

ON THE TYPOLOGY OF MULTI-VERB OR COMPOSITE PREDICATES: SEMANTICS AS A MEANS TO DISTINGUISH SERIAL, AUXILIARY, DUMMY AND LIGHT VERBS

GREGORY D.S. ANDERSON¹

Abstract Serial verb, auxiliary verb and light verb are terms widely used in linguistics but are used in different ways by researchers of different theoretical orientation. The (morpho)syntax and historical origins of these partly overlap confoundingly. Scholars use the same terms but do not use them to cover identical sets of phenomena. At least four distinct kinds of multi-verb or composite predicates are needed. Semantics alone can meaningfully distinguish different subtypes of multi-verb predicates (MVP) typologically. Serial verb constructions are MVPs that are purely lexical and combinatorial in meaning, auxiliary verb constructions are MVPs that consist of a lexical and a functional element, dummy verb constructions are MVPs in which one element carries no lexical or functional semantics at all, only instantiates valence or lexical aspect if such categories are obligatorily expressed in predicates in the language, and lastly light verb constructions are co-lexicalized MVPs, and thus not strictly speaking syntactic *per se*.

Keywords Light verbs, Serial verbs, Auxiliary verbs, Semantics, Dummy Verbs.

1. INTRODUCTION

Few topics in typological and theoretical linguistics have generated more disparate opinions and *ad hoc* definitions than how or whether to distinguish among different subtypes of complex, composite (Cattell 1984) or multi-verb predicates or multi-verb constructions (Choi 2005, Ulrich 2018, Unterladstetter 2020). Specifically, the terms *serial verb*, *auxiliary verb* and *light verb* have each been used by different authors to cover virtually every verb + verb sequence or *verbal complex predicate* subtype. All these terms have been notoriously difficult to systematically define, and moreover the adherence to the use of certain terms in specific analytical traditions is so ingrained as to make coherent dialog between scholars using the same term but operating within different understandings of syntactic modeling seemingly impossible.

Some definitions of complex predicate in use include that of Bowerman (2010: 42): “(c)omplex predicates are structures in which more than one element in the clause contributes information to the predicate which is normally associated with a verbal head.” Butt (2010: 2-3)

¹ Living Tongues Institute for Endangered Languages, 4676 Commercial St. SE., Salem, Oregon, USA 97302, gdsa@livingtongues.org.

defines a complex predicate as a form that “designates a construction that involves two or more predication elements (e.g., nouns, verbs and adjectives) which predicate as a single unit, i.e., their arguments map onto a monoclausal syntactic structure...in which two or more predication elements each contribute to a joint predication”. This clearly includes mood, aspect, causative, permissive and other functional meanings and thus makes light verb, serial verb and auxiliary verb constructions impossible to distinguish in many cases.

Many scholars have commented over the years on this problem, as the issue endures. To give a few different examples. Andrews (2023) “the term complex predicate has been widely and rather loosely applied to a variety of constructions where for some reason it appears that two predicates that might be regarded as independent are behaving as one” (emphasis here and elsewhere mine). With respect to serial verb constructions, Crowley (2002:10) bemoans that “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”. Speaking about light verb constructions, Fleischhauer & Hartmann (2021: 136) remind us that “(a)lthough light verb constructions (LVCs) have been analyzed from many different perspectives for decades, *there still exists no consensus* regarding some fundamental issues. Even the very definition of the concept is still subject to debate.” Seiss (2013: 33) for her part summarizes that “(m)ore generally, however, *it seems to be problematic to distinguish between light verbs in Australian coverb constructions ...and auxiliary verbs*. Baker & Harvey (2010) conclude from this that *it very difficult to distinguish light verb uses and auxiliary uses of inflecting verbs in Jaminjung and in Australian languages more generally*”.

In addition to ‘complex predicates’ another cover term for the formations under concern is ‘multi-verb predicate’ construction (e.g., Aikhenvald and Muysken 2011). Recently, Haspelmath (2024) calls everything of this Verb₁+Verb₂ type *biverbal predicates*.²

Complex predicates have generated a huge body of literature by now. Functional-constructional approaches non-exhaustively include Heine and Reh (1984), Traugott and Heine (1991a, 1991b), Heine, Claudi and Hünemeyer (1991), Hopper and Traugott (1993), Heine (1993), Givón (1995), Traugott (1999), Kuteva (2001), Heine and Kuteva (2002), or Anderson (2004, 2006, 2011a, 2011b). Formal approaches also non-exhaustively include Halle and Marantz (1993), Butt (1995, 2010, 2014), Alsina et al., (eds., 1997), Abeillé et al. (1998), Koopman and Szabolcsi (2000), Butt and Geuder (2001) Essegbey (2004), Ameka (2005), Gazdar et al. (1982), Ackerman and Webelhuth (1998), Andrews and Manning (1999); Seiss (2009) Aranovich (2007, ed.), Bower (2008, 2010, 2014) or Godard and Samvelian (2021).

One major source of the terminological confusion over the three most commonly used terms subsumed under complex or multi-verb predicates, viz. *serial verb*, *auxiliary verb* and *light verb* was summarized by Seiss (2013: 24) as follows:

“(i)n all three constructions, usually an element of an open class combines with an element of a closed class, i.e., in complex predicates a light verb combines with a verb, in auxiliary verb constructions an auxiliary combines with a verb and in certain serial verb constructions, one verb comes from a restricted class, too...Light verbs in complex predicate constructions, auxiliaries and serial verbs are often also very similar semantically.”

² And as pointed out by Lovstrand (2021), all such definitions entail other potentially problematic terms and concepts like what it means to be a verb or be monoclausal for example.

The source input and resulting outcomes are therefore rather similar, and one is confronted with a dizzying array of partially overlapping terms covering partly overlapping phenomena. To be sure, a better understanding of complex predicates can help direct research into various broad topics such as the linguistic (and psycholinguistic) nature or reality of wordhood, or the extent and limit of the domains of syntax vs. the lexicon.

Clearly there is no one view as to what even the most commonly used terms with respect to multi-verb or composite predicates mean. However, if we want to be able to understand the nature and typological range of multiverb predicates cross-linguistically, we must be able to come to a consensus on what kinds of phenomena the terminology we are utilizing refer to, or what these terms can be understood to mean. Thus, typologically we have a situation where these terms are used loosely or rather differently by different scholars operating in this space, a situation that has troubled Haspelmath in a series of papers (e.g., 2016, 2024) discussing the nature of the concepts and terms *auxiliary verb* and *serial verb* among others offering controversial and randomly restrictive definitions.

In this brief report I discuss four types of multiverb predicates, viz., *serial verb constructions*, *auxiliary verb constructions*, *light verb constructions* and *dummy verb constructions*. It is argued in the sections below that serial verb constructions (section 2) should be considered those multiverb predicates that are combinatorial or concatenative semantically, i.e., ones that consist solely of lexical semantic combinations, and that auxiliary verb constructions (section 3) have one component part that contributes functional semantics and one component part that contributes lexical semantics. The verb in a dummy verb construction (section 4) carries no meaning whatsoever and may at most realize the valence (or lexical aspect) of the construction. In other words, it serves as an instantiation of the (morpho)syntactic need for an inflectional head when the predicative element that assigns theta-roles, case etc., cannot bear this information for whatever reason. Light verb constructions (section 5) on the other hand are co-lexicalized forms, and the light verb in such formations often maintains some unpredictable set of the lexical features of its source form, albeit clearly not all of them. Light verb constructions are not immutable idioms but nor are they unrestricted syntactically in many senses, and clearly the elements bear a strong collocational/co-occurrence bond if not a requirement on strict linear adjacency. The light verb and the predicative element generally require each other's presence to be properly processed, examples of light verb suppression, as has been argued to occur in various Romance languages, notwithstanding. All these facts suggest light verb constructions are co-lexicalized composite predicates. These have mainly been argued for being treated *syntactically* by adherents of Chomskyan/Minimalist and Lexical-Functional Grammar formalist approaches but also constructionalist ones to a lesser extent.

2. SERIAL VERB CONSTRUCTIONS HAVE COMBINATORIAL / CONCATENATIVE LEXICAL SEMANTICS

Serial verb constructions [SVCs] have certainly occupied a significant place in the analysis of the syntax of numerous parts of the world including languages of Africa and the Pacific as well as Southeast Asia and parts of South America. In addition to the description of SVCs in individual languages, one can also enumerate a considerable body of literature from a broadly typological functional or constructional approach, e.g., Givón (1991a, 1991b,

1995), (Crowley (2002), Senft (2004), Aikhenvald (2006, 2018) and Bril and Ozanne-Rivierre (eds., 2004) Aikhenvald and Dixon (eds., 2006), Senft (ed., 2008), or Anderson (2011b)). There is also a considerable body of literature on SVCs from various broadly formal approaches as well, for example, Li (1991), Lee (1992), Déchaine (1993), Collins (1993, 1997, 2002), Baker (1989), James (1983), Foley and van Valin (1984), Foley and Olson (1985), Sebba (1987), Durie (1988, 1997), Schiller (1990), Seuren (1990), Zwicky (1990), Lefebvre (1991), Bradshaw (1993), Lord (1993), Muysken and Veenstra (1994, 2006), Bisang (1995, 2009), Aboh (2009), Seiss (2009), Owens (2011), Stewart (2013), Lovestrand (2017, 2021), Ross (2021), Campbell (2023), Schneider (2024).

According to Lovestrand (2017) the term *serial verb* was first used by Balmer and Grant (1929) in a description of Niger-Congo language Akan where it—oddly enough, given much contemporary usage—was used to express a construction that did *not* entail a single action. It was perhaps first used in a more modern sense by Dempwolff (1939) in his description of the Austronesian language Yabem/Jabêm.

In the intervening decades there have practically been as many definitions of serial verb construction as researchers working on them. Lovestrand (2017: 16) citing Zwicky (1990) notes that serialization is often used descriptively as a “pretheoretical umbrella term” which refers to a “class of phenomena that are in some way problematic in theorizing”. For Sebba (1987: 39), it is definitional that both verbs (Verb₁ and Verb₂) in SVCs “...must be lexical verbs, i.e., must be capable of appearing as the only verb in a simple sentence”. Functionally there is a wide range of opinions as to what SVCs may function as, thus, while Lovestrand (2017: 16) asserts that “aspectual SVCs are an uncontroversial type of SVC”, Anderson (2011b) and Cleary-Kemp (2015) explicitly reject this.

As mentioned above, it is a non-trivial issue—assuming it is possible or indeed worthwhile—to separate the three most commonly named multi-verb predicates, viz., serial verb constructions, auxiliary verb constructions and light verb constructions. As Cleary-Kemp (2015:256) comments with respect to her own analysis of the “associated motion” construction in Koro that “the question of whether it is *a true SVC*, or *is instead an auxiliary or light verb construction*, is more difficult to resolve. (emphasis mine)” This succinctly summarizes the inherent tension in this cross-linguistic/typological issue very nicely.

Within the tradition of Role and Reference Grammar (Foley and Olson 1985, Van Valin and La Polla 2000), at least two rather different and formally distinct kinds of serial verb formations are recognized, *nuclear SVCs* and *core SVCs*. While grounded in the specific formal architecture of RRG, roughly speaking the distinction is one that centers on i) the degree of cohesion phonologically that holds between the two elements in construction. i.e., whether a nominal (argument) element may intercede or not, and on ii) the inflectional morphosyntax observed in the formation: In *nuclear serialization*, there is a tighter connection between Verb₁ and Verb₂, and inflectional categories are marked either once or shared (‘split’) across the two components of the construction, while *core serialized* formations show a lesser degree of cohesion and integration and both parts may be inflected. In the former instance it can sometimes be difficult to distinguish nuclear serialization from root compounding which entails issues of morphotactics and prosodic integration and prominence, word and phrase level phonology, etc., so becomes very complex and requires language specific sets of parameters to be determined.

Doubled inflection is a hallmark of core serialized formations. This typically takes the form of doubled subject marking (1)-(2), but may include other inflectional categories as well.

- (1) Tobelo [W. Papuan; Indonesia]
 tanu **h-oiki** **ho-ma-ohiki**
 should 1INCL-go 1INCL-RFLXV-bathe
 ‘we should go bathe’
 (Holton 2003: 26)
- (2) Numbami [Austronesian; Papua New Guinea]
 muna-wasa muna-yonggo
 2PL:IRR-go 2PL:IRR-see
 ‘go have a look’
 (Bradshaw 1993: 148)

Core serialization may vary within a single language with nuclear serialization, and we find variants such as those in the Austronesian language Larike spoken in Indonesia. Here we see either doubled (3a) or simplex (3b) subject indexing in this SVC. Likely the latter is secondary historically to the former.

- (3) a. Larike [Austronesian; Indonesia] b. Larike
au-’eu au-’anu ~ **au-’eu** anu
 1-go 1-eat 1-go eat
 ‘I’m going to eat’ {core} ‘I’m going to eat’ {nuclear}
 (Laidig and Laidig 1991:28)

As (3b) shows in nuclear serialized structures there is conversely just a single index of subject as is similarly seen in the following tripartite motion serial verb construction from the Plains dialect of the Munda (Austroasiatic) language Gta? of India (4), where the subject and TAM only appear on the third and final verb (note that Gta? shows dominant verb-final clausal syntax).

- (4) Plains Gta? [Munda; India]
 næŋ dʊgdʲ **e-ko** **n-læʔ-e**
 I garden go-sit 1-stay-FUT
 ‘I will go sit and rest in the garden’
 (Anderson, in preparation)

As the first two verbs in (4) show, what constitutes one word or construction vs. a compound is not always clear. This veers into the realms of morphotactics and prosody and may entail *ad hoc* realizations in the context of serialization thus making it very difficult to distinguish—if indeed there is reason to—nuclear serialization from stem compounding in forms like the one from Santali in (5).

- (5) Santali [Munda; India]
 ʈaʈka-ge noka=e **rakab-ghōŋ-n-a=e**
 numb-IS.II DEM=3SG climb-sit.astride-I/M-IND=3SG
 ‘confused and anxious he climbed up (on the deer)’ [Field Notes]

They are combinatorial and sequential in meaning and share a single inflectional frame as one expects in a nuclear serial formation but phonologically do not always form a single phonological word.

Crowley (2002) expanded this typology of serialized formations to include a distinction among syntactic role or argument cohesion or co-reference between Verb₁ and Verb₂ in the SVC. This may include i) subject cohesion/coreference ('same subject' serialization), ii) subject disjunction but with argument sharing ('switch subject' serialization) but with no requirement on shared valency, i.e., a formation that typically consists of a transitive verb followed by an intransitive one with the object of the first verb co-referent with the subject of the second one (e.g., 'hit die' for 'kill') or iii) no argument sharing at all, with one or another element in such formations typically marked as 3SG regardless of the subject of the overall construction and which may encode generalized states ('ambient serialization').

Aikhenvald (2006, 2018) uses a different typological opposition between *symmetric* and *asymmetric* SVCs, the distinction being one of co-occurrence restrictions: symmetric SVCs do not have co-occurrence restrictions between Verb₁ and Verb₂ in an SVC, but in asymmetric SVCs one or another of these comes from a restricted class. It is the asymmetric formations that are the types of SVCs that undergo auxiliation, i.e., functional/grammatical specialization and the ones that when so specialized or functionally restricted have grammaticalized into auxiliary verbs in auxiliary verb constructions, and thus no longer should be considered serial verb constructions.³

Even non-finite marking on one verb is not a definitively excluding factor for some researchers in determining what constitutes an SVC. For example, Goddard (1988) describes a construction in the Australian language Yankunytjatjara as a serial verb construction even though it has a particular verbal suffix glossed "serial". Hale (1991) describes a construction in Misumalpan languages (Nicaragua and Honduras) as a "serial construction" even though it uses a non-finite participial form of the verb.⁴

To be sure, isosemantic sequences can be formally distinct in their syntactic realizations. For example, a motion serialized meaning can be expressed by a nuclear serial formation in the Munda language Sora as in many languages (6a), but the same meaning can

³ Note that also likely developed from a serialized formation is a co-lexicalized biverbal composite predicate structure in various South Asian languages that are sometimes called echo-formations. I distinguish between true echo formations which are reduplicated with consonant- or vowel-overwrite often, from co-lexicalized forms which consist of a general term with a meaning that may occur alone in the same meaning and a co-lexicalized element that typically may not. Both are seen in example (i) from the Munda language Gutob. The colexicalized forms suggest they were likely core serialized forms in origin and the echo form shows consonant overwrite of *r-* with *b-*.

(i) Gutob [Munda; India]
 madɔ=nən **rone.bone** dɛŋ=gu **buron**=gu=nən **aʔso**=gu=nən
 3=PL **happy.ECHO** AUX=PST.I **live-** PST.I=3PL COLEX-PST.I=3PL
 'They became happy and lived on that way' (N. Zide 1997)

⁴ This of course assumes that finiteness is a discrete category which again is not agreed to by all researchers so once again even the terms used to describe the terms under consideration are themselves not necessarily coherent concepts.

be expressed by a rather different looking form with split inflection (tense on Verb₁, subject on Verb₂) and subjunctive marking on the sequential verb following the motion verb (6b) in a non-canonical ‘serialized’ structure.

- (6) a. Sora [Field Notes]
 ambin kuddu-bin a-siʔiŋ enegoij kən
 you.PL all-2PL DEP-house like.this this
 dʒeʔe-sol-n **i-dʒoda-ba**
 red-soil-N.SFX **go-smear-PL.IMP**
 ‘you all go and apply red soil in your houses like this’
 b. Sora [Field Notes]
 bebara-dum-en-dʒi kən a-kaku-n=na a-maŋ
 trader-Domb-N.SFX-PL this DEP-brother-N.SFX=FOC DEP-side
ij-l-ai tim-e-dʒi
go-PST-CLOC sell-SBJN-3PL
 ‘the Domb cattle traders came and sold this one to his brother’

Therefore, the answer to the question of what is meant by serial verb or serial verb construction is basically only answerable in the specific theoretical context that the researcher aligns themselves with, and therefore to which their theoretical terminology, assumptions, etc. are anchored. Lovstrand (2017: 77; 2021: 124) cogently summarizes this as follows:

“(a)nalyses of serialization often involve tweaking the abstract linguistic mechanisms of the linguist’s theory of choice. What has not emerged from the literature is any kind of consensus on what a formal analysis of serialization should account for. It appears that serialization has not yet been successfully incorporated into any of the formal syntactic theories and will continue to a topic of interest in formal syntax for at least the next few years.”

“(i)n as much as generative analyses of SVCs purport to be applicable universally, they tend to restrict the definition of SVCs depending on which constructions fit the proposed analysis. This creates controversy among linguists who have a different perspective on how to delimit the data. The disagreements cannot be resolved since there are few if any objective grounds for claims that one feature or another must be criterial in the definition of SVCs.”

In summary, the terms serial verb and serial verb construction whether from formal or functional approaches have little shared understanding across researchers and research traditions, and no one feature is agreed upon as definitional of serial verb and serial verb construction, although many individual researchers like Haspelmath (2016) have definitions they use to include some sets of formations and exclude others that have been called SVCs by other researchers using other, different terms or sets of definitional criteria. In other words, scholars either have been overly restrictive or overly inclusive in what they include in the denotation of ‘SVC’ or ‘serial verb’. The same is also true of auxiliary verb constructions as discussed in section 3. The overlap is particularly salient in, but not limited to, former SVCs

grammaticalized into aspectual functions. The overall confusion that has been expressed in the literature⁵ is clear due to the nature of the overlapping stages that typically co-exist between source formations (e.g., from SVCs) and auxiliated target formations (AVCs) that is often attested in grammaticalization of the latter from the former. Indeed, it is possible to have the same sequence be ambiguous between serialized and auxiliated readings in a given synchronic state of a language, e.g., as with the following form from the Pama-Nyungan language Djapu Yolngu.

- (7) Djapu Yolngu [Pama-Nyungan; Australia]
 nanɲ²-nanɲdhu-n nhina bala dhukarr-kurr
 /REDPL/-run-UNM sit/AUX.UNM TLOC road-PERL

serialized reading:

‘(it) ran and sat over there in the road (and then ran on again in fits and starts)’

or

auxiliated reading:

‘(it) kept running away along the road’

(Morphy 1983: 90)

As the serialized reading in (7) above as well as the forms in (1)-(6) show, the component verbs in an SVC always maintain their lexical semantics. This is their defining feature.

3. AUXILIARY VERB CONSTRUCTIONS ARE MULTI-VERB PREDICATES WITH FUNCTIONAL AND LEXICAL SEMANTIC ELEMENTS

Anderson (2006, 2011a/b) defines an auxiliary verb as a functional element and an auxiliary verb construction (AVC) as a Verb₁ Verb₂ predicate construction where one element has functional semantics, and one has lexical semantics. Auxiliary verbs in AVCs thus index functional categories by definition; in addition, they often serve as hosts for markers of other functional categories (e.g., object as in (8)).

Semantically auxiliaries are thus functional operators and instantiate functional heads of various types. The most common categories that they express are various tense (8)-(9), mood (10)-(11), and aspect and *Aktionsart* (12)-(13) categories (e.g., progressive, habitual, completive, imperfective).

- (8) Tairora [Kainantu, PNG]
 uba-ti-ba a-**mi**-ro
 talk-say-NMLZR 3OBJ-AUX-3
 ‘he told him’ (Vincent 1973: 562)

⁵ For example, Evans (1995: 308-12) calls aspectual complexes serialization but Cornyn and Roup (1968) call all verbal sequences auxiliaries in Burmese, Essegbey (2004) conversely claim that auxiliaries are a type of SVC in various West African languages.

- (9) Canela-Krahô [Macro-Jê, Brazil]
 i-**te** a-pupun
 1-PST 2-see
 ‘I saw you’ (Popjes and Popjes 1986: 130)
- (10) Warao [isolate, Venezuela]
 yaru-ne **ta**-kotu
 come.in-CONT AUX-2PL.IMP
 ‘you all better keep coming in’ (Romero-Figeroa 1997: 104)
- (11) Mapudungun [Araucanian, Chile]
kim-la-n ðlkantu-n
 CAP-NEG-1 sing-DEP
 ‘I cannot sing’ (Zuñiga 2000: 27)
- (12) Shuar [Jivaroan]
 kanu nahána-sa **puhá**-hey
 canoe make-GER AUX-1
 ‘I am making a canoe’ (Karsten 1935: 555)
- (13) Raga [Austronesian; Vanuatu]
ra-m *ban*
 3PL-CONT go
 ‘they are going’ (Lynch et al. 2002: 45)

Other functions of auxiliary verbs in AVCs found across the world’s languages include the expression of voice categories like causative (14), or a category of grammaticalized affectedness or discourse salience called ‘version’ (15).

- (14) Slave [Athabaskan, Canada]
 bebí déh-w’a ‘ah-**lá**
 baby 3-burp 1-CAUS
 ‘I burped the baby’ (Rice 2000: 209)
- (15) Tofa [Turkic; Siberia]
 kəp soot øøren-ip **al**-di-vis
 many word learn-CV SUBJ.VERSION-REC.PST-1PL
 ‘we learned ourselves many words’ (Field Notes)

Another less common function found associated with auxiliated formations in verbal constructions include various quasi-aspectual adverbial notions such as ‘suddenly’ in the Siberian Turkic language Xakas (16) or the stative verbal intensifier ‘very’ found in the Niger-Congo language Eleme of Nigeria (17).

- (16) Xakas [Turkic; Siberia]
ib-deŋ *sigara* *par-a* **xon-ga-m**
 house-ABL from go-CV UNEXP-PST-1
 ‘suddenly I left the house’ (Pritsak 1959: 621; verified in field notes)
- (17) Eleme [Cross River/Ogonoid; Nigeria]
 i. ð-**ʔɔɔ** *tʃá-i* *ɛpó*
 2-AUX run-2PL afraid
 ‘you became very afraid’ (Anderson 2006: 37)

- ii. *è-ʔɔtɔ-rĩ* *tʃã* *ɛpɔ*
 3-AUX-3PL run afraid
 ‘they became very afraid’ (Anderson 2006: 37)

Of course, negative formations are not infrequently encoded by auxiliary verb constructions with dedicated negative auxiliary verbs (18)-(19) as well.

- (18) Lango [Nilotic]
 án *à-pe* *à-cámò* *réc*
 I 1-NEG.AUX 1-eat:PRF fish
 ‘I didn’t eat the fish.’ (Noonan 1992: 143)
- (19) Hung’an [Bantu H42]
 tu-khoon-ak *ku-mon*
 1PL-NEG.AUX-IPFV INF-see
 ‘we don’t see, don’t think so’ (Nurse 2008: 183)

Syntactically auxiliaries frequently (although not obligatorily) occur in a head/dependent relationship with an accompanying lexical verb in an AVC, which may be encoded in many formal ways, such as the lexical verb being required to appear in various infinitive, converb, participial, gerund(ive), zero-marked, etc. formations. Many examples above demonstrate this. However, not all AVCs show this structure and this pattern with an overtly dependent lexical verb and all other inflectional categories encoded on the auxiliary is just one of five major morphosyntactic patterns attested in AVCs cross-linguistically, the so-called AUX-headed pattern, further exemplified in (20)-(21). In such formations, the lexical verb appears in a construction-specific (non-finite) form and the auxiliary verb encodes subject/TAM, etc.

- (20) Huallaga Quechua [Quechuan, Peru]
 Pillku-man *aywa-sha* ***ka-shaq***
 Pillku-GOAL go-PRTCPL AUX-FUT
 ‘I will have gone to Pillku’ (Weber 1989: 18)
- (21) Cayuvava [Isolate, Bolivia]
 hir-ave *ra-čoka*
 1PL.EX-CAP INF-come
 ‘we can come’ (Key 1967: 38)

The other four morphosyntactic patterns attested in AVCs include the LEX-headed pattern, the doubled or co-headed pattern, as well as various split and split/doubled patterns. In the LEX-headed pattern, the auxiliary encodes whatever functional category it realizes but other categories are indexed on the lexical verb. Examples include those found in (22)-(23). As these two examples show, the unmarked auxiliary can either precede (22) or follow (23) the lexical verb with which it forms a construction.

- (22) Tillamook [Salish, USA]
gʷə qʰkʷ-əs-w-əs
 FUT bite-PURP-2OBJ-3SUBJ
 ‘he will bite you’ (Egesdal & Thompson 1998: 241)
- (23) Euchee [Isolate, USA]
 di dze-ne-to **te**
 I 1.PAT-2.ACT-go.with **AUX**
 ‘you can go with me’ (Linn 2001: 296)

Doubled or co-headed AVCs show doubled inflection realizing the categories on both the auxiliary verb and the lexical verb at the same time. As (25) shows, the doubling can entail both subject and TAM marking.

- (24) Moro [Heiban Kordofanian; Sudan]
i-gero **i-gaberta**
1-NEG.PST **1-have**
 ‘I didn’t have’ (Black and Black 1971: 20)
- (25) Gorum (Parengi) [Munda; India]
 miŋ **ne-gaʔ-ru** **ne-laʔ-ru**
 I **1-eat-PST** **1-aux-PST**
 ‘I ate vigorously’ (Aze 1973:279)

Split inflectional patterns in AVCs show two common patterns. In the first one (26)-(27), subject is commonly found on the auxiliary verb but object on the lexical verb that subcategorizes for it, but the reverse pattern is also attested (28).

- (26) Kana [Cross-River/Ogonoid; Nigeria]
m-wēè **ā-kūē**
 1-PST 2-call
 ‘I called you’ (Ikoro 1996)
- (27) Bolanci/Bole [Chadic ; Nigeria]
 ‘n-jii ‘unḡa-kó
 1-AUX call-2OBJ
 ‘I call you’ (Lukas 1971: 128)
- (28) Jakaltek [Mayan; Guatemala]
šk-ach **w-ila**
COMPL-2ABS **1ERG-see**
 ‘I saw you’ (Craig 1977: 60)

The other common split pattern seen in AVCs is for negative to be encoded on the lexical verb and other grammatical categories rather appear on the auxiliary. This latter mainly occurs in languages exhibiting V AUX linear order.

- (29) Wai Wai [Cariban; Brazil/Guyana]
to-**hr** es-**ko**
go-NEG AUX-**2.IMP**
‘don’t go!’ (Hawkins 1998: 124)
- (30) Ika [Chibchan; Colombia]
č-**u?** nar-**w-in**
see-NEG AUX-**1-DECL**
‘I do not see’ (Landaburu 2000: 743)

Combining split with doubled patterns yields the so-called split/doubled pattern (Anderson 2006, 2011). The split categories in these split/doubled patterns tend to be the same as the simple split forms, i.e., subject/object splits or subject+TAM/object (30)-(31) and negative/other inflectional splits (32)-(33).

- (30) Pipil [Uto-Aztecan; El Salvador]
n-yu **ni-mitsin**-ilwitia
1-AUX 1-2PL-show
‘I’m going to show you’ (Campbell 1985: 137)
- (31) Lamba [M54 Bantu]
n-**ā**-li n-**ā-mu**-wona lēlo
1-PST-AUX 1-PST-3-see:FV today
‘I have seen him today’ (Botne 1986: 307; Doke 1938: 305)
- (32) Betoï [Isolate; Colombia/Venezuela]
r-ij-**omé** r-u-cá
1-die-NEG 1-AUX-IND
‘I do not die’ (Zamponi 2003: 34)
- (33) Setswana [Bantu]
ba-na **ba-se**-ka **ba**-robala
PL-children **3PL-NEG-AUX 3PL**-sleep:FV
‘the children must not sleep’ (Setshedi 1974: 42)

As with serial verb constructions, variation in the inflectional pattern is also not infrequently attested in AVCs as well. For example, in (34) we see a split inflectional pattern with the negative on the auxiliary but in (35) we see the same auxiliary rather appearing in a LEX-headed configuration with a negative-marked lexical verb in the Munda language Sora.

- (34) Lanjia (Arsid) Sora [field notes]
jen do?η=nam **ad**-rabti gidz-**am**
I OBJ=you NEG-CAP see-**2SG.UND**
‘I am not able to see you’ → ‘split pattern’
- (35) Juray Sora [field notes]
jen man=ado?η rabti **a-gidz-am**
1SG 2SG=OBJ CAP NEG-see-**2SG.UND**
‘I am not able to see you’ → ‘LEX headed pattern’

In terms of the diachronic semantics of grammaticalization, over and over across the world's languages we see the same limited set of lexical input forms mainly serving as the sources of grammaticalized auxiliaries. In (36) we offer the most commonly attested sets of auxiliated lexical sources.

(36)

Be(come)	Be On/At	Come	Do	Give
Go	Have	Hit	Leave	Lie
Put	Remain/Stay	See	Send	Sit
Stand	Take	Walk	Want	

Similarly, there is often a very restricted set of functional outcomes or target grammatical semantics that each specific input yields typically. This can also be viewed from the opposite perspective: each functional category is likely to be instantiated by a very restricted set of source input lexical semantics. Either way, the most common source-target or lexical → functional pairings (Anderson 2006, Heine and Kuteva 2002) found cross-linguistically include those in (37).

(37)

STAND/SIT/LIE >> Progressive (> Present), Imperfective, Habitual, Durative, Evidential
GO/WALK/LEAVE/ENTER >> Progressive (> Present), Inchoative/Inceptive, Perfective (> Past), Future
GIVE >> Benefactive (/‘Object’ Version), Inchoative
PUT/HIT/SEND >> Perfective, Perfect
SEE >> Attemptive
TAKE >> Perfective, Capabilitive, Self-Benefactive(/‘Subject’ Version)
DO/MAKE >> Past, Future, Habitual
BE/BECOME >> Probabilitive, Possibilitive, Capabilitive, Expletive
BE ON/AT >> Progressive (> Present), Durative; Perfective
STAY/REMAIN >> Progressive/Durative;
COME >> Inchoative/Inceptive, Potential, Future
WANT >> Future

What is striking about this list of the most commonly auxiliated verbs is the nearly total overlap it shows with the verbs most likely to enter into either co-lexicalized light verb formations (Section 5) or, more restrictedly, to be fully bleached to the point that they only instantiate valence in the context of dummy verb constructions (Section 4) examined in the following two sections. They are also the same verbs that occur as one of the verbs in an asymmetrical serial verb construction.

4. DUMMY VERBS LACK LEXICAL OR FUNCTIONAL SEMANTICS

Perhaps the ultimate endpoint on the desemanticization or semantic shift/narrowing of a component in a composite or complex predicate is to the complete lack of meaning entirely, whether functional or lexical. An intermediate point on this continuum could be considered elements that instantiate only valence or lexical aspect (if such are obligatory in

the language). These elements exhibit the morphosyntax and syntax of verbs but are semantically empty. Such elements may be called *dummy verbs* and serve mainly to make predicative elements inflectable that for whatever reason are not inflectable as normal stems in the language, e.g., they are loan elements, ideophones, phonologically defective in some way, etc. Typically, the verbs that serve as dummy verbs in such constructions involve forms etymologically meaning 'do', 'be' or 'say'. There may be a single such form in a given language or there may be a small, restricted set, for example, distinguishing transitive from intransitive forms or perfective from imperfective ones. A language with such a system of dummy verbs is Jarawara (38).

- (38) Jarawara [Aruan; Brazil]

jara owa haa:haa ka-**na** **na**-wi **na**-re-ka
branco 1:OBJ laugh APPL-DV DV-CONT DV-IMM.PST.EYEWTNS.M.-DECL.M
'the branco laughed at me for a considerable time' (Dixon 2002: 135)

ted-an	teʔ-li-n	e-da-n-etiʔ	
hang-N.SFX	hang-CV-I/M	cry-DV-I/M-PRF	
'Jembra hung on his elder sister-in-law's neck and cried'			(Field Notes)

Unfortunately, as of yet, insufficient data are available from which valid typological generalizations can be put forth as to the specific developmental trends that can be observed about such 'dummy' verb constructions, either how and where they arise or what, if anything, they might subsequently become.⁶

5. LIGHT VERB CONSTRUCTIONS ARE CO-LEXICALIZED COMPOSITE PREDICATES

In addition to the forms discussed above in sections 2-4 that exhibit a cline of semantic relationships themselves that moves from the purely lexical in SVCs to the functional with respect to the auxiliary verb in an AVC or to nothing but instantiating core valence (transitivity: intransitivity) or lexical aspect (perfectivity: imperfectivity) in the case of dummy verb constructions, there are other formations that are clearly formally similar—so-called light verb constructions. These are yet another composite predicate structure that also consists of a predicative but uninflectable or fixed element and an inflectable verbal component like a dummy verb construction. The syntactic role of the uninflectable predicative element in light verb constructions is disputed by different authors and indeed the entire range of phenomena are so grounded in specific theoretical matrices as to make it difficult to assess their insights crosslinguistically, e.g., the proposal that light verbs are instantiations of *v* offered by Adger (2003:134). These multi-verb predicate formations are typically called 'light verb formations'.

There is no real consensus as to what it means to be a 'light' verb, nor how such a concept differs from other verbal composite predicate elements in different biverbal constructions like serial verbs or auxiliary verbs, nor what the exact relationship between the light verb and the other predicative element in the formation it is in is, other than both are required to be meaningful in some way, and thus present a classic example of co-lexicalization.

In the Northern Australian languages, the uninflecting coverbs are drawn from an open class, and in general seem to share characteristics with both adverbials and verbs (Butt 2010: 11). The inflecting verbs, on the other hand, are drawn from a closed class that is generally quite small. A classic example of what is now called a light verb structure (but was analyzed at the time as a kind of auxiliary formation) comes from Northern Australian languages. Here we find a combination of an element that is predicatively rich but uninflectable with a closed class of inflectable light verbs.

- (44) Pungupungu (Kandjerramalh) [-Australia]
 mōrakara **naka** **ne-tye-nuŋ** wunkel

⁶ Note that what are here called 'dummy verbs' have also been called 'light verbs', and have been described as predicationally empty, i.e., that their function is simply to license the predication of another element; this is the solution pursued by Grimshaw and Mester (1988) for describing Japanese light verbs.

yesterday ask 1-LV:NON.FUT-3M.OBJ tobacco
 ‘yesterday I asked him for tobacco’
 (Tryon 1974: 195)

Bowern (2006b: 13) describes these light verb formations as biverbal complex predicates in which “one verb is lexically defective in some way” but does not explicitly make clear how the defectiveness is to be reckoned or what formal properties this defectiveness entails. She goes on to say that these light elements function to encode internal event structure semantics, trajectory, quasi-modality, participant information (like number and theta-roles of participants). Butt (2010: 4) states that “the light verb combines with something that is already a verb (historically a gerund, see Butt and Lahiri 2013) and generally affects the *Aktionsart* of the joint predication... the light verb renders the event bounded, but other subtle modifications such as benefactive readings, forcefulness, suddenness or inception are also possible (Hook 1974).” Butt (2010: 21-22) further comments that light verbs “...seem to modulate or structure a given event predication but not supply their own event... (and) *add* information to an event predication”. Butt (2010: 5) considers light verb formations to be unavailable to diachronic change and that they must be *form identical* to a main verb of the language (Butt and Lahiri 2013), and that the “light verb and full verb usages must be drawn from the same underlying lexical entry, whose lexical information plays out in different ways depending on its syntactic environment”.⁷ Nazir (2014: 25) for her part claims that “LVs generally add information about lexical aspect: a telic, boundness, or a causation component”.

It is thus clear from such statements that there is no clearcut definition nor consensus as to what a light verb or light verb construction is. Categories such as causation, benefactive, inception or even boundedness or suddenness should all be considered grammaticalized concepts encoding voice and aspect/*Aktionsart* functional semantics, and thus formations that express such meanings in a composite predicate should likely not be considered light verb constructions but rather auxiliary verb constructions.

Bowern (2006b) describes the most common verbs that function as light verbs to be *do/make, say, be(come), go, come, hit, give, catch, fall, think, want, and try*. Note that this overlaps significantly with the list of common auxiliated verbs in (36). In both origin and function there is significant overlap here with auxiliaries and indeed such light verb elements in Indo-Aryan were often considered to be auxiliaries by earlier researchers (e.g., Hacker 1958 and Hook 1974, 1991a, 1993).

Schultze-Berndt (2002) offers an analysis of the light verbs as *classifiers* of events in Jaminjung.⁸ In the following forms, the coverb denotes the manner, while the light verb supplies the event predication (45), the coverb supplies a path and the light verb supplies information about the type of motion on that path (46), or the coverb denotes a result and the light verb supplies the cause (47).

⁷ All these suggest an interpretation of such as forms as co-lexicalized structures or misinterpretations of auxiliary verb formations.

⁸ Note that in Schulze-Berndt (2003) she considered preverbs to function syntactically as adverbials.

- (45) Jaminjung [Australia]
 burdurubba=biya ga-ngga ngayin thanthu
 race=now 3SG-go.PRS animal(ABS) Dem(ABS)
 ‘It is racing off now that animal.’ (Schultze-Berndt 2002)
- (46) Jaminjung [Australia]
 buru ga-ruma-ny
 back 3SG-come-PST
 ‘s/he came back’ (Schultze-Berndt 2002)
- (47) Jaminjung [Australia]
 ning burr-wa-na
 break.off 3PL:3SG-bite-IMPF
 ‘They were biting something off.’ (Schultze-Berndt 2002)

Light verb formations are often analyzed from the Chomskyan generativist or other formalist perspectives (e.g., LFG), and the specific interpretations vary with the specific theoretical apparatus and assumptions of the investigator, indeed, much as was also shown to be characteristic of the discussions on SVCs and AVCs. Thus, the same issues abound: the terms are widely used by different subgroups of scholars in partially overlapping ways covering partially overlapping phenomena. What the discussion in the literature about light verb formations suggests is that once formations that are better analyzed as serial, auxiliary and dummy verb structures are identified and removed from consideration as light verb formations, then these largely appear to be co-lexicalized composite predicate formations in which both elements contribute to the overall meaning. Butt makes several points in her work on light verbs in Urdu that argue for a co-lexicalized interpretation. For example (Butt 2010: 14, 22) she notes that light verbs but not auxiliaries may undergo reduplication like a regular lexical verb, show subtle semantic differences in different combinations, and that the two elements show a tight connection with each other in a light verb construction as one would expect in a co-lexicalized formation.

Butt (2010) asserts light verbs cannot be grammaticalized in terms of their functional specification and I agree with this but for different reasons: They are already lexicalized formations and while the same input source construction could be functionally specialized in a different process of auxiliation as a grammatical construction, the light verb formation has already followed a separate path towards co-lexicalization. But that is not to say that light verbs or dummy verbs can’t be univerbated as the Australian data amply show: the composite predicate structures can be phonologically one word or more than word, and univerbation and functional specialization are logically independent parts of grammaticalization processes. Note also that dummy verbs that were similarly univerbated were exemplified in section 4 above.

Light verb constructions have been reported for a number of Indo-Iranian languages as well as Northern Australian, Turkic, SE Asian, Caucasian ones. Often there is a range of area-/tradition-specific terminological designations such as in South Asia, where the terms *vector verb*, *compound verb* or *explicator verb* (Masica 1976, Hook 1991a, 1991b, 1993, 2001) can be found; in Australia one finds the use of terms like *preverb*, *coverb*, and *inflecting verb* (McGregor 2002 and Schultze-Berndt 2000, 2003; Stokes and McGregor 2003), in Bantu linguistics we find use of terms such as *defective verbs* and *deficient verbs* (Ziervogel 1952, 1959, Ziervogel and Dau 1961, Setshedi 1974, Ziervogel and Mabuza 1976,

Mkhatshwa 1991, Nurse 2008); in Turkic linguistics the term ‘*postverb*’ is found (Demir 1993, 1998; Johanson 1995); in Southeast Asian linguistics one encounters yet different uses of *preverb* and *coverb*, *tense marker*, *auxiliary*, *post verb* and *particle* (Li and Thompson 1974, Thompson 1984-1985, Matthews and Yip 1994, Po-Ching and Rimmington 1997). In addition to light verb uses in the present sense, these other terms also cover a disparate range of formations some of which should likely be analyzed under the auspices of auxiliary verb constructions or serial verb formations or indeed dummy verb formations as well.

6. TOWARDS A SEMANTIC TYPOLOGY OF COMPOSITE PREDICATES

If we want to be able to understand the nature and typological range of multiverb predicates cross-linguistically—and I do think this is a valid line of inquiry as this investigation reveals much about the nature of the rise, expansion and collapse of grammatical and lexical systems, and thus this topic stands as an obviously relevant domain for the scientific study of language(s)—we must be able to come to a consensus on what kinds of phenomena the terminology we use refer to. The three-way opposition of serial verb/auxiliary verb/light verb is clearly inadequate, and a more fine-grained set of distinctions will be required.

Minimally a four-way opposition as preliminarily proposed here is needed; this will likely require significant refinement and expansion. In this typology of biverbal composite predicates, the primary defining feature distinguishing differently named subtypes is the semantic relationship seen between the elements in construction. If purely lexical and combinatorial, the formation is a serial verb construction.⁹ If there is no semantic content or the element solely instantiates the valence (or lexical aspect) and serves simply to permit inflection it is a dummy verb construction. If one element contributes functional/grammatical semantics and the other lexical semantics to the composite predicate, it is an auxiliary verb construction. If the two elements are co-lexicalized, then the formation is a light verb construction. There are thus continua observed in such formations moving from lexical to grammatical to null semantics and from syntactic to lexical formations, with attendant unusual semantics a possible outcome of the latter.

It is important to note that none of the terms used and addressed herein, viz. serial verb, auxiliary verb, dummy verb and light verb, exist as self-standing concepts, but rather are meaningful only in a larger constructional context, so it is more appropriate to discuss serial verb constructions, auxiliary verb constructions, dummy verb constructions and light verb constructions. Such formations minimally consist of two elements, at least one of which is lexical/predicative and at least one element is syntactically (/morphosyntactically) a verb and at least one activated potentially as a predicate.

As noted above at multiple points, there is indeed confounding overlap in how different scholars use the terms serial verb, light verb and auxiliary verb. Moreover, the same kinds of variation in the syntax and indeed morphosyntax are observed and ultimately the same historical phonological developments have been attributed to these different formations, e.g., functional specialization of serial or light verb formations is auxiliatation, and even light and dummy verbs can be fused into morphotactically integrated complexes with lexical verbs or uninflecting elements, etc. Structurally similar-looking formations might be

⁹ Indeed, SVCs are also typically iconically ordered with respect to event sequencing as well.

of a different semantic type, and we might find serialized or auxiliated structures or light verb constructions and auxiliary verb constructions from identical source formations.¹⁰ Thus, composite predicate structures obviously show significant overlap in input and output which further complicates the issues about how/whether to distinguish among them. Nevertheless, Bowerman (2008: 174) confidently states “I have found no evidence for light verbs being reanalysed as auxiliaries” but goes on to say that “...verbs meaning ‘sit’ consistently appear to grammaticalise as stative markers in light verb constructions (e.g., a large number of Northern Australian languages (Bowerman 2006a), and Turkic languages such as Uzbek (Bodrogligeti 2003: 724))”. This underscores the issue with terminology since if something that means ‘sit’ ends up meaning ‘stative’ it has already grammaticalized and thus is already an auxiliary, and it is not clear how or why it would ever be considered a light verb in the co-lexicalized composite predicate sense, as the meaning is typical of inflectional formations and regular and semantically predictable.¹¹ Lovestrand (2017: 78) nicely summarizes this in the following manner “(s)erialization in the descriptive literature exists as one of several somewhat vaguely-defined types of multiverb constructions including complex predicates, raising/restructuring verbs, auxiliary verb constructions, light verb constructions, coverbs and compound verbs.” It is possible that this is all that can be hoped for, that these are terms only understandable in language- and theory-specific contexts.

Auxiliary verb constructions typically derive from verb complement formations, serial verb constructions or clause chaining constructions (Anderson 2006). Dummy verbs in the present sense represent an endpoint of semantic bleaching, only instantiating a valence or obligatory lexical aspect requirement in the language for an inflected form but not meaning anything as such. In the Butt/Indo-Iranian or Australian sense, light verbs appear to be co-lexicalized formations, thus, most of what the theoretical literature calls light verbs appear to be co-lexicalized formations consisting of an inflecting element and an uninflecting element. Note that we differentiate between dummy verbs and light verbs here, thus these co-lexicalized formations form light verb formations, and the purely morphosyntax-triggered use of an inflectable stem is designated here as a dummy verb formation.

To summarize, a Verb₁ or Verb₂ element in a multi-verb predicate (depending on the phrasal syntax of the language) is an auxiliary verb if it contributes functional semantics to the overall constructional sense, is a serial verb if it contributes lexical semantics to the

¹⁰ Indeed, form-function mismatches are attested as well, such that semantically combinatorial sequential events can be expressed by a construction that is formally serialized or by subordination of some type in a given language.

¹¹ The problems with this statement are myriad: The verb ‘sit’ indeed has grammaticalized as a progressive marker in related Turkic languages (Anderson 2004), with no evidence of why this would be considered a light verb formation in those languages and why the input structure would be different in Uzbek except *ex post facto* definitionally. Bowerman’s statement (2008: 174) that “verbs meaning ‘sit’ consistently appear to ...grammaticalise... as a progressive marker in auxiliary constructions ... and as progressive or durative in serialisation constructions (Newman 2002: 16–17)”. How could something be meaningfully distinguished as a light verb formation, a serial verb formation or an AVC at its origin, when the input structures can be formally identical and can yield the same output structure (progressive) in the case of SVCs and AVCs? Such a statement also assumes that durativity, progressivity and other types of semantic imperfectivity that are often interpreted in a nuanced manner contextually can be so finely distinguished as to what their diachronic source origins might be, and, as such, this clean historical picture proposed by Bowerman does not hold up under careful scrutiny, at least from internal perspective of Turkic multi-verb predicates.

constructional sense, and is a dummy verb if it contributes no other semantics to the constructional sense except instantiating valence or lexical aspect and/or serving as an inflectable or potentially finite verbal element in a complex predicate, the other component of which has predicative potential but cannot be inflected as a verbal element in the language for a variety of different reasons (it's an ideophone, a borrowed stem, phonologically defective, etc.). Light verbs show obligatory co-lexicalization with another lexical/predicative element.

Thus, if one element in a MVC acquires functional/operator meanings, it is now an auxiliary operating in an AVC. If the semantics of the resulting structure is combinatorial or concatenative it is an SVC. If one element is verbal and serves solely to instantiate valence/lexical aspect or to be a completely semantically empty morph serving as (morpho)syntactic head to be inflected, it is a dummy verb. Light verb combinations are co-lexicalized composite predicates and thus may not be syntactic constructions *per se* but nevertheless have some kind of internal syntax that is verbal. However, we must allow for the likelihood that there are several more formal subtypes of multi-verb predicate formations that are syntactic and/or semi-lexical, and that new terminology will likely have to be coined (or co-opted) for such.

Of course, it is maybe most likely or honest to at least admit that perhaps subtypes of multi-verb composite predicate constructions can only be defined language specifically, and thus that there may be no cross-linguistic categories that can be meaningfully investigated and compared as such, except within that specific language's context (e.g., genetically/historically or within a contact history). Thus, it may be the case that the differences in approach and terminology are simply too ingrained in specific analytical traditions such that these differences are simply too fundamental to extract from the theoretical assumptions/approaches of the investigators and that there is no meaningful dialog possible across language contexts with respect to subtypes of bi-verbal or multi-verb composite predicate constructions. Future research it is hoped will reveal which path is the correct one to follow.

REFERENCES

- Abeillé, A., D. Godard, I. A. Sag, 1998, "Two Kinds of Composition in French Complex Predicates", in: E. Hinrichs, A. Kathol, T. Nakazawa (eds), *Complex Predicates in Nonderivational Syntax*, Syntax and Semantics Volume 30, San Diego, Academic Press, 1–41.
- Aboh, E. O., 2009, "Clause structure and verb series", *Linguistic Inquiry*, 40, 1, 1–33.
- Ackerman, F., G. Webelhuth, 1998, *A Theory of Predicates*, Stanford, CSLI Publications.
- Adger, D., 2003, *Core Syntax: A Minimalist Approach*, Oxford, Oxford University Press.
- Aikhenvald, A.Y., 2018, *Serial Verbs*, Oxford, Oxford University Press.
- Aikhenvald, A.Y., P. Muysken, (eds), 2011, *Multi-Verb Constructions: A View from the Americas*, Leiden, Brill.
- Aikhenvald, A.Y., 2006, "Serial Verb Constructions in Typological Perspective", in: A. Y. Aikhenvald, R.M.W. Dixon (eds), *Serial Verb Constructions. A Cross Linguistic Typology*, Oxford, Oxford University Press, 1–68.
- Aikhenvald, A. Y., R. M. W. Dixon (eds), 2006, *Serial Verb Constructions: A Cross-linguistic Typology*, Oxford, Oxford University Press.
- Alsina, A., J. Bresnan, P. Sells (eds), 1997, *Complex Predicates*, Stanford, CSLI Publications.

- Ameka, F. K., 2005, "Multiverb constructions on the West African littoral: microvariation and areal typology", in: M. Vulchanova, T. A. Āfarli (eds), *Grammar and Beyond: Essays in honour of Lars Hellan*, Oslo, Novus Press, 15–42.
- Anderson, G.D.S., 2004, *Auxiliary Verb Constructions in Altai-Sayan Turkic*, Wiesbaden, Harrassowitz Verlag.
- Anderson, G.D.S., 2006, *Auxiliary Verb Constructions*, Oxford, Oxford University Press.
- Anderson, G.D.S., 2011a, "Auxiliary verb constructions in the languages of Africa", *Studies in African Linguistics*, 39, 1/2, 1–409.
- Anderson, G. D. S., 2011b, "Auxiliary verb constructions (and other complex predicate types): A functional-constructional overview", *Language and Linguistics Compass*, 5, (11), 795–828.
- Anderson, G. D. S., (in preparation), *The Gta? Language: Grammar, Dictionary and Texts in Plains Gta? and Hill Gta?*.
- Andrews, A. D., 2023., "Complex predicates", in: M. Dalrymple, R. M. Kaplan, O. Belyaev, Gy. Rákosi, D. Haug (eds), *The Handbook of Lexical Functional Grammar*, Berlin, Language Science Press, 267–308.
- Andrews, A. D., C. D. Manning, 1999, *Complex Predicates and Information Spreading in LFG*, Stanford, Center for the Study of Language and Information.
- Aranovich, R. (ed.), 2007, *Split Auxiliary Systems: a Cross-linguistic Perspective*, Typological Studies in Language 69, Amsterdam, John Benjamins.
- Aze, F. R., 1973, "Clause Patterns in Parengi-Gorum", in: R. Trail (ed.), *Patterns in clause, sentence and discourse in selected languages of India and Nepal, Part 1*, Kathmandu, SIL and Tribhuvan University, 235–312.
- Baker, B., M. Harvey, 2010, "Complex predicate formation", in: M. Amberber, B. Baker, M. Harvey (eds), *Complex Predicates: Cross-Linguistic Perspectives on Event Structure*, New York, Cambridge University Press, 12–48.
- Baker, M., 1989, "Object sharing and projection in serial verb constructions", *Linguistic Inquiry*, 20 (4), 513–553.
- Balmer, W.T., F.C.F. Grant, 1929, *A grammar of the Fante-Akan language*, London, Atlantis Press.
- Bisang, W., 1995, "Verb serialization and converbs—differences and similarities", in: E. König, M. Haspelmath (eds), *Converbs in cross-linguistic perspective*, Berlin, Mouton de Gruyter, 137–188.
- Bisang, W., 2009, "Serial verb constructions", *Language and Linguistics Compass*, 3, 3, 792–814.
- Black, K., K. Black, 1971, *The Moro Language. Grammar and Dictionary*, Linguistic Monograph Series 6, Khartoum, Sudan Research Unit, Faculty of Arts.
- Bodrogligeti, A., 2003, *An Academic Reference Grammar of Modern Literary Uzbek*, vol. 2. Munich, Lincom Europa.
- Botne, R., 1986, "The Temporal Role of Eastern Bantu *-ba* and *-li*", *Studies in African Linguistics*, 17, 3, 303–317.
- Bowern, C., 2006a, "Australian complex predicates", *Plenary presentation*, Berkeley Linguistics Society 32, Berkeley, California.
- Bowern, C., 2006b, "Inter-theoretical approaches to complex verb constructions: position paper", *11th Biennial Rice University Linguistics Symposium. Rice University. 16th–18th March, 2006*.
- Bowern, C., 2008, "The diachrony of complex predicates", *Diachronica*, 25, 2, 161–185.
- Bowern, C., 2010, "The typological implications of Bardi complex predicate", *Linguistic Typology*, 14, 1, 39–70. (doi:10.1515/lity.2010.002).
- Bowern, C., 2014, "Complex predicates", in: H. Koch, R. Nordlinger (eds), *The Languages and Linguistics of Australia: A Comprehensive Guide*, Berlin, De Gruyter Mouton, 263–294.
- Bradshaw, J., 1993, "Subject relationships within serial verb constructions in Numbami and Jabêm", *Oceanic Linguistics*, 32, (1), 133–61.
- Bril, I., 2004, "Complex nuclei in Oceanic languages: contribution to an areal typology", in: I. Bril, F. Ozanne-Rivierre (eds), *Complex Predicates in Oceanic Languages*, Berlin, Mouton de Gruyter, 1–48.

- Bril, I., F. Ozanne-Rivierre (eds), 2004, *Complex Predicates in Oceanic Languages*, Berlin, Mouton de Gruyter.
- Butt, M., 1995, *The Structure of Complex Predicates in Urdu*, Stanford, California, CSLI Publication.
- Butt, M., 2010, "The Light Verb Jungle: Still Hacking Away", in: M. Amberber, B. Baker, M. Harvey (eds), *Complex Predicates: Cross-linguistic Perspectives on Event Structure*, Cambridge, Cambridge University Press, 48–78.
- Butt, M., 2014, "Control vs. complex predication", *Natural Language & Linguistic Theory*, 32, 1, 165–190. doi:10.1007/s11049-013-9217-5
- Butt, M., A. Lahiri., 2013, "Diachronic pertinacity of light verbs", *Lingua*, 135, 7–29. doi:10.1016/j.lingua.2012.11.006
- Butt, M., W. Geuder, 2001, "On the (Semi)Lexical Status of Light Verbs", in: N. Corver, H. van Riemsdijk (eds), *Semi-Lexical Categories: On the Content of Function Words and the Function of Content Words*, Berlin, Mouton de Gruyter, 323–370.
- Campbell, J., 2023, *Serial Verb Constructions and Auxiliary Verb Constructions in SENĆOŦEN*, MA Thesis, University of Victoria.
- Campbell, L., 1985, *The Pipil language of El Salvador*, Berlin, Mouton de Gruyter.
- Cattell, R., 1984, *Composite Predicates in English*, Sydney, Academic Press Australia.
- Choi, S. 2005, *Multiple Verb Constructions in Korean*, PhD dissertation, University of Sussex.
- Cleary-Kemp, J., 2015, *Serial Verb Constructions Revisited: A Case Study from Koro*, PhD Dissertation, University of California, Berkeley.
- Collins, C., 1993, *Topics in Ewe syntax*, PhD Dissertation, MIT.
- Collins, C., 1997, "Argument sharing in serial verb constructions", *Linguistic Inquiry*, 23, 3, 461–497.
- Collins, C., 2002, "Multiple verb movement in #Hoan", *Linguistic Inquiry*, 33, 1, 1–29.
- Cornyn, W. S., D. H. Roop, 1968, *Beginning Burmese*, New Haven and London, Yale University Press.
- Craig, C., 1977, *The Structure of Jakaltek*, Austin, University of Texas Press.
- Crowley, T. 2002, *Serial Verbs in Oceanic: A Descriptive Typology*, Oxford/New York, Oxford University Press.
- Déchaîne, R-M., 1993, "Serial verb constructions", in: J. Jacobs, A. von Stechow, T. Vennemann, (eds), *Syntax: Ein internationales Handbuch zeitgenössischer Forschung*, Berlin/New York: Walter de Gruyter, 799–825.
- Demir, N., 1993, *Postverbien in Türkei/türkischen*, *Turcologica* 17, Wiesbaden, Harrassowitz.
- Demir, N., 1998, "On the status of a Turkish postverb", in: L. Johanson, É. Á. Csató, V. Locke, A. Menz, D. Winterling, (eds), *The Mainz Meeting. Proceedings of the Seventh International Conference on Turkish Linguistics*, *Turcologica* 32, Wiesbaden, Harrassowitz, 224–233.
- Dempwolff, O., 1939, *Grammatik der Jabem-Sprache auf Neuguinea*, Hamburg, Friederichsen, de Gruyter.
- Dixon, R. M. W., 2002, "The eclectic morphology of Jarawara, and the status of word", in: R.M.W. Dixon, A.Y. Aikhenvald (eds), *Word. A Cross-Linguistic Typology*, Cambridge, Cambridge University Press, 125–152
- Doke, C., 1938, *Textbook of Lamba Grammar*, Johannesburg, Witwatersrand University Press.
- Durie, M., 1988. "Verb serialization and 'verbal-prepositions' in Oceanic languages", *Oceanic Linguistics*, 27, 1–2, 1–23.
- Durie, M., 1997, "Grammatical structures in verb serialization", in: A. Alsina, J. Bresnan, P. Sells, (eds), *Complex Predicates*, Stanford, CSLI Publications, 289–354.
- Egesdal, S., M. T. Thompson, 1998, "A fresh look at Tillamook (Hutyéyu) inflectional morphology", in: E. Czaykowska-Higgins, M.D. Kinkade, (eds), *Salish Languages and Linguistics, Theoretical and Descriptive Perspectives*, Berlin, Mouton de Gruyter, 235–273.
- Essegbey, J., 2004., "Auxiliaries in serialising languages: on COME and GO verbs in Sranan and Ewe", *Lingua*, 114, 4, 473–494.
- Evans, N. D., 1995, *A Grammar of Kayardild: With Historical-Comparative Notes on Tangkic*, Berlin, Walter de Gruyter.

- Fleischhauer, J., S. Hartmann, 2021, "The emergence of light verb constructions: A case study on German *kommen* 'come'", *Yearbook of the German Cognitive Linguistics Association*, 9, 1, 135–156. doi:10.1515/gcla-2021-0007.
- Foley, W. A., M. Olson, 1985, "Clausehood and verb serialization", in: J. Nichols, A.C. Woodbury (eds), *Grammar Inside and Outside the Clause: Some New Approaches to Theory from the Field*, Cambridge, Cambridge University Press, 17–60.
- Foley W. A., R.D. Van Valin, 1984, *Functional Syntax and Universal Grammar*, Cambridge, Cambridge University Press.
- Gazdar, G., G. Pullum, I. Sag, 1982, "Auxiliaries and related phenomena in a restrictive theory of grammar", *Language*, 58, 591–638.
- Givón, T., 1991a, "Serial verbs and the mental reality of 'event': Grammatical vs. cognitive packaging", in: E.C. Traugott, B. Heine (eds), *Approaches to Grammaticalization*, Amsterdam/Philadelphia, John Benjamins, 81–128.
- Givón, T., 1991b, "Some substantive issues concerning verb serialization: Grammatical vs. cognitive packaging", in: C. Lefebvre (ed.), *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*, Amsterdam/Philadelphia, John Benjamins, 137–184.
- Givón, T., 1995, *Functionalism and Grammar*, Amsterdam, John Benjamins.
- Godard, D., P. Samvelian, 2021, "Complex predicates", in: S. Müller, A. Abeillé, R. D. Borsley, J.-P. Koenig (eds), *Head-Driven Phrase Structure Grammar: The Handbook*, Berlin, Language Science Press, 419–488. <https://zenodo.org/record/5599838>.
- Goddard, C., 1988, "Verb serialisation and the circumstantial construction in Yankunytjatjara", in: P. Austin (ed.), *Complex Sentence Constructions in Australian Languages*, Typological Studies in Language, Amsterdam/Philadelphia, John Benjamins, 177–192.
- Goddard, J., 1980, "Notes on Agarabi Grammar", *Papers in New Guinea Linguistics* 20, Pacific Linguistics A-56, Canberra, Australian National University, 35–76.
- Grimshaw, J., A. Mester., 1988, "Light Verbs and Θ -Marking", *Linguistic Inquiry*, 19, 2, 205–232.
- Hacker, P., 1958, *Zur Funktion einiger Hilfsverben im modernen Hindi*, Mainz, Akademie der Wissenschaften und der Literatur.
- Hale, K., 1991, "Misumalpan verb sequencing constructions", in: C. Lefebvre (ed.), *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*, Amsterdam/Philadelphia, John Benjamins, 1–35.
- Halle, M., A. Marantz, 1993, "Distributed Morphology and the Pieces of Inflection", in K. Hale, S. J. Keyser, (eds), *The View from Building 20*, Cambridge, MA, MIT Press, 111–176.
- Haspelmath, M., 2016, "The serial verb construction: Comparative concept and cross-linguistic generalizations", *Language and Linguistics*, 17, 3, 291–319.
- Haspelmath, M., 2024, "Biverbal predicate constructions and related concepts: Serial verbs, converbs, auxiliaries, and grammaticalization" URL: https://www.academia.edu/123995829/Biverbal_predicate_constructions_and_related_concepts_Serial_verbs_converbs_auxiliaries_and_grammaticalization (Access date: 15.10. 2025).
- Hawkins, R. E., 1998, "Wai Wai", in: D. Derbyshire, G. K. Pullum, (eds), *Handbook of Amazonian Languages, Vol. IV*, Berlin, Mouton de Gruyter.
- Heine, B., 1993, *Auxiliaries. Cognitive Forces and Grammaticalization*, New York, Oxford University Press.
- Heine, B., U. Claudi, F. Hünemeyer, 1991, *Grammaticalization. A conceptual framework*, Chicago, University of Chicago Press.
- Heine, B., T. Kuteva, 2002, *World Lexicon of Grammaticalization*, Cambridge, Cambridge University Press.
- Heine, B., M. Reh, 1984, *Grammaticalization and Reanalysis in African Languages*, Hamburg, Helmut Buske Verlag.
- Holton, G., 2003, *Tobelo*, Languages of the World/Materials 328, München, LINCOM.
- Hook, P. E., 1974, *The Compound Verb in Hindi*, Center for South and Southeast Asian Studies, University of Michigan.

- Hook, P. E., 1991a, "The Emergence of Perfective Aspect in Indo-Aryan Languages", in: E. Traugott, B. Heine, (eds), *Approaches to Grammaticalization*, Amsterdam: Benjamins, 59–89.
- Hook, P. E. 1991b, "The Compound Verb in Munda: An Areal Overview", *Language Sciences*, 13, 2, 181–95.
- Hook, P. E., 1993, "Aspectogenesis and the Compound Verb in Indo-Aryan", in: M. Verma (ed.), *Complex Predicates in South Asian Languages*, Delhi, Manohar Publishers and Distributors, 97–113.
- Hook, P. E., 2001., "Where do Compound Verbs come from? (and where are they going?)", in: P. Bhaskararao, K.V. Subbarao (eds), *The Yearbook of South Asian Languages and Linguistics*, New Delhi, Sage Publications, 102–130.
- Hopper, P. J. and E. C. Traugott, 1993, *Grammaticalization*, Cambridge, Cambridge University Press.
- Ikoro, S., 1996, *The Kana Language*, Leiden University, Ph. D. Dissertation.
- James, D., 1983, "Verb Serialization in Siane", *Languages and Linguistics in Melanesia*, 14, 24–73.
- Johanson, L., 1995, "Mehrdeutigkeit in der türkischen Verbalkomposition", in: M. Erdal, S. Tezcan (eds), *Beläk Bitig. Sprachstudien für Gerhard Doerfer zum 75. Geburtstag*, (Turcologica 23), Wiesbaden, Harrassowitz, 81–101.
- Karsten, R., 1935, *The Head-Hunters of Western Amazonas: The Life and Culture of the Jibaro Indians of Eastern Ecuador and Peru*, Helsingfors, Akademiska Bokhandeln.
- Key, H., 1967, *Morphology of Cayuvava*, The Hague, Mouton.
- Koopman, H., A. Szabolcsi, 2000, *Verbal Complexes*, London/Cambridge, Massachusetts, MIT Press.
- Kuteva, T., 2001, *Auxiliation*, Oxford, Oxford University Press.
- Laidig, W.D., C.J. Laidig, 1991, *Lalepata Sou Rikedu. Percakapan Bahasa Larike. Larike Conversations*, Ambon/Maluku, SIL.
- Landaburu, J., 2000, "La lengua ika", in: M.S. González de Pérez, M.L. Rodríguez de Montes, (eds), *Lenguas indígenas de Colombia*, Bogotá, Instituto de Caro y Cuervo, 733–48.
- Lee, S., 1992, *The Syntax and Semantics of Serial Verb Constructions*, Ph D dissertation, University of Washington.
- Lefebvre, C. (ed.), 1991, *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*, Amsterdam, John Benjamins.
- Li, C.N., S.A. Thompson, 1974, "Co-verbs in Mandarin Chinese: Verbs or prepositions?", *Journal of Chinese Linguistics*, 2, 3, 257–278.
- Li, Y., 1991. "On Deriving Serial Verb Constructions", in: C. Lefebvre (ed.), *Serial Verbs: Grammatical, Comparative and Cognitive Approaches*, Amsterdam, John Benjamins, 103–135.
- Linn, M. S., 2001, *A Grammar of Euchee (Yuchi)*, PhD Dissertation, University of Kansas.
- Lord, C., 1993, *Historical Change in Serial Verb Constructions*, Typological Studies in Language 26, Amsterdam, John Benjamins.
- Lovestrand, J., 2017ms, "DRAFT: An overview of the literature on serial verb constructions", unpublished.
- Lovestrand, J., 2021, "Serial verb constructions", *Annual Review of Linguistics*, 7, 1, 109–130.
- Lukas, J., 1971, "Die Personalia und das primare Verb im Bolanci (Nordnigerien) ", *Afrika und Übersee* 55, 114–139.
- Lynch, J., M. Ross, T. Crowley, 2002, *The Oceanic Languages*, London, Curzon.
- Masica, C., 1976, *Defining a Linguistic Area: South Asia*, Chicago, University of Chicago Press.
- Matthews, S., V. Yip, 1994, *Cantonese: A Comprehensive Grammar*, London, Routledge.
- McGregor, W., 2002, *Verb Classification in Australian Languages*, Berlin, Mouton de Gruyter.
- Mkhatshwa, S. N. L., 1991, *Metaphorical Extensions as a Basis for Grammaticalization. With Special Reference to Zulu Auxiliary Verbs*, MA Thesis, University of South Africa.
- Morphy, F., 1983, "Djapu, a Yolngu dialect", in: R.M.W. Dixon, B.J. Blake (eds), *Handbook of Australian Languages: Volume 3*, Canberra, Australian National University, 1–188.
- Muysken, P., T. Veenstra, 1994, "Serial verbs", in: J. Arends, P. Muysken, N. Smith, (eds), *Pidgins and Creoles: An Introduction*, Amsterdam, John Benjamins, 289–302.

- Muysken, P., T. Veenstra, 2006, “Serial verbs”, in: M. Everaert, H. van Riemsdijk, (eds), *The Blackwell Companion to Syntax*, volume 4, Oxford, Blackwell, 234–270.
- Nazir, F. B., 2014, *Light Verb Constructions in Potwari*, PhD Dissertation, University of Manchester.
- Newman, J., (ed.), 2002, *The Linguistics of Sitting, Standing, and Lying*, Amsterdam, John Benjamins.
- Noonan, M., 1992, *A Grammar of Lango*, Berlin, Mouton de Gruyter.
- Nurse D., 2008, *Tense and Aspect in Bantu*, Oxford, Oxford University Press.
- Owens, M., 2011, *Serial Verb Constructions: Argument Structural Uniformity and Event Structural Diversity*, PhD thesis, Stanford University.
- Po-Ching, Y., D. Rimmington, 1997, *Chinese: An Essential Grammar*, London, Routledge.
- Popjes, J., J. Popjes, 1986, “Canela-Krahô”, in: D. Derbyshire, G. K. Pullum (eds), *Handbook of Amazonian Languages*, Vol. I, Berlin, Mouton de Gruyter, 128–99.
- Pritsak, O. 1959. “Das Abakan-türkische (Chakassische)”, in: J. Deny, K. Grønbeck, H. Scheel, S.V. Togan, (eds), *Philologiae turcicae fundamenta I*, Aquis Mattiacis, Steiner, 598–622.
- Rice, K., 2000, “Voice and valency in the Athapaskan family”, in R. M. W. Dixon, A. Y. Aikhevald (eds), *Changing valency. Case Studies in Transitivity*, Cambridge, Cambridge University Press, 173–235.
- Romero-Figueroa, A., 1997, *A Reference Grammar of Warao*, München, Lincom Europa.
- Ross, D., 2021, *Pseudocoordination, Serial Verb Constructions and Multi-Verb Predicates: The Relationship Between Form and Structure*, PhD dissertation, University of Illinois. doi:10.5281/zenodo.5546425
- Schiller, Eric. 1990. “On the Definition and Distribution of Serial Verb Constructions”, in: B. Joseph, A. Zwicky (eds). *When Verbs Collide*, Columbus, Ohio, Ohio State University Press, 34–64.
- Schneider, L., 2024, *Serial Verb Constructions in Hul’q’umi’num’ Salish*, PhD Dissertation, Simon Fraser University.
- Schultze-Berndt, E., 2000, *Simple and Complex Verbs in Jaminjung: A Study of Event Categorisation in an Australian Language*, Nijmegen, MPI Series in Psycholinguistics.
- Schultze-Berndt, E., 2002, “Neither noun nor verb nor particle”, Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September, 2002.
- Schultze-Berndt, E., 2003, “Towards a typology of complex predicates”, paper presented at the annual meeting of the Society for the Study of the Indigenous Languages of the Americas, Atlanta, Georgia.
- Sebba, M., 1987, *The Syntax of Serial Verbs: An Investigation into Serialisation in Sranan and Other Languages*, Amsterdam, John Benjamins.
- Seiss, M., 2009, “On the difference between auxiliaries, serial verbs and light verbs”, in: M. Butt, T.H. King (eds). *Proceedings of the LFG09 Conference*. Stanford, California, CSLI Publications, 501–519.
- Seiss, M., 2013, *Murrinh-Patha Complex Verbs: Syntactic Theory and Computational Implementation*, PhD Dissertation, Universität Konstanz.
- Senft, G., 2004, “What do we really know about serial verb constructions in Austronesian and Papuan languages?”, in: I. Bril, F. Ozanne-Rivierre (eds), 49–64.
- Senft, G. (ed.), 2008, *Serial verb constructions in Austronesian and Papuan languages*, Canberra, Australian National University.
- Setshedi, J. E., 1974, *The Auxiliary Verbs and the Deficient Verbs in Tswana*, MA Thesis, University of the North, Pietersburg.
- Seuren, P., 1990, “Serial Verb Constructions”, in: B. Joseph, A. Zwicky (eds), *When Verbs Collide*, Columbus, Ohio, Ohio State University Press, 14–33.
- Stewart, O. T., 2013, *The Serial Verb Construction Parameter*, London, Routledge.
- Stokes, B., W. McGregor, 2003, “Classification and Subclassification of the Nyulnyulan Languages”, in: N. Evans, (ed.), *The Non-Pama-Nyungan Languages of Northern Australia. Comparative Studies of the Continent’s Most Linguistically Complex Region*, Canberra, Australian National University, 29–74.

- Thompson, E. D., 1976, "Nera", in: M.L. Bender (ed.), *Non-Semitic Languages of Ethiopia*, East Lansing, Michigan, African Studies Center, 484–494.
- Thompson, L. C., 1984–1985, *A Vietnamese Reference Grammar, Mon-Khmer Studies XIII–XIV*, Honolulu, University of Hawai'i Press.
- Traugott, E. C. 1999., "A Historical Overview of Complex Predicates", in: L.J. Brinton, M. Akimoto (eds), *Collocational and Idiomatic Aspects of Composite Predicates in the History of English*, Amsterdam, John Benjamins, 239–260.
- Traugott, E. C., B. Heine, 1991a/b, *Approaches to Grammaticalization*, Vol. 1–2, Amsterdam and Philadelphia, John Benjamins.
- Tryon, D. T., 1974, *Daly Family Languages, Australia*, Pacific Linguistics C-32, Canberra, Australian National University.
- Ulrich, J., 2018, *Modification, Secondary Predication and Multi-Verb Constructions in Lakota*, PhD Dissertation, Heinrich-Heine Universität, Düsseldorf.
- Unterladstetter, V., 2020, *Multi-Verb Constructions in Eastern Indonesia*, Berlin, Language Science Press.
- van Valin, R., R. La Polla, 2000, *Syntax*, Cambridge, Cambridge University Press.
- Vincent, A., 1973, "Notes on Tairora noun morphology", in: H. McKaughan (ed.), *The Languages of the Eastern Family of the East New Guinea Highland Stock*, Seattle, University of Washington Press, 530–546.
- Weber, D.J., 1989, *A Grammar of Huallaga (Huánaco) Quechua*, Berkeley, UC Press.
- Zamponi, R., 2003, *Betoi*, München, Lincom.
- Zide, N.H., 1997, "Gutob pronominal clitics and related phenomena elsewhere in Gutob-Remo-Gta?", in: A. Abbi (ed.), *Languages of Tribal and Indigenous Peoples of India*, Delhi, 307–334.
- Ziervogel, D., 1952, *A Grammar of Swazi*, Johannesburg, Witwatersrand University.
- Ziervogel, D., 1959, *A Grammar of Northern Transvaal Ndebele*, Pretoria, J. L. van Schaik Ltd.
- Ziervogel D., R.S. Dau, 1961, *Handbook of the Venda Language*, Pretoria, University of South Africa.
- Ziervogel D., E. J. Mabuza, 1976, *A Grammar of the Swati Language (Siswati)*, Pretoria: J.L. van Schaik Ltd.
- Zuñiga, F., 2000, *Mapudungun*, Languages of the World/Materials 376, Munich, LINCOM.
- Zwicky, A., 1990, "What are we talking about when we talk about serial verbs?", *Ohio State University Working Papers in Linguistics*, 39, 1–13.