat lıkʰ li-ya.
Nadya.F.Sg=Erg letter.M.Nom write take-Perf.M.Sg
'Nadya wrote a letter (completely).' (Urdu, Butt, 1995)

However, other differences also exist. Thus, light verbs can change the valency of a construction, for example in causative constructions as in (12). The light verb

faire 'make', adds an argument, the causer, to the construction. Auxiliaries are not able to add or reduce arguments. Passive auxiliaries, which may be considered as reducing the arguments at first glance, seem to be very different from light verbs when looked at in more detail. For example, passives do not change the basic argument structure, just its syntactic realization, and the agent can still be expressed as a adjunct.

```
(12) Jean a fait partir Marie.

Jean has made go Marie

'Jean made Marie go.' (French, Rosen, 1990, 37)
```

Another property in which light verbs and auxiliaries differ is the ability to assign case. Light verbs may determine case assignment, e.g. in (13), the case of the subject depends on the choice for the light verb. Auxiliaries, in contrast, are usually not considered to be able to assign case, but may be sensitive to categories such as unaccusative vs. unergative.

```
a. ilaa-ko khaanaa pasand huaa
Ila-D food-N like happen-PF
'Ila liked the food. (Hindi, Mohanan, 1997, 437)
b. ilaa-ne khaanaa pasand kiyaa
Ila-E food-N like do-PF
'Ila liked the food. (Hindi, Mohanan, 1997, 437)
```

Finally, light verbs may determine theta-role assignment while auxiliaries cannot. In (14), an example from Bardi, the light verbs *ma* 'put' or *ga* 'carry' result in a different theta-role-assignment when combined with the coverb *abarrabarr*. In (14a), there is only one theta-role, a theme. In contrast, in (14b), two theta-roles are assigned, an agent and a patient.

```
a. abarrabarr-ma- 'to be careless'b. abarrabarr-ga- 'to lead someone astray' (Bardi, Bowern, 2004)
```

To sum up, light verbs and auxiliaries may differ in their combinatorical behavior, their paradigm, their ability to change the valency of a main verb and their ability to assign case or theta roles. Both may develop from main verbs, but while auxiliaries may develop further into clitics and morphological markers, light verbs seem to be a dead end. As serial verbs are a very diverse syntactic class, no claim can be made that all serial verbs are light verbs or auxiliaries on the one hand, on the other hand it cannot be claimed that no serial verb is a light verb or auxiliary either. This has to be investigated for each serial verb construction in a language in detail. In the following section, I look at two verbal constructions in Ngan'gityemerri and show that although they look very similar at first glance, one of them behaves like a light verb while the other is best analyzed as an auxiliary.

3 Case Study: Ngan'gityemerri Verbal System

3.1 A short overview of the verbal system

Ngan'gityemerri is a non-Pama-Nyungan, polysynthetic language of the Daly River region of Northern Australia (Reid, 2003). It has 31 inflecting verbs² with a very 'generic' meaning. In most cases, these inflecting verbs combine with a so-called coverb, an uninflecting element used to denote more specific verbal meanings. Of the 31 inflecting verbs, only twelve can be used as *simple* verbs in constructions without coverbs. An example of a simple verb construction is given in (15a). Of these simple verbs, seven are intransitive posture verbs like 'sit', 'stand', 'lie', 'go' etc. (Reid, 2000). These verbs will be the focus of this case study. Apart from the seven intransitive verbs, five transitive verbs can also function as simple verbs. The remaining transitive and reflexive detransitive inflecting verbs can only be used in combination with a coverb as in (15b). For more information on the verbal constructions in Ngan'gityemerri in general I refer the reader to Reid (1990, 2000, 2002, 2003); Reid and McTaggart (2008).

Apart from simple and complex verb constructions, Ngan'gityemerri has also developed a construction which Reid (2002) calls *serialized posture verb construction*. In this construction, posture verbs cliticize onto a light verb + coverb complex, adding aspectual information. An example of this construction is given in (15c).

(15) a. **Inflecting Verb:**

Ngirim.

1SG.S.sitPR

'I'm sitting.'

(Reid, 2002, 241)

b. Inflecting Verb + Coverb:

Ngirim-tyerrakul.

1GS.sit.PR-talk

'I'm talking.'

(Reid, 2002, 243)

c. Inflecting Verb + Coverb + Encliticized Inflecting Verb:

Nganni-batybity-tye-nginni.

1PLEXS.poke.PI-sew.PAST-1PLEX.sit.PI.

'We were sewing.'

(Reid, 2002, 256)

It has been argued successfully by different researchers (Schultze-Berndt, 2000; Wilson, 1999; Bowern, 2004) that constructions involving inflecting verbs plus coverbs like (15b) involve complex predicates, i.e. that the inflecting verb is a light verb in this case. In the next subsection I show that this is also true for inflecting verbs in Ngan'gityemerri. However, I argue that constructions like (15c) should

²These inflecting verbs have very complex paradigms, i.e. each inflecting verb has at least 33 different forms, some have as many as 44 different forms (Reid and McTaggart, 2008)

not be considered serial verb constructions or complex predicates. Instead, the encliticized verb should be analyzed as an auxiliary. Before going into the properties of this construction in detail, I provide some examples.

In addition to the past progressive example in (15c), these constructions can also have present or future tense where the person, number and tense markers of the encliticized verb always have to correspond to the marking on the light verb:

(16) a. Dangim-batybity-dim.
3SG.S.poke.PR-sew-3SG.S.sit.PR

'She is sewing' (Reid, 2002, 256)

b. Warri-batybity-pe-wirri.
3PL.S.poke.IR-sew-FUT-3PL.S.sit.IR

'They will be sewing' (Reid, 2002, 256)

Reid claims that these constructions are used to "distinguish between present (ongoing) and habitual or between future perfective and future imperfective" (Reid, 2002).

'sit' seems to be the verb which most often cliticizes onto a verb+coverb complex and thus seems to be the most neutral one. However, other posture and motion verbs can also function in this way, e.g. 'go' is also possible as a clitic and Reid (2002) claims that 'go' is used to denote motion (17a), habitual activity (17b) or common knowledge facts (17c):

- (17) a. Werrimim-ne-tyerr-baty-wannim.

 3PL.S.hands.PR.-3SG.G-mouth-hold-3.PL.S.go.PR

 'They are leading him along.' (Reid, 2002, 258)
 - b. Madewetimbi wa-mumu-nimbi resyin
 long ago male-taboo-SRCE rations
 wurrmu-wawu-tye-waddi.
 3PL.S.snatch.PI-pick up-PAST-3PL.S.go.PI
 'In the old days they used to collect rations from the policemen.'
 (Reid, 2002, 258)
 - c. Detyeri-werri yenim dem-wurity-yenim
 ear-ASSOC 3SG.S.goPR 3SG.S.hands.PR-fix-3SG.S.go.PR
 mudiga.
 car
 'He knows how to fix cars' (Reid, 2002, 258)

In the examples considered above, the encliticized verb has been bleached of its semantic content. However, there are also some, rare examples where the posture and motion verbs still carry some of their meaning:

- (18) a. *Yawul karrityinmade ngebem-wurity-ngerim tyatma*. spear bent 1.SG.S.bash.PR-fix-1.SG.S.sit.PR straight 'I'm sitting straightening this bent spear.' (Reid, 2002, 257)
 - b. Yawul karrityinmade ngebem-wurity-ngibem tyatma. spear bent 1.SG.S.bash.PR-fix-1.SG.S.lie.PR straight 'I'm lying straightening this bent spear.' (Reid, 2002, 258)
 - c. Yawul karrityinmade ngebem-wurity-ngirribem tyatma. spear bent 1.SG.S.bash.PR-fix-1.SG.S.stand.PR straight 'I'm standing straightening this bent spear.' (Reid, 2002, 258)

I will argue in the next subsection that all these constructions involving encliticized motion or posture verbs are best analyzed as auxiliary constructions, no matter how semantically bleached the clitics are.

3.2 Discussion of the data

In this section I discuss the two different verbal complexes in Ngan'gityemerri and show that the inflecting verb + coverb construction, as exemplified in (15b), is a complex predicate, i.e. the inflecting verb is a light verb. On the other hand, the encliticized posture verb, as e.g. in (15c), according to the before established criteria, is best considered an auxiliary.

First, neither of the two constructions should be considered a serial verb. If we assume object sharing as a defining feature of serial verbs, the inflecting verb in (15b) is intransitive and thus does not share the object with the coverb. But even without this property, the inflecting verb + coverb construction is not a serial verb construction. The coverb always has to combine with an inflecting verb, thus it cannot function as a verb on its own. The inflecting verb also acts more as a classifier and does not contribute a whole "subevent" as is usual for serial verbs.

Again, if we assume shared objects as defining feature of serial verbs, the encliticized posture verb which attaches to the inflecting verb + coverb complex as in (15c) cannot be considered a serial verb because the clitic is intransitive. Additionally, it does not contribute to the event semantics, but merely acts as aspect marker. Thus, in most accounts this construction would not be considered a serial verb. It may, eventually, be included in Aikhenvald's (2006) typology of serial verbs as an asymmetrical serial verb because the clitic comes from the restricted verb class of motion and posture verbs. However, as will be shown below, it shares some features with auxiliaries. Thus, in my view it should be considered an auxiliary and not a serial verb.

3.2.1 Inflecting verb + coverb as light verb

The verb in the inflecting verb + coverb construction should be considered a light verb because the verb does not have a defective verbal paradigm and is also always

form identical to the corresponding full verb, thus fulfilling two criteria Butt (2003) established.

Additionally, the verb displays subtle lexical semantic differences in terms of combinatorial possibilities with coverbs, i.e. it acts as classifier (McGregor, 2002) for these coverbs. It is usually expected for auxiliaries to be able to combine with every main verb. This is not the case for the inflecting verbs which can only combine with certain coverbs and leave arbitrary gaps.

Further evidence comes from valency alternations. While auxiliaries cannot change the valency of the verb they combine with, light verbs can. In Ngan'gityemerri, the inflecting verb determines the valency of the expression jointly with the coverb, e.g. the inflecting verb can reduce the number of arguments the coverb would need. In example (19), the coverb *tum* 'bury' would normally take two arguments, but through combining it with the intransitive inflecting verb 'sit', the whole verbal complex becomes intransitive.

```
(19) ngirim-tum.
1SG.S.sit-bury
'I'm sinking.' (Reid, 2000, 347)
```

On the other hand, in (20), the coverb du, 'sleep', only needs one argument. The inflecting verb dum, 'move', adds an argument which results in a causative reading.

```
(20) Ngirrngirr ngu-dum-birrki-du.
Sleep 1sG.A.move-3.DU.O-sleep

'I put them to sleep.' (Reid, 2000, 344)
```

Finally, the inflecting verb may carry the "main semantic information" of a sentence if it forms part of an inflecting verb + coverb complex, but not if it is used as clitic. Thus, in (21) the inflecting verb 'sit' not only contributes aspectual information, but is semantically the "main predicate" of the clause.

```
(21) winni-pappup-tye.
3.PL.S.sit.PI-climb-PAST

'They were sitting up on top (having climbed up).' (Reid, 2002, 252)
```

In sum, this evidence shows that inflecting verb + coverb complexes should be best analyzed as complex predicates. In the remainder of this section I discuss why encliticized inflecting verbs should be considered auxiliaries.

3.2.2 Encliticized posture verb as auxiliary

Although the inflecting verb used as clitic still displays its full verbal paradigm, there are differences in the behavior of the inflecting verb used in the different constructions. In a complex predicate construction, the inflecting verb can combine

only with a restricted number of coverbs. On the other hand, when used as a clitic, the inflecting verb can attach to almost every inflecting verb + coverb unit. More precisely, the posture verb can cliticize onto every coverb + inflecting verb complex unless the inflecting verb is a posture verb already.

In contrast to the light verb in complex predicate constructions, the encliticized posture verb never changes the valency of the coverb + inflecting verb combination and the semantic roles of the arguments are determined by the inflecting verb or the coverb, but never by the clitic.

Additionally, the encliticized posture verb mainly provides information about tense and aspect, at most some information about the posture of the subject as could be seen in the examples in (18), repeated here in (22).

```
(22) 'Yawul karrityinmade ngebem-wurity-ngirim/ngibem/ngirribem
spear bent 1.SG.S.bash.PR-fix-1.SG.S.sit/lie/stand.PR
tyatma.
straight
I'm sitting/lying/standing straightening this bent spear.' (Reid, 2002, 258)
```

This, as has been discussed above, should not be used to exclude an analysis as auxiliary. Especially because, just as with the Dutch examples above, some examples exist in which the encliticized posture verb does not correspond to the information encoded in the main verb or the context, e.g. (23) was uttered by someone standing upright, not sitting.

```
(23) Nginem-purrngpurrng-nyine-ngirim!
1.SG.SheatPR-boil-FOC-1SG.S.sit.PR
'I'm boiling it right now!' (Reid, 2002, 258)
```

Thus, the encliticized posture verb behaves very different from the inflecting verb in the complex predicate construction and has actually much more in common with auxiliaries crosslinguistically. Similarly to my treatment of Ngan'gityemerri cliticized posture and motion verbs, Street (1996) treats similar constructions in Murrinh-Patha, a closely related language, as auxiliaries marking continuous or habitual aspect.

4 Conclusion

In this paper I looked at light verb, serial verb and auxiliary constructions crosslinguistically and tried to set up criteria to distinguish these constructions. I argued that while a coherent set of properties could be found to distinguish light verbs from auxiliaries, it is more difficult to find crosslinguistic criteria which set serial verbs apart from light verbs and auxiliaries. This is because the class of serial verbs is not coherent, i.e. it is not clear which constructions should be considered

serial verbs. Nevertheless, when looking at a specific language in detail, it can be established whether a construction may be considered a serial verb.

As a case study, I looked at posture verbs in Ngan'gityemerri. In Ngan'gityemerri, posture verbs can be used as simple verbs, in verb + coverb complexes and as clitics which attach to verb + coverb complexes. I showed that while these constructions seem to be very similar at first glance, they behave differently when looked at in more detail. Thus, I argued that verb + coverb complexes are complex predicates while the clitic should be best analyzed as an auxiliary.

References

- Aikhenvald, Alexandra. 1999. Serial Constructions and Verb Compounding: Evidence from Tariana (North Arawak). *Studies in Language* 23(3), 469–498.
- Aikhenvald, Alexandra Y. 2006. Serial Verb Constructions in Typological Perspective. In Alexandra Y. Aikhenvald and R.M.W. Dixon (eds.), *Serial Verb Constructions: A Cross-linguistic Typology*, pages 1–68, Oxford: Oxford University Press.
- Alsina, Alex, Bresnan, Joan and Sells, Peter (eds.). 1997. *Complex Predicates*. Stanford: CSLI Publications.
- Anderson, Gregory. 2006. *Auxiliary Verb Constructions*. Oxford: Oxford University Press.
- Andrews, Avery. 1997. Complex Predicates and Nuclear Serial Verbs. In Miriam Butt and Tracy Holloway King (eds.), *On-line Proceedings of the LFG97 Conference*, Stanford: CSLI Publications.
- Andrews, Avery D. and Manning, Christopher D. 1999. *Complex Predicates and Information Spreading in LFG*. Stanford: CSLI Publications.
- Appah, Clement Kwamina Insaidoo. 2009. The representation of ISVC in C and F structures of LFG: A proposal. *SKASE Journal of Theoretical Linguistics* 6(1), 92–117.
- Baker, Mark. 1989. Object Sharing and Projection in Serial Verb Constructions. *Linguistic Inquiry* 20, 513–53.
- Bamgbrose, Ayo. 1974. On Serial Verbs and Verbal Status. *Journal of West African Languages* 9(1), 17–48.
- Beermann, Dorothee A. and Hellan, Lars. 2002. VP-Chaining in Oriya. In Miriam Butt and Tracy Holloway King (eds.), *Proceedings of the LFG02 Conference, National Technical University of Athens*, pages 40–57.

- Bodomo, Adams. 1996. Complex Verbal Predicates: the case of serial verbs in Dagaare and Akan. In Miriam Butt and Tracy Holloway King (eds.), *On-line Proceedings of the LFG96 Conference*, Stanford: CSLI Publications.
- Bodomo, Adams. 1997. A Conceptual Mapping Theory for Serial Verbs. In Miriam Butt and Tracy Holloway King (eds.), *On-line Proceedings of the LFG97 Conference*, Stanford: CSLI Publications.
- Bowern, Claire. 2004. *Bardi Verbal Morphology in Historical Perspective*. Ph. D.thesis, Harvard University.
- Bowern, Claire. 2008. The Diachrony of Complex Predicates. *Diachronica* 25(2), 161–185.
- Bruce, Les. 1988. Serialization: From Syntax to Lexicon. *Studies in Language* 12(1), 19–49.
- Butt, Miriam. 1995. *The Structure of Complex Predicates in Urdu*. Stanford: CSLI Publications.
- Butt, Miriam. 2003. The Light Verb Jungle. *Harvard Working Papers in Linguistics* 9, 1–49.
- Butt, Miriam. 2009. The Light Verb Jungle: Still Hacking Away. In Brett Baker, Mengistu Amberber and Mark Harvey (eds.), *Complex Predicates in Cross-linguistic Perspective*, Cambridge: Cambridge University Press, in press.
- Butt, Miriam and Geuder, Wilhelm. 2003. Light Verbs in Urdu and Grammaticalization. In Regine Eckardt, Klaus von Heusinger and Christoph Schwarze (eds.), Words in Time: Diachronic Semantics from Different Points of View, pages 295–349, Berlin: Mouton de Gruyter.
- Butt, Miriam and Lahiri, Aditi. 2002. Historical Stability vs. Historical Change, unpublished Ms., http://ling.uni-konstanz.de/pages/home/butt/.
- Crowley, Terry. 2002. *Serial Verbs in Oceanic*. New York/Oxford: Oxford University Press.
- Delancey, Scott. 1991. The Origins of Verb Serialization in Modern Tibetan. *Studies in Language* 15, 1–23.
- Durie, Mark. 1997. Grammatical Structures in Verb Serialization. In Alex Alsina, Joan Bresnan and Peter Sells (eds.), *Complex Predicates*, pages 289–354, Stanford: CSLI Publications.
- Foley, William. 2009. Events and Serial Verb Constructions. In Mengistu Amberber, Brett Baker and Mark Harvey (eds.), *Complex Predicates: A Cross-linguistic Perspective*, Cambridge: Cambridge University Press, in press.

- Foley, William A. and Olson, Mike. 1985. Clausehood and Verb Serialization. In Johanna Nichols and Anthony C. Woodbury (eds.), *Grammar Inside and Outside the Clause*, pages 17–60, Cambridge: Cambridge University Press.
- Heine, Berndt. 1993. *Auxiliaries: Cognitive Forces and Grammaticalization*. New York/Oxford: Oxford University Press.
- Hook, Peter Edwin. 1974. *The Compound Verb in Hindi*. Center for South and Southeast Asian Studies: The University of Michigan.
- Hook, Peter Edwin. 1991. The Emergence of Perfective Aspect in Indo-Aryan Languages. In Elizabeth Traugott and B. Heine (eds.), *Approaches to Grammaticalization*, pages 59–89, Amsterdam: Benjamins.
- Hopper, Paul J. and Traugott, Elizabeth C. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Hopper, Paul J. and Traugott, Elizabeth C. 2003. *Grammaticalization*. Cambridge: Cambridge University Press, second edition.
- Jarkey, Nerida. 2009. Cotemporal Serial Verb Constructions in White Hmong. In Mengistu Amberber, Brett Baker and Mark Harvey (eds.), Complex Predicates: A Cross-linguistic Perspective, Cambridge: Cambridge University Press, in press.
- Joseph, Brian D. and Zwicky, Arnold M. (eds.). 1990. When Verbs Collide: Papers from the 1990 Ohio State Mini-conference on Serial Verbs. Columbus: Ohio State working papers in Linguistics.
- Juge, Matthew L. 2006. Morphological Factors in the Grammaticalization of the Catalan 'go' Past. *Diachronica* 32(2), 313–339.
- Kuteva, Tania. 2001. *Auxiliation: An Enquiry into the Nature of Grammaticalization*. Oxford: Oxford University Press.
- Lemmens, Maarten. 2005. Aspectual Posture Verb Constructions in Dutch. *Journal of Germanic Linguistics* 17(3), 183–217.
- Lord, Carol. 1993. *Historical Change in Serial Verb Constructions*. Amsterdam/Philadelphia: John Benjamins.
- McGregor, William B. 2002. *Verb Classification in Australian Languages*. Berlin: Mouton de Gruyter.
- Mohanan, Tara. 1994. Argument Structure in Hindi. Stanford: CSLI Publications.
- Mohanan, Tara. 1997. Multidimensionality of Representation: NV Complex Predicates in Hindi. In Alex Alsina, Joan Bresnan and Peter Sells (eds.), *Complex Predicates*, pages 431–471, Stanford: CSLI Publications.

- Osam, Emmanuel Kweku. 1994. From Serial Verbs to Prepositions and the Road Between. *Language Typology and Universals* 47(1), 16–36.
- Reid, Nicholas. 1990. Ngan'gityemerri: A language of the Daly River Region, Northern Territory of Australia. Ph. D.thesis, The Australian National University, Canberra.
- Reid, Nicholas. 2000. Complex Verb Collocations in Ngan'gityemerri: A Non-derivational Strategy for Encoding Valency Alternations. In R.M.W. Dixon and Alexandra Y. Aikhenvald (eds.), *Changing Valency: Case Studies in Transitivity*, pages 333–359, Cambridge/Melbourne: Cambridge University Press.
- Reid, Nicholas. 2002. Sit Right Down the Back: Serialized Posture Verbs in Ngan'gityemerri and other Northern Australian Languages. In John Newman (ed.), *The Linguistics of Sitting, Standing and Lying*, pages 293–268, Amsterdam/Philadelphia: John Benjamins.
- Reid, Nicholas. 2003. Phrasal Verb to Synthetic Verb: Recorded Morphosyntactic Change in Ngan'gityemerri. In Nicholas Evans (ed.), *The non-Pama-Nyungan Languages of Northern Australia*, pages 95–123, Canberra: Pacific Linguistics.
- Reid, Nicholas and McTaggart, Patricia Marrfurra (eds.). 2008. *Ngan'gi Dictionary*. Armidale: Australian Linguistics.
- Roberts, Ian and Roussou, Anna. 2003. *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge: Cambridge University Press.
- Rosen, Sara Thomas. 1990. *Argument Structure and Complex Predicates*. New York/London: Garland Publishing.
- Schultze-Berndt, Eva. 2000. Simple and Complex Predicates in Jaminjung. Nijmegen: University of Nijmegen.
- Sebba, Mark. 1987. The Syntax of Serial Verbs. Amsterdam: Benjamins.
- Stewart, John. 1963. Some Restrictions on Objects in Twi. *Journal of African Languages* 2(2), 145–149.
- Stewart, Osamuyimen. 2001. *The Serial Verb Construction Parameter*. New York/London: Garland.
- Street, Chester S. 1996. Tense, Aspect and Mood in Murrinh-Patha. In William McGregor (ed.), *Studies in Kimberley Languages in Honour of Howard Coate*, pages 205–225, M"unchen/Newcastle: Lincom Europa.
- Wilson, Stephen. 1999. *Coverbs and Complex Predicates in Wagiman*. Stanford: CSLI Publications.