

The Historical Linguistics of Complex Predication
Claire Bower
Rice University

Department of Linguistics, MS-23
Rice University
6100 Main St
Houston, TX, 77005, USA
Ph: (713) 348-5150
Fax: (713) 348-4718
email: bower@rice.edu

Abstract

While complex predicate constructions, including light verb structures and verb serialization, are found in many of the world's languages, there has been little diachronic work on these structures to date. In this paper I survey the state of the field and describe current ideas on the origins and development of complex predicates. In particular, I show that the assumption of cline-like development from parataxis to affix (through serialization, light verbs and auxiliation) is too simplistic. Finally, I review arguments in favor and against views of light verbs as stable structures.

Obwohl *Complex predicate*-Konstruktionen, einschliesslich *Light verb*- und Verbserialisierungsstrukturen, in vielen Sprachen der Welt zu finden sind, liegen bis heute nur wenige diachrone Arbeiten zu diesem Thema vor. Er werden deshalb hier der bisherige Forschungsstand sowie aktuell diskutierte Hypothesen bezüglich des Entstehens und der Entwicklung von *Complex predicates* zusammengefasst und diskutiert. Dabei erweist sich insbesondere die Annahme dass sich *Complex predicates* entlang eines Grammatikalisierungspfad von Parataxis zu Affix (per Serialisierung, *Light verb* und Auxiliarisierung) entwickeln als zu einfach. Abschliessend werden Argumente für und gegen die Annahme, dass Light verbs historisch stabil sind, abgewogen.

Keywords: complex predicates, serial verbs, historical syntax, grammaticalization, clines, reanalysis

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1 Introduction

Complex verb constructions are found in many of the world's languages. We now have the beginnings of a typology of such constructions, ranging from the different types of serial verbs (in, for example, the isolating languages of East and Southeast Asia and the languages of Oceania and West Africa) to the light verbs of the languages of Asia, as well as the bipartite verbal systems of Australia and converbal complex predication in Japanese, Korean, and Turkic. Work has been progressing on studies of complex verbs from several different theoretical perspectives¹ but so far there has been little examination from a historical perspective. It is therefore a good opportunity to take stock of the various phenomena which come under the label of "complex predicates", and to draw together recent historical findings.

The papers in this volume are studies of change amongst different types of complex predicates. All the authors combine historical reconstruction with descriptive work on the synchronic facts about the languages under discussion, since despite the general increase in work on complex predicates, there still remains a great deal to be said about the basic behaviour of these constructions. In this introductory paper, I outline some of the issues involved in research on change in complex predicates, including definitions of the construction, previous diachronic work on complex predicates (particularly serialisation and light verb constructions), and the

*Thanks to the participants in Rice University's Eleventh Symposium on Linguistics for feedback in the ideas on the original position paper, and to Avery Andrews. Needless to say I am responsible for any omissions or errors of fact or interpretation. Abbreviations used are: ACC, accusative; AF, actor/agent focus; COMP, complementiser; DAT, dative; FPART, focus particle; IB, *ip/ib* (converb morpheme in Turkic languages); INF, infinitive; LOC, locative; PART, participle; PERL, perlativ; PRIM, primary; PST, past; SG, singular; TOP, topic. This paper is loosely based on Bowers (2005), which was circulated in advance of the 2006 workshop.

¹ Compare McGregor (2002), Hale and Keyser (2002) and Andrews and Manning (1999).

relationship between our views of grammar, grammaticalisation, and change more generally. A full typological survey remains to be done; I do not claim to be comprehensive in my survey of constructions and sources here. Instead, I concentrate on work in light verb and serialisation constructions in Pacific, South Asian and Australian families.

2 Definitions of complex predicates

Many superficially rather different constructions have been labeled ‘complex predicates’ at various times. SERIAL VERB CONSTRUCTIONS, such as those found in the languages of West Africa, Oceania and Asia, are of course well-known in the literature: see, for example, Bradshaw (1993, 1999), Brill (2002), Crowley (2002), Durie (1997), Pawley and Lane (1998) for Oceania and Papua New Guinea; Ameka (2005), Eaton (03), Lord (1993), Sebba (1987), Stahlke (1970) for Africa; Aikhenvald (1999), Andrews (1997) for South America; and Aikhenvald (2006), Foley and Olson (1985), Newmeyer (2004) for more general discussion (amongst many others). Serialisation has many definitions but all have at their core the following concepts:

- 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;²
- the verbs behave as a single unit for tense, aspect, and polarity marking.

RAISING VERBS and RESTRUCTURING PREDICATES also share some features in common with serialisation. Such structures are overwhelmingly described for Germanic and Romance languages (amongst many others, see Alsina 1997, Di Sciullo and Rosen 1990, Samek-Lodovici 2003, Wurmbrand 2001). They are also found in Hindi/Urdu and Quechua, and it is possible that the same analysis also applies to some types of ‘serialization’ in Tariana (Aikhenvald 2003).

Restructuring predicates have properties of both serialisation and control structures; one clause

²Although for an exception, see Crowley (2002) on ‘ambient serialisation’ in Oceania, where the argument of the second verb appears to be the first verb and its argument(s).

is a constituent of the other (that is, it is embedded) but the clauses behave as though there is no embedding in terms of argument structure.

The third major type of complex predicate construction is LIGHT VERBS. 'Light verbs' are verbs which are structurally defective in some way. They may have an empty (Grimshaw and Mester 1988) or reduced (Bowerman 2004b, Butt 1995) argument structure; they do not assign theta-roles (that is, they do not assign a semantic role to one or more of their arguments); they are semantically deficient or 'light', in that they contribute semantics to the clause which are not very specific, and they are frequently either phonologically null or (if they are overt) as act merely as a host for agreement and tense morphology. Similar definitions are followed by many other researchers (e.g. Lin 2001).

Light verb constructions can be categorised in several different ways. One involves the number of light verbs involved in the construction. In Turkish, for example, there are only two productive light verbs; *dur-* "stand, stop", which combines with gerunds to form durative predicates, and *et-* "do", which (as illustrated in (2a) below) combines with nouns; here the contribution of the light verb appears to be exclusively a host for tense and agreement morphology. The gerund (=preverb) controls θ -role assignment; there is no contribution in this case from the light verb. Some examples are given in (1) and (2) In this type of construction, θ -roles and argument structure seem to be determined by the 'object' of the finite verb, rather than the finite verb itself. We see in the Japanese examples in (3), for example, that complex predicates with *suru* "do" may be mono-, bi- or tri-valent. In other languages, such as Uzbek, Urdu, Farsi, and a large number of Australian languages, more than half a dozen light verbs are used, and categorise the predicate for various aspect, event structure and trajectory distinctions.

Light verb complex predicates may also be categorised according to the type of preverb they occur with. In some languages, preverbs are nominalised verbs (or gerunds); (2c) gives an example for Farsi, and Hindi/Urdu and Uzbek also have this type of complex predicate. In other languages (such as Japanese; see (3) below), the preverbs are nouns and may receive case marking. In a further set of languages (such as Nyikina in Northern Australia; see Stokes 1982),

preverbs form a distinct word class and may be productively derived from multiple word classes.³

(1) Uzbek:

- a. *Qush uchip ketib qoldi.*
bird fly-IB come-IB remain-3.PST
“The bird flew away [unexpectedly].”
- b. *Bu kitobni o'qib borar ekanman, khayolim boshqa joyda edi.*
this book-ACC read-IB go-PART sow-1SG mind-1SG.POSS'R other place-LOC be-3PST
“I was reading this book, but my mind was somewhere else.”

(2) a. Turkish: *redd etmek* “to give advice”; *telefon etmek* “to phone’ (*etmek* = “do”)

b. Japanese: *benkyō suru* “to study”; *shuppatsu suru* “to depart’ (*suru* = “do”)

c. Farsi: *gerye kardan* “to cry”; *fotokopi kardan* “to photocopy’ (*kardan* = “make”)

(3) Japanese:

- a. *John-wa Mary-ni hanashi-o shita.*
John-TOP Mary-DAT talk-ACC *suru.*
“John talked to Mary.”
- b. *John-wa Tōkyō-kara shuppatsu-o shita.*
John-TOP Tokyo-FROM departure-ACC *suru.*
“John departed from Tokyo.”
- c. *John-wa murabito-ni [ōkami-ga kuru-to] keikoku-o shita.*
John-TOP villager-DAT wolf-NOM come-COMP warn-ACC *suru*
“John warned the villagers that the wolf was coming.” (Grimshaw and Mester 1988:207)

Light verb constructions fall into a few different types. In Japanese, the preverb is a noun (and may take case marking). (3) provides examples. In Turkic languages, there are two light verb constructions. There is the one illustrated in (2), where a noun combines with the verb *etmek* “do” (e.g. *redd etmek* “advise”). There is another construction, using the gerund marker *-ib* (or

³Abbreviations used in this paper are: 1, first person; 2, second person; 3, third person; ACC, accusative; AF, agent/actor focus; ATTR, attributive marker; COMP, complementiser; CONV, converb; DAT, dative; EPART, existential particle; FUTURE, future; IB, converb marker (Turkic languages); IMP, imperative; LOC, locative; LV, light verb; NFUT, non-future; NOM, nominative; NOM'L, nominaliser; PART, participle; PERL, perlativ; POSS'R, possessor; PRIM, primary (verb form); PST, past; REAL, realis; SG, singular; TOP, topic.

-*ip* in some languages), illustrated in (1), where the light verb provides information about the structure of the event denoted by the coverb.⁴

These complex predicates are found in a large number of diverse languages, in South and Central Asian languages such as Hindi/Urdu (Butt 1995, 1997, Butt and Geuder 2001, Hook 1974, Mohanan 1994), Farsi/Persian (Folli *et al.* 2003, Ghomeshi 1996, Goldberg 1996) and Turkic languages (Anderson 2003, Bower 2004c, Schönig 1984); in a swathe of Northern Australian languages (Bower 2004a, Nash 1982, Schultze-Berndt 2001, Wilson 1999)⁵, in the Caucasus (Harris [this volume]) and Native North America. The strong areal distribution of light verb constructions makes it tempting to argue that they are highly borrowable (see further §3.4 below).

Other constructions which have been claimed as complex predicates include ABSTRACT FINALS and bipartite verb stems, particularly in Algonquian (Quinn 2006), Algic (Garrett 2004) and Athapaskan (Rice 2000); some VERBAL CLASSIFIER constructions (such as those in Signed Languages, cf. Benedicto *et al.* 2007⁶); and INCORPORATION phenomena, such as noun incorporation, preposition incorporation (Baker 1988, Garrett 1990), particle verbs, and pseudo-incorporation (Massam 2001).

All of these types of predicate could be said to be ‘complex’ in the sense that the predicate structure (or event structure) is determined by more than one element. That is, in each construction, more than one element in the clause contributes information which is normally associated with a verbal head. Moreover, these constructions have features in common with simple predicates. However, it is not immediately clear that there is more common to complex predicate constructions than this, and ‘multiheadedness’ is a very broad category in which to group constructions. They appear to have no single common historical source and little if any common paths of diachronic development (see §4 below).

⁴For discussion of this construction within Turkic from a comparative (although not historical) perspective, see Bower (2006b).

⁵McGregor (2002) deals with the same construction, although he argues that it is not a complex predicate.

⁶See also McGregor (2002) and Bower’s (2004a) argument that what McGregor calls ‘verb classification’ constructions are a functional label for light verb complex predicates.

3 Historical sources for complex predicates

By now there are several works on the origins of complex predication, including Crowley (2002), DeLancey (1991), Foley and Olson (1985), Lord (1993) and Shibatani and Chung (2006) on serialisation, and Anderson (2005), Butt and Lahiri (1998, 2004) and Nichols (2002) for complex predicates. Three points emerge from this literature. The first is that much work (although not all) on the history of these languages is based on internal reconstruction, and on the assumption that variation in structure in the modern language directly reflects a grammaticalisation pathway.⁷ The second is that complex predicates are an intermediate stage (analytically and historical) between biclausal structures and affixes, and as should be represented on a cline (such as given in (4) below). Thirdly, however, there is some dissent from the overall 'cline' picture; Butt and Lahiri (2004) claim that light verbs are not part of a cline which includes auxiliaries because of their historical stability and link to lexical verbs; Shibatani and Chung (2006) argue contra DeLancey (1991) that semantically less congruent relationships between the verbs in serial verb constructions facilitate grammaticalisation. Crowley (2002) also presents doubt over the reconstructibility of serialisation in proto-Oceanic.

One author who has been explicit in claims about the origin and development of light verb structures is Anderson (2005). Chapter 7 of this work is a diachronic overview of the formation of auxiliary verb constructions, which for Anderson include light verb structures. Anderson (2005:4) treats auxiliaries as one (vaguely defined) point on a cline between full lexical verb and affix, a cline which is both a grammaticalisation 'fact' and a part of descriptive grammar. Anderson classes light verbs (and auxiliaries more generally) as partially grammaticalised, semantically bleached full verbs, and furthermore treats that grammaticalisation cline as a synchronic descriptive tool. That is, in his analysis there are items which are ontologically full lexical verbs, items which are affixes, and a vaguely bounded category in between; moreover, Anderson

⁷While I am critical here of this approach to serialisation and complex predication in this paper, I do not wish to deny the usefulness of carefully applied internal reconstruction in general. Here I follow Joseph (2004), Campbell (2000) and others in urging caution over the assumption that obvious historical sources are the only (or even the most likely) sources of the construction under consideration. This caution is especially necessary for constructions which are subject to internal reorganisation, as I've claimed is the case for light verb structures.

(amongst many others) claims a historical link between these categories.⁸

Problems of the synchronic status of clines have been well discussed in the literature (see, for example, Anderson 1999, Joseph 2004). The diachronic status is testable inasmuch as it represents a cross-linguistic typology of change. The maximal cline, given in Anderson (2005) is given in (4) below.⁹

(4) (a) parataxis > (b) hypotaxis > (c) serialisation > (d) light verb > (e) auxiliary > (f)
univerbated affix

DeLancey (1991) makes a similar claim specifically with respect to serialisation. His stages in the formation and grammaticalisation of serial verb constructions are equivalent to (b) > (c) > (d, e) > (f); that is, that hypotaxis creates serialisation structures, which may further grammaticalise to light verbs and auxiliaries (categories which are not differentiated), which may then univerbate. The change from full lexical verb to auxiliary is well attested and patent in the etymology of auxiliaries in many languages (Hopper and Traugott 1993). So is the final stage of the continuum (points (e) > (f)), the change from auxiliary to affix (for example, it is attested in the written record in Polish; see Andersen 1987). However, there are two logical problems with the continuum. First, just because the fully lexical verb is the source of the auxiliary, it does not follow that the CONSTRUCTION itself underwent the change from a serialisation (or light verb) construction to one involving an auxiliary. A similar dichotomy is raised in Brill (2004b:194), where she distinguishes between grammaticalisation and specialisation (although in the same volume, Brill (2004a) favours a cline analysis as well). Secondly, the constructional grammaticalisation is not well attested (or is simply assumed) for some of these stages. As Hendery (2007) has shown for relative clause formation, the parataxis > hypotaxis link is not nearly as well supported by fully attested change in the written record as has been assumed.

⁸In several articles (e.g. Butt 1995, Butt and Geuder 2001), Butt has presented evidence that light verbs and auxiliaries have rather different synchronic behaviour. For example, auxiliaries usually have defective tense/aspect paradigms, whereas light verbs never do. Light verbs are always related transparently to a full lexical verb; that is very seldom the case for auxiliaries. Light verbs assign theta roles and interact with argument structure; auxiliaries are transparent to argument structure.

⁹It should be noted that Anderson (2005:331) revises a linear cline at the construction level to include other sources of auxiliary constructions, such as coordinate constructions, although the linear cline is not specifically repudiated.

Here, I make the following claims, contra Anderson (2005), DeLancey (1991) and others. Firstly, it is clear that light verbs and serial constructions may both have their sources in hypotactic or embedded structures (e.g. in gerunds), but that is not the only source of such constructions (see, for example, §3.1). Furthermore, *pace* Anderson (2005), light verbs and auxiliaries have distinct synchronic properties and distinct diachronies; they have different origins and do not readily change into one another. Therefore representing them on the same cline is misleading. Rather, the types of change we see in complex predicates can be subsumed under the more general typology of syntactic change outlined in Harris and Campbell (1995), that is, one that treats syntactic change as originating in reanalysis, extension, or borrowing. I focus here on light verb complex predicates, and to a lesser extent on serial verb constructions.

3.1 Acquisition of headlike properties: reanalysis (1)

The first case in which a complex predicate may arise is when a constituent which was not formerly a head acquires head-like properties. The most common examples are in the creation of light verb constructions where nouns, adjectives, and adverbs (and occasionally full nominal or adjectival phrases) acquire argument-assigning properties.¹⁰

A very common example of this change is when an object and its verb is reanalysed as a light verb complex predicate. Examples from a number of languages were provided in (1)–(3) above.

Examples from English are also extensive and have existed in the language for over 1000 years. (5) is one example (from Middle English):

- (5) c1400 MANDEVILLE (1839) xiv. 154 The Kyng **had Werre**, with hem of Sithie. [The King *had war* with the Scythians.]

While it is clear that the rise of such constructions involves reanalysis, the reanalysis should perhaps be split into two components. One change involves apparent bleaching of the verb (loss of lexical properties such as fully specified argument structure); the second is the noun's acquisition of head-like properties, such as the ability to assign theta-roles. It is tempting to argue

¹⁰This type of change does not apply to serialisation constructions, since the two serialised verbs are already heads.

for a bleaching analysis through internal reconstruction when there is a transparent semantic link between the full lexical phrase and the ‘light’ phrase. However, it is intrinsically implausible that in all cases light verbs arise from full verbs in a literal construction. That is, a phrase such as “have war” or “take a bath” are extremely unlikely to have arisen from their “literal” (that is, fully lexical) counterparts. That is, they are analogical extensions of an already bleached verb. In the specific case of the phrase “have war”, the chronology of attestations in the *Oxford English Dictionary* implies that complex predicates with “have” arise only after “have” is comes to be used to denote abstract possession, such as “how many siblings do you *have*?”.

It is clear that these structures are prone to creation by analogy and, somewhat like idioms, they can drop in and out of use. For example, ‘have war’ (from (5) above) is not a phrase in current use (in a cursory search the most recent attestation was a *New York Times* headline from 1911). By this I mean in that it is clearly not the case that all examples of OV-type complex predicates were originally object plus verb (straightforward VPs) which were then reanalysed. It is because of this that items such as this are extremely difficult to reconstruct. For any particular item, even if it has cognates in related languages, the source could be analogical. That is, the etymology of a construction like “have a shower” does not lie in the components “have_{full}” + X, which was reanalysed, but rather in the construction “have_{light}” + X. This leads to questions about how light meanings arise from full verbs in the first place, and which verb + noun combinations are particularly prone to reanalysis in this way. In this volume, Hilpert and Koops provide an example of how this might be done in a case study of Swedish *sitta* ‘sit’.

3.2 Change in configuration: reanalysis (2)

A further type of reanalysis is implicated in the creation of complex predicates. Changes in constituent (phrase) structure may also give rise to complex predication. Hilpert and Koops (this volume) provide an account of the rise of serialisation from reduced (pseudo-)coordination. Incipient serialisation in Nyulnyulan languages would seem to have the same source (Bower 2008). Note that this is a counterexample to the claim in Harris and Campbell (1995:282–313) that there is no evidence that hypotaxis develops from parataxis (although note that their claim

specifically involved overt subordination, such as embedded questions, and not hypotaxis in general).

There is a further frequent claim that reanalysis of this type is causally linked to frequency. That is, in the formulation of Traugott and Heine (1991:9), semantic congruency, salience and frequency together determine whether a given item will end up grammaticalised. That is, a form must have high frequency, there must be a certain degree of semantic congruence between the two items, and the construction must have some salience in the grammar. However, tempting as it is to infer such an origin for most complex predicate types, there is some evidence to the contrary. Shibatani and Chung (2006) and Shibatani (2006) show that non-congruence in semantics can facilitate grammaticalisation, and in some cases, token frequency might be misleading. Shibatani (2006) shows that in the Formosan language Wulai Atayal, the verb *usa?* “go” is grammaticalising as a marker of future tense in serial constructions with irrealis marking, and as a perfective with realis marking. However, the change is not occurring where “go” appears with another motion verb, but whether where the concept of motion is already metaphorical. Where the motion sense is concrete, future readings are dispreferred or ungrammatical. This is despite the use of “go” in serialised motion constructions being more frequent than the semantically non-congruent examples like those in (6).

(6) a. *m-usa? qwalax*
AF-go rain.
“It will rain.”

b. *gwan tgayaw qhuniq qasa la.*
go.REAL fall.down tree that F.PART
“That tree has fallen down.”

(Shibatani 2006)

Such an analysis is also applicable to incipient serialisation in the Yolŋu Matha subgroup of Pama-Nyungan, where *garama* “go’ in Yan-nhanju is primarily used in a serialisation construction to denote spatial extent rather than pure motion (as in (7) below):¹¹

¹¹Where pure motion is used in serialisation, the verb *gabathun* “run” is used rather than *garama* “go”. See also Austin (1998) for other examples of serialisation and auxiliatation of motion verbs in Pama-Nyungan languages.

(7) *Nhaŋku bambitj dhukarr-murru bamparra garama.*
those tree road-PERL stand.PRIM go.PRIM

“The trees extend along the road.”

(Bower, fieldnotes, 2005)

Finally, it is worth considering possible explanations for why, despite disparate sources for preverbs ranging across all major word classes, light verb complex predicates end up with surprisingly uniform functions. In all light verb constructions, the preverbs have two facts in common. First, they are all constituents which may have implicit event ‘participants’, but they do not have arguments to license. For example, a noun such as ‘scattering’ has no overt subject, and no agent semantic role to assign. It does, however, have an implied agent or cause. In various South and Central Asian languages such as Hindi-Urdu and Uzbek, gerundial coverbs have the same form as medial converbs, or non-finite forms more generally (for a survey of strategies see Bower 2006b). That is, they are forms with some tense specification but which do not license a full argument structure. Second, light verb constructions appear overwhelmingly to arise from constructions which are structurally asymmetric, such as a verb and its object complement, or a gerundial clause followed by a matrix verb. Therefore, light verbs facilitate overt expression of otherwise implied participants. This is a variation of Grimshaw and Mester’s (1988) claim that the arguments of a coverb are ‘transferred’ from the coverb to the light verb because the coverb is not in a structural position to assign case or discharge theta-roles. However, the great majority of the items which participate in light verbs constructions are not items which typically have arguments to assign or theta-roles to discharge. If this is correct, the transfer argument is untenable historically, because the constituents which end up as preverbs are not items which are argument-assigning. Furthermore, this implies that such structures are prone to creation not because they are a stage on a unidirectional grammaticalisation cline, but because the coverbs already have semantically implied arguments which are realised by unification with a light verb. Thus the ‘real’ historical change is one of implicature to overt realisation.

In summary, overtly marked non-finite verb forms with defective argument structure appear not to give rise to serialisation, but instead to light verb structures. That is, light verbs arise from structural asymmetries where the embedded item (verb, noun, etc) has argument assigning

difficulties. Serialisation seems to arise from reduced coordination – either with an omitted conjunction, or from true parataxis (that is, clausal juxtaposition). A possible further source is finite subordination (Lanz 2008), although this requires further substantiation.¹² Auxiliary constructions, however, seem mostly to arise in two situations: from copular constructions, and from infinitives or switch-reference marked subordinate clauses (which are not finite in that their argument structure reference is determined by another verb in the clause). Harris and Campbell (1995:173ff) provide extensive discussion of auxiliary development.

3.3 Extension

As already discussed, once the complex predicate structure exists in the language, other items may be recruited into the construction. Harris' paper shows this well. Bower's discussion of light verbs in Nyulnyulan languages in this volume provides further evidence. See also Nichols (2002) for light verb structures, and such an idea is implicit in Crowley's (2002) explanation for why serialisation cannot necessarily be reconstructed to Proto-Oceanic. Such examples do not fit the cline analysis at all, and would have to be thought outside the 'primary' grammaticalisation pathway.

Several articles in the literature involve claims of complex predication arising in a semantically or grammatically restricted area. Schultze-Berndt (2003) and McGregor (2002:ch 5) claim that Australian complex predicates arose from the use of ideophones with a generic delocutive verb (such as Bardi *diilarr -joo-* "make a short, light tapping sound (e.g. the sound of seeds hitting a baler shell)"). They argue that the construction arose in this area and was subsequently extended and broadened as further light verbs and preverbs were assimilated into the construction. See also Plank (2005) on delocutive verbs in other languages. While this is certainly one possible locus of reanalysis and subsequent extension, it is not the only one. For example, Bardi (Bower 2004a:Ch. 9) exhibits structures that are similar to English V+Obj light verb constructions. Given

¹²Functionally, serialisation and light verb constructions may end up marking similar categories; in this case, the distinction (for a subset of cases) would be in historical sources rather than in function; that is, the light verb structures would arise through reanalysis, whereas the serialisation constructions would arise through specialisation and restriction of the construction. This would provide an explanation of why so many authors (such as Aikhenvald 2006) have trouble drawing a division between light verb and serialisation constructions.

that light verb complex predicates are well entrenched in all the languages McGregor (2002) investigates, there is no particular reason to assume arbitrary extension from a single locus.

3.4 Calques and loans

Light verb constructions using a verb meaning “do’ are often a vehicle for loan verbs. This is true in Karaim (8) (Csató 2002), Bardi (9), Turkish (10) and Japanese (11) (Matsumoto 1996); see examples below.

(8) Karaim *pazdravit’ et-* “to congratulate’ (cf. Russian *pozdravit’* “congratulate-INF”)

(9) Bardi *wajim -ma-* “to wash’ (cf. Kriol *wash'im* “wash”)

(10) Turkish *telefon et-* “to telephone’ (cf. English “telephone”)

(11) Japanese *benkyō suru* “to study’ (from Chinese)

Lanz (2008) traces the diachrony of several complex predicate structures in Japanese, using textual materials from Old Japanese through Classical to Early Modern Japanese. She shows that serialisation has become rather restricted in Modern Japanese compared to the range of uses that serialisation exhibits in the earliest records of the language. Moreover, she identifies a concomitant rise in productivity of light verb constructions marked with *suru* “do’, and shows that while they did exist in Old and early Classical Japanese with native vocabulary (see (12) below), they become much more productive with extensive borrowing of verbs from Chinese.

(12) *yuki-ge* **S-URU** *yamamiti-sura-wo*
snow-thaw.NOM’L LV-ATTR mountain.road-PART-ACC
“[the] mountain road [where] the snow is thawing.” (Lanz 2008:(49))

Claims about the loanability of light verb constructions (and complex predicate constructions more generally) are widespread. They are frequently claimed to be an areal feature in northern Australia (see, for example, Dixon 2002:188, Schultze-Berndt 2000:532–535). Güldemann claims them as a possible loan feature into pre-Khoe from Tuu languages (Güldemann 2005). Serial verb

constructions are implicated as an areal feature in mainland South-East Asia (Enfield 2006:259) and Oceania (Crowley 2002:167–68).

It is clear that there is a strong correlation between loan verbs and the use of light verb constructions. That is, speakers of languages from all over the world borrow verbs from other languages as preverbs.¹³ In the case of Japanese and Karaim, the construction existed in the language before; the use of the light verbs with loan verbs leads to a rise in frequency of the construction. Therefore it seems appropriate here to follow Jones and Esch (2002:1ff) in avoiding a dichotomy between ‘internal’ and ‘external’ factors in language change and arguing for a view which also considers the interplay of such factors.

3.5 Hypotaxis/Parataxis and the grammaticalisation cline

As mentioned above, serial verb constructions are often said to originate in either hypotaxis or parataxis (e.g. Givón 1991); cf (4), repeated as (13) below:

- (13) (a) parataxis > (b) hypotaxis > (c) serialisation > (d) light verb > (e) auxiliary > (f) unverbated affix

Givón (2008:2) implicitly equates hypotactic constructions and serialisation as the first step towards subsequent grammaticalisation. DeLancey (1991) also assumes this, and as Shibatani and Chung (2006) have pointed out, although this typology has been widely assumed for other languages, the evidence from Tibetan on which it is based is entirely synchronic. A similar line of argument is developed in Johanson’s (1995) discussion of *-ip* constructions in Turkish (e.g. Johanson 1995:314–315). He argues that one can identify four types of converbial constructions in Turkic languages. They are defined in terms of the degree of grammaticalization shown, the closeness of the relationship between the converb and the inflecting verb, and the degree of choice in inflecting verbs. At the least grammaticalised level there are two predicates which are loosely conjoined and which do not share arguments. At the next level, multiple predicates share a subject. The most tightly-grammaticalized level (14d) exhibits, in Johanson’s terminology, a

¹³Loaned nouns can of course also participate in such constructions.

single ‘predicate core’. His four levels are illustrated in (14) with sentences from Turkish.

(14) a. different subjects:

Ali gel-ince Osman şarşır-dı.
Ali-NOM come-CONV Osman-NOM be.surprised-PST.3SG

“When Ali came, Osman was surprised.”

b. same subject, multiple actions:

Ali gel-ince şarşır-dı.
Ali-NOM come-CONV be.surprised-PST.3SG

“When Ali_i came, he_i was surprised.”

c. more limited inflecting verb; ‘two predicate cores’:

Ali kitab-ı alıp gel-di.
Ali-NOM book-ACC take-CONV bring-3SG.PST

“Ali brought the book.”

d. single predicate:

Ali kitab-ı okuy-up tur-du.
Ali-NOM book-ACC read-CONV stand/stop-3SG.PST

“Ali kept on reading the book.”

In this case, it is not clear that defining converbial constructions as a cline does much more than pointing out that there are certain constructions with broadly similar properties. As I show in Bower (2006b), while all the constructions in (14) involve ‘converbs’, they have rather different syntax (for example, (14d) is semantically and syntactically ambiguous between an aspectual reading and a conjoined event reading (similar to (14b), translatable as “Ali read a book, and then he stood up.”). Claiming a synchronic cline for constructions like this obscures the differences between them. After all, scale can be used to represent many phenomena which are only indirectly scalar.¹⁴ In sum, the arguments made by Joseph (2004:54–55) apply here too; that is, that it runs the risk of joining the dots at the expense of a better explanation.

¹⁴For example, the vowel inventories of the world’s languages can be represented on a cline from $1 > 2 > n$, but doing so is not very helpful.

It has been claimed that light verbs are a stage on a cline from full verb to auxiliary. However research here shows that light verbs systematically do not pattern with auxiliaries; both structures may exist in the same language, and they show different grammaticalisation patterns. For example, verbs meaning “sit’ consistently appear to grammaticalise as stative markers in light verb constructions (e.g. a large number of Northern Australian languages (Bower 2006a), and Turkic languages such as Uzbek (Bodrogligeti 2003:724)), as a progressive marker in auxiliary constructions (Newman 2002:16–17, Hilpert and Koops [this volume]), and as progressive or durative in serialisation constructions (Newman 2002:16–17). In short, I have found no evidence for light verbs being reanalysed as auxiliaries. Butt and Lahiri (1998, 2004) provide further evidence for different pathways of auxiliaries and light verbs, and Bower (2006b), Butt and Geuder (2001) show that auxiliaries and light verbs have rather different synchronic properties as well.

4 Outcomes in complex predication

Butt and Lahiri (1998, 2004) claim that a light verb construction is a type of linguistic ‘dead end’: that is, that it is highly stable once it arises, and does not participate in subsequent changes. The claim was originally voiced in response to arguments that light verbs are intermediate points on a grammaticalisation continuum (e.g. Johanson 1995). I have argued here that such a claim is too strong. While complex constructions are not simply transitory points on the way to the end of the grammaticalisation cline, they aren’t necessarily stable either. We find that complex predicates themselves are subject to the same changes involving extension, reanalysis and univerbation that gave rise to the construction in the first place. Some examples are presented in this section.

4.1 Stability

Lanz (2008) shows how one type of verb serialisation has become restricted over the last thousand years in Japanese. For example, Old Japanese has transitivity mismatches in serial constructions, non-iconic ordering, and cases of $V_1 V_2$ (that is, core serialisation) where V_1 is grammaticalised. In

contrast, in Modern Japanese, V_2 is always the bleached verb, transitivity mismatches are much rarer, and narrative serialisation with more than two verbs is highly restricted.

A further argument against stability comes from comparative work on complex predicates among closely related languages. Bovern (this volume) provides an analysis of Nyulnyulan complex predicate structures. She argues that the diversity exhibited in the classification strategies causes problems for reconstruction. It is also a strong argument against the internal stability of the construction. Hook and Pardeshi (2006) also show that Indic light verbs are not a dead end, but rather are subject to reanalysis and extension, just like other constructions. McGregor (2002) gives examples of change from Australia.

4.2 Univerbation

There are numerous cases of complex predication constructions undergoing univerbation; or rather, perhaps better: there are cases of single words where one element is etymologically related to a verb.¹⁵ In some cases, we have the information in the historical record which allows us to claim a straight case of univerbation. Such an example is the Australian language Ngan'kityemerri (Reid 2004). Reid documents the univerbation of complex predicates (in this case, light verb constructions) in the 70 years between recordings of the language by Gerhardt Laves and Reid's own fieldwork on a closely related dialect.

In other cases, light verb constructions end up as aspect or class marking within the verb. For the Australian language Gooniyandi, for example, McGregor (2002) argues that the class markers are a further grammaticalised stage of the constructions which are found in Nyulnyulan languages. McGregor (2002:351–354) also suggests that light verb constructions might be the source of conjugation markers in Pama-Nyungan languages. Such a claim was also made by Merlan (1979) for Pama-Nyungan. There are certain similarities between some non-Pama-Nyungan light verb forms and widespread Pama-Nyungan conjugation markers, but the forms are so small and the correspondences so inexact that this should not be taken to be a good example at this stage.

¹⁵Etymologically there are problems in discovering whether a univerbated structure is a compound or descends historically from another structure, such as a light verb or serialised structure. I leave aside this detail.

There is no *a priori* reason to suppose that the conjugation marker *-ma* in Pama-Nyungan languages is in any way related to the root **ma* “put”, for example. A much better documented case of univerbation is presented in Harris’ contribution to this volume.

Serial verb constructions also undergo univerbation. Affixation is a common final result of core serialisation; numerous examples are provided in Anderson (2005:249ff) and Lichtenberk (1991). Core symmetric serial verbs also fuse, and may in time come to closely resemble compounding (Crowley 2002:176–77).

4.3 Reanalysis of word class

Changes in serial verb constructions which involve ‘deverbalisation’ (a change from verbal class to another word class) are extremely widespread. Only a few examples are cited here.

Bowern (in prep.), Crowley (2002), Durie (1988), Hamel (1994, 1993), Pawley (1973), Ross (2004) discuss the creation of a class of deverbal prepositions, particularly in Oceanic (although of course, the path of verb to adposition is known from elsewhere in the world as well). The case of Oceanic languages such as the Admiralty Islands languages Titan (Bowern in prep.) and Loniu (Hamel 1994, 1993) are extremely interesting from the point of view of grammaticalisation because they give rise to a category which is neither fully verbal, nor fully prepositional. Titan deverbal prepositions agree in tense with the main verb of the clause; they also have adverbial functions and may appear doubled with inherited (non-verbal) prepositions. They never take person or number marking. Some examples from Titan are given below. In (15), *kile* “into” (related to the full verb *le* “go to”) cannot be agreeing in person with the matrix subject, because then the form would be **kole* (which never occurs). (16) shows a sentence where *ila* “there” (from *la* “go”) is doubled by an inherited preposition *te* “to, for”. This example further shows that *ila* can occur where there is no implied motion.

- (15) “*Ko cong ki-le putuo!*”
IMP slide FUT-into stomach-1SG
“Slide down into my stomach!”

- (16) *Alu i=yuyuu i-la te i.*
Alu 3SG=call NFUT-there to 3SG
“Alu called to him.”

Adpositions are not the only outcome of serialisation. Numerals (Crowley 2002:114-116), aspect marking (Bower in prep.), associated motion (Austin 1998), grammatical relations marking (Lord 1993), valency changing derivation (Tetun Dili: Williams-van Klinken *et al.* 2002:Ch. 9; Misumalpan languages: Hale 1997:85), and coordinating, subordinating and quotative conjunctions (Anderson 2005, Lord 1993).

5 Summary and Conclusions

5.1 Summary: sources and developments

Serial verbs originate in reduced coordination (e.g. Hilpert and Koops [this volume]), in the loss of overt subordination markers (e.g. in Japanese), particularly in finite subordination and switch-reference marking, and from paratactic structures and clause chaining (e.g. Nyulnyulan languages). Light verb constructions, however, seem to originate primarily in the reanalysis of VPs (V + NP complement; adverbs, adjectives, etc), in embedded gerunds, and in other constructions where the embedded element is congruent with argument assignment but does not itself have grammatical arguments to assign. Therefore although serialisation and light verb constructions may end up with similar functions, in the clearest cases they have rather distinct origins. The rise of both constructions can be described in terms of reanalysis. Furthermore, once established in the language, both constructions undergo extension and reorganisation.

Neither serial verbs nor light verbs are a ‘dead end’ construction. Serialised verbs are highly prone to reanalysis as a different word class, and end up as case markers, adpositions, tense/aspect markers, associated motion markers, valency-changing markers such as applicatives and causatives, conjunctions and quotative markers, or they may be fused with another element and become clitics or affixes. Light verb constructions have some of the same outcomes, including markers of event structure and situation aspect, associated motion and trajectory, and valency.

Both serialisation and light verbs are areal phenomena; serialisation because it is readily borrowed, and light verbs because they are a common strategy for verb root borrowing.

The sources of complex predicates are rather wider than the cline in (4) would suggest. Light verb structures have VPs, gerunds and adverbs as sources of coverbs in addition to verbs; in fact, paratactic structures and finite hypotactic structures seem not to be sources of light verb structures, although they do form serialisation and restructuring predicates. We have seen at several points in this introduction the danger of inferring the source of a construction from the sum of its parts; that is, ultimately, not much more than linguistic folk etymology, extrapolation from the obvious; but we can seldom join the dots in the present in a straightforward way.

Therefore the points made for subordination in Harris and Campbell (1995:289ff.) apply here too; given the possibilities for extension, the claim that hypotaxis originates in parataxis runs the risk of ending up as syntactic folk etymology.

A further point arises from grammaticalisation theory. Harris and Bowerman show clearly that many of the synchronic complex predicate structures in Nakh-Daghestanian and Nyulnyulan respectively have indirect sources; that is, the construction is a sink which is highly subject to extension. It is further claimed as areal in South Asia and Northern Australia. This is not surprising given the facility with which light verbs (and, incidentally, serialisation) are borrowed and the extent to which light verb constructions act as a host for loan verbs.

5.2 Conclusions

The current volume brings together three of the contributions to a symposium held at Rice University in 2006 on approaches to complex predication. The fourth paper, Bowerman's discussion of complex predication in Nyulnyulan, expands on ideas which were original part of the position paper and other work. They are representative of the diversity of the construction and discuss the issues which arise in historical reconstruction and evolution of various complex predicates. The original symposium included both synchronic and diachronic contributions. Four continents are represented here: North America (Athapaskan), Asia (Nakh-Daghestanian), Europe (Germanic) and Australia (Nyulnyulan).

Hilpert and Koops present a case study of the use of Swedish *sitta* “sit” in serial constructions. They track argument structure and co-occurrence changes through more than 600 years of Swedish texts and show how corpus studies can be used in diachronic research. Harris also presents a study of light verb complex predicates in a single language, in this case the Nakh-Daghestanian language Udi. She further discusses the reconstructability of light verb structures to Proto-Lezgian and shows that while some structures are likely to be inherited, others are not reconstructible. The reconstruction of light verbs is also the topic of Bower’s paper on Nyulnyulan languages. She presents evidence that internal reorganisation among light verb classification systems and syntactic change have negative consequences for reconstructing the details of the system. This is partly because the languages have different bases for classification, but also because of the distinct behaviour of preverbs in the various languages. Finally, Rice argues for the analysis of activity incorporates in Athapaskan as a type of nominal + verb complex predicate. She shows that Athapaskan languages fall into two groups, as defined by the morphemes and behaviour of the incorporates, and discusses the reconstruction and pathways of change between the two constructions.

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