On the Status of g- ‘do’ in Kalam

Kelsey Daniels, Graduate Institute of Applied Linguistics student

Abstract: In this paper, I explore the grammatical status of g- ‘do’ in Kalam, a Papuan language of Papua New Guinea. I examine the previous work done primarily by Andrew Pawley, exploring both the distinctions between so-called serial verb constructions (SVCs) with and without g- ‘do’ as the final verb and the distinctions between verb adjunct constructions (VACs) with and without g- ‘do’. In the first half of the paper, I argue that g- ‘do’ functions as a pro-verb in so-called SVCs based on its anaphoric relationship with other verbs in the discourse and its ability to refer to unspecified events. I also argue that instances in which g- ‘do’ appears to function like an aspectual auxiliary can be explained by rules of Kalam grammar and its anaphoric relationship with other verbs. In the second half of the paper, I argue that g- ‘do’ is a light verb in VACs (and with adjectives or borrowed lexical items) based on its identical form with the heavy verb g- ‘do’, restrictions in lexical combinations, and change in argument structure by the addition of a verb adjunct. I conclude the paper by distinguishing the two forms of g- ‘do’ in their combinatorial properties, functions, and selectional restrictions.

1. Introduction

Kalam is a language spoken near the junction of the Bismark and Schrader Ranges on the northern edge of the central highlands of Papua New Guinea (Pawley and Bulmer 2011:11). It is a member of the Trans New Guinea family, the Madang subgroup, and the Kalam-Kobon family (Pawley 2006a).1

Pawley and Bulmer (2011), Pawley (2009), Pawley (2008), Pawley (n.d.), and Lane (2007) have all discussed Kalam constructions which appear to have more than one predicking element in a clause. Specifically, the first four papers mentioned in the list state that there are three types of serial verb constructions2 (henceforth, SVCs) in Kalam: compact, narrative3, and ‘do-support’. However, as these authors point out, ‘do-support’ SVCs have a number of characteristics that make them distinct from canonical SVCs. Additionally, these linguists also describe verb adjunct constructions (henceforth, VACs) in Kalam. VACs which contain g- ‘do’ also function differently than canonical VACs.

In this paper, I explore both the distinctions between so-called SVCs with and without g- ‘do’ as the final verb and the distinctions between VACs with and without g- ‘do’. I argue that g- ‘do’ functions as a pro-verb in so-called SVCs based on its anaphoric relationship with other verbs in the discourse and its ability to refer to unspecified events. I also argue that instances in which g- ‘do’ appears to function like an aspectual auxiliary can be explained by rules of Kalam grammar and its anaphoric relationship with other verbs.

Footnotes:
1Andrew Pawley as well as the other scholars whose work is discussed in this article have conducted a tremendous amount of fieldwork and produced a great deal of descriptive work on Kalam which has allowed me to research this topic. Pawley has also answered many of my questions regarding his analysis based on his decades of experience working with the language. I am indebted to him for his vast publication of data and for his input. I am also grateful to Amy Wiest, Paul Kroeger, Steve Parker, and Don Daniels for comments on previous versions of this paper. Of course, all errors remain my responsibility.
2Whether these constructions are actually SVCs according to standard tests such as monoclausality is questionable. I use the term SVC when I discuss Pawley’s analysis to remain consistent with his terminology. See my comments about terminology in §2.2.
3In Lane (2007) narrative SVCs were referred to as ‘episodic event sequences’.
grammar and its anaphoric relationship with other verbs. Lastly, I argue that the use of g- ‘do’ in clause chains suggests that an SVC or auxiliary verb analysis will not suffice. In the second half of the paper, I argue that g- ‘do’ is a light verb in VACs (and with adjectives or borrowed lexical items) based on its identical form with the heavy verb g- ‘do’, restrictions in lexical combinations, and change in argument structure by the addition of a verb adjunct.

2. ‘Serial verb constructions’

Kalam reportedly employs SVCs extensively. Strings of eight verbs in one clause under one intonation contour with only the final verb inflected for tense, aspect, or modality and person/number agreement are not uncommon, as in (1).

(1) yp wik d ap tan d ap yap g-s<$\text{a}>p
me rub get come ascend get come descend do-PRES.PROG<$3\text{S}>$
‘He is massaging me...’ (or, ‘…he is giving me a rubdown.’) [Pawley 2008:171]

There are a number of semantic and syntactic constraints to serial verb construction formation in Kalam as quoted from Pawley and Bulmer (2011:52):

(a) Semantic constraints on canonical serial verb constructions
(i) The verbs (with their arguments) must denote a series of acts or events that, taken together, are readily identifiable by native speakers as closely connected.
(ii) All acts must be performed by the same actor.
(iii) The acts must be either all asserted or all denied.
(iv) The acts must all be of roughly equal semantic importance, i.e. no act is singled out for highlighting or elaboration.
(v) The verb roots retain their full lexical senses, as opposed to a bleached or grammaticalized sense.
(vi) The SVC can be broken down into immediate constituents each denoting an act or event that is temporally discrete, or partly discrete from the other constituents. The immediate constituents may consist of a single verb root or, in some cases, a sequence of verb roots that forms a semantic unit.
(vii) To the extent that the constituents are temporally discrete, their order matches the temporal order of the actions which they denote.

(b) Grammatical constraints on canonical serial verb constructions
(i) There is only one inflected verb per SVC.
(ii) The same verb cannot occur successively.
(iii) There is only one overt subject, coded on the inflected verb, and sometimes also represented by an overt NP.
(iv) Transitive verb roots share a Direct Object.
(v) No subordinating or coordinating morphemes occur within the construction.
(vi) Other than the negative clitic, the only non-verb material that can occur within the string of verb roots consists of verb adjuncts. A verb adjunct + verb root is functionally equivalent to a single verb root.
Non-verbal clitics or particles which can be postposed to inflected verbs (such as *tek* ‘like, positive question marker’, *akay* ‘or, question marker’), can only follow the final (inflected) verb in a series.

There can be only one negative morpheme per verb series, with scope over the whole series. The negative marker can precede either the whole verb series or (under certain conditions) the final verb.

Although these constraints are presented in Pawley and Bulmer (2011) as applying to all SVCs, they seem to primarily correspond to the formation of compact SVCs. Recall that there are three kinds of SVCs in Kalam: compact, narrative, and ‘do-support’ (Pawley and Bulmer 2011:51).

2.1 Compact

Compact SVCs, as the name suggests, are more syntactically and semantically tight-knit than narrative SVCs. Syntactically, arguments may not intervene between the elements of the SVC. Semantically, compact SVCs contain two or more verbs semantically joined to denote sub-events of one complex event (Pawley and Bulmer 2011:53) as in (2).

(2) Kaj tb lak-sp-ay.
    pig cut split-PRES.PROG-3PL
    ‘They are butchering pigs.’ (lit. cutting them up by splitting, i.e. making a (first) longitudinal cut) [Pawley and Bulmer 2011:53]

2.2 Narrative

Pawley (2008:191) suggests that narrative SVCs are “compressed, single clause versions of multi-clause narratives” as shown in (3) and (4).

(3) Am kmn pak d ap ad ñb-go game.mammal kill get come cook eat
    ‘Go and kill game mammals and bring and cook and eat them.’ [Pawley and Bulmer 2011:58]

(4) Am kas nb ogok tk dad ap-l,…
    go leaves such these pick carrying come-SS.PRIOR
    ‘…(they) go and pick such leaves and having brought them back,…’ [Pawley and Bulmer 2011:59]

The verbs that make up narrative SVCs are syntactically and semantically more separate than those of compact SVCs. Individual verbs can be negated independently, and modifiers and arguments can intervene between the verbs (Pawley 2009). Furthermore, Pawley (2008) strongly questions the status of a single-event interpretation of Kalam narrative SVCs. However, he does assert that all the verbs in a narrative SVC are spoken under one intonation contour.

As can be seen, the criteria listed in §2 apply more to compact SVCs than to narrative SVCs. Whether Pawley’s narrative SVCs can be considered SVCs by traditional definitions given their unusual qualities is a question that is beyond the scope of this paper. However, there are a number of reasons to think that these narrative SVCs are simply clause chains without
switch reference morphology. Pawley (2009) states that, in some instances of narrative SVCs, “…one VP appears to be joined to the rest at the peripheral layer (cases where the scope of a locative adjunct or an adverbial modifier, or a negator is restricted to just one of the VPs), and this type Foley and Olson would treat as a two clauses,” and that, “The boundary between each small VP is potentially a boundary between separate clauses in a chaining construction.” Furthermore, narrative SVCs can be easily paraphrased or simply replaced by using clause chains like that in (5).

(5) Ad ñb-l, kn-l, am-l, oven.cook eat-SS.PRIOR sleep.SS.PRIOR go.SS.PRIOR ap-l, g-elgp-al ak, come-SS.PRIOR do-PAST.HAB-3PL that ‘…having cooked them in an earth-oven, having camped overnight, having gone out and come back they used to do (those things: cooking and eating the food…)’ [Pawley 2009:179]

For these reasons, I prefer to refer to these narrative SVCs as (covert) clause chains. However, in §2.3 and §3, I will continue to use the term SVC given that I will be discussing issues regarding that analysis.

2.3 ‘Do-support’

‘Do-support’ SVCs are constructions in which g- ‘do’ occurs as the last verb in the series as in (6) and (7). Most of these verb series appear to be structurally similar to Pawley’s ‘narrative SVCs’ or as I call them ‘(covert) clause chains’; however, note that those in which g- ‘do’ occurs with an adjective as in (7) are distinct.

(6) puŋi ap tan ap yap g- bump.into come ascend come descend do ‘lose one’s way, get lost and wander about’ [Pawley and Bulmer 2011:60]

(7) ag tep5 g- say well do ‘say properly, speak clearly’ [Pawley and Bulmer 2011:60]

‘Do-support’ SVCs have a number of criteria, discussed in §3, that distinguish them from canonical SVCs. After discussing these distinctions, I reanalyze constructions like that in (6) as (covert) clause chains with g- ‘do’ functioning as a pro-verb (§4) and constructions like that in (7) as light verb constructions (§5).

---

4The parentheses around ‘covert’ indicate that the switch reference morphology may or may not be present on the clause chains.
5There is an alternation between ‘good’ and ‘well’ in the glossing of this term in the source texts. The construction in Kalam never seems to change, however. It is unclear why this change in glossing occurs.
3. *g- ‘do’ in ‘SVCs’*

There are a number of the semantic and syntactic criteria of canonical SVCs that ‘do-support’ SVCs do not follow.

3.1 Reduplication

Syntactic criterion (ii) states that the same verb cannot occur successively in the verb series. However, *g- ‘do’* frequently occurs reduplicated as in (8).

(8) …kayn ak wtsek nep yuk ap-tan ap-yap
dog this together precisely chase come-ascend come-descend

g-e-l  g-e-l  g-e-l…
‘…the dogs keep on chasing up and down right after it…’ [1.51]

3.2 Negation

Syntactic criterion (viii) states that there can only be one negative morpheme which typically occurs on the first verb in the series as in (9). However, in constructions with *g- ‘do’* it frequently occurs on the final verb (g- ‘do’) instead as in (10).

(9) Yad m-am nŋ-n-k.
I NEG-go perceive-1sg-PAST
‘I didn’t go and look for him.’ [4.78]

(10) Kotwal nb ak yad nŋ tep ma-g-in...
scrub:wallaby so this I perceive good NEG-do-PERF-1SG
‘I don’t know the kotwal well…(i.e. I am not familiar with the kotwal).’ [1.55]

3.3 Less than full lexical sense

Semantic criterion (v) states that the verbs in the series occur with their full lexical senses, not bleached or grammaticalized senses. However, *g- ‘do’* is frequently used in a bleached form simply to indicate durative or iterative aspect as in (8).

‘Do’ is also used in instances in which it does not seem to contribute any semantic content to the verb series but rather serves simply to carry the inflectional affixes of the construction, as in (11).

(11) Am kətp ak d ap abn mgan okud g-ob-un...
go nest the get come undercroft hole there do-PROG-1PL
‘we are fetching (foliage) to the nest in a hole in the undercroft…’ [Pawley 2008:186]

---

*Examples with this citation format come from Lane (2007). The number in brackets refers to the example number of the source text.*
3.4 Eventhood

Similar to the previous point, semantic criterion (vi) states, “The SVC can be broken down into immediate constituents each denoting an act or event that is temporally discrete, or partly discrete from the other constituents while all other verbs in SVCs denote a specific (sub)event of a larger complex event.” However, g- ‘do’ is frequently used to summarize the previous events in the series as a whole rather than to refer to a separate (sub)event in a larger complex event as in (12) and (8).

(12) puni ap tan ap yap g-
    bump.into come ascend come descend do-
    ‘lose one’s way, get lost and wander about’ [Pawley and Bulmer 2011:60]

3.5 Combination with adjectives

Whereas all other SVCs contain a series of verbs denoting separate events in a series, the category of ‘do-support’ SVC includes complex predicates in which g- ‘do’ combines with adjectives like tep ‘good’ to modify the preceding verb. Although tep is glossed ‘well’ in (13), the fact that tep is an adjective is noted in Lane (2007:21) and Pawley and Bulmer (2011:48) and is evidenced by the fact that it modifies a noun in (14) and that it can only function to modify a verb when combined with g- ‘do’ (Lane 2007:21).

(13) g tep g-
    do well do
    ‘do s.th. well’ [Pawley 2008:182]

(14) kuy tep ap-e-k…
    smell good come-DS:PRIOR-(3SG)PAST
    ‘a good smell having come…’ [1.53]

4. g- ‘do’ as a pro-verb in (covert) clause chains

Given that g- ‘do’ functions uniquely in SVCs, it seems that an alternative analysis is necessary to account for these constructions. I aim here to show that in (covert) clause chains g- ‘do’ functions as a pro-verb.

Halliday and Hasan (1976:125) state that the class of pro-verbs “corresponds to an equivalent nominal class, that of pro-nouns…” They go on to say that pro-verbs “stand for any unidentified or unspecified process…” and that a pro-verb “is often used endophorically [i.e. anaphorically]…” having anaphoric reference with prior verbs in the discourse. Examples of pro-verbs in English are do as in ‘What are you doing?’ and ‘Someone should make paper chains,’ ‘I already did that,’ and happen.

I argue here that g- ‘do’ can be analyzed as a pro-verb when it occurs in (covert) clause chains based on its anaphoric relationship to prior verbs in the discourse as well as its ability to refer to unspecified events. I further argue that the auxiliary-like functions of g- ‘do’ such as carrying TAM information and being reduplicated to show durative or iterative aspect are simply residual effects of the use of g- ‘do’ as a pro-verb and the grammatical rules inherent in the

7This ‘do-support’ construction is also used with other modifiers like ypd ‘truthful’ and kus ‘around’ (Lane 2007:22).
language. Lastly, I argue that the use of *g-* ‘do’ in clause chains makes the pro-verb analysis the best option.

4.1 Anaphoric relationship with other verbs

The first criterion that supports the analysis of *g-* ‘do’ as a pro-verb in (covert) clause chains is that *g-* ‘do’ has an anaphoric relationship with the previous verbs in the clause chain as shown in (8), (11), and (12). In these cases, *g-* ‘do’ is not used to specify another event carried out by the subject, but rather it is used to refer to all the previous events. Pawley (2008:182) claims that, “…[‘do’] indicates that the subject performs all the act(s) denoted by the preceding verb root(s).” Thus, the actions that *g-* ‘do’ refers to change according to the verbs which appear prior to *g-* in the discourse. Or, as Pawley (2008:182) notes, “This type, in which the final verb is *g-* ‘do, make’, departs from canonical transitives in that the final verb forms a constituent by itself, *semantically coordinate* with a constituent made up of the rest of the [(covert) clause chain] nucleus” (emphasis added).

4.2 Reference to unspecified events

*g-* ‘do’ is also used to refer to unspecified events just as Halliday and Hasan (1976) state that pro-verbs are. The use of *g-* ‘do’ to refer an unspecified event is shown in (15).

(15) Nad etp g-ab-an o-p-an? you what do-REC:PAST-2SG come-PERF-2SG
    ‘What have you been doing? (lit. What have you just done and you have come?)’ [3.2]

4.3 Aspectual properties explained

Pawley and Bulmer (2011:60) claim that in the (covert) clause chains in which *g-* ‘do’ can be removed with little or no change in meaning, “*g-* perhaps contributes the sense of perfective aspect, in which the preceding series of acts are viewed as a totality.” However, these claims regarding the aspectual use of *g-* ‘do’ seem to be tentative; thus, they are not discussed here.

Furthermore, *g-* ‘do’ is commonly repeated for the purpose of expressing iterative or durative aspect as in (8). This seems to be the case because as is common in Papuan languages, “[the] same verb root or series of two or three roots may be repeated two or more times to indicate continuous or repeated activity…” (Pawley 2008:184) as shown in (16).

(16) … am am am am am am ng-a-k…
    go go go go go go see-3SG-PAST
    ‘[he] went a long, long way (from his home) and saw…’ [1.49]

However, when the entire sequence of events not just a single event is repeated over and over as in (8), it is more economical to resort to anaphoric reference and repeat *g-* ‘do’ two or three times rather than to repeat the entire sequence of events two or three times. Thus, while *g-* ‘do’ is used to express aspectual information in these clauses, this is possible with all verbs by reduplication. In fact, it is the reduplication that carries the aspectual content rather than *g-* ‘do’.
4.4 Occurrence in clause chains

One final piece of evidence which suggests that g- ‘do’ is a pro-verb rather than a special verb in Pawley’s ‘narrative SVCs’ is the fact that g- can function identically in clause chains as shown in (5) and (17).

(17) Gos  nŋ  tep  g-i,  kmap  ag-ng
    thought  perceive  well  do-SS:PRIOR  song  sing-SS:PROSP
    g-ab-ø.
    do-REC:PAST-3sg
    ‘When he has thought about it carefully, he will sing the song.’ [1.56]

If this were a special type of ‘SVC’, we should not find the same construction outside of so-called SVCs. Furthermore, if g- ‘do’ were a kind of auxiliary verb that took scope over all the verbs in the ‘SVC’, it should not be possible for it to occur in a clause by itself as it does in (5) and (17).

4.5 Summary

To summarize, in (covert) clause chains, g- ‘do’ functions as a pro-verb to refer anaphorically to previous events or actions described in the discourse. Additionally, it can refer to unspecified events or actions. Iteration of verb roots in Kalam carries continuous or iterative aspect rather than ‘do’, but g- is frequently recruited for this iterated use when a series of events is repeated. While I have explained here the apparent syntactic category of g- ‘do’ as a pro-verb, I have not been able to explain why speakers employ g- at the end of (covert) clause chains. An explanation of this sort must await a more in-depth study of the discourse patterns in Kalam.

5. Verb adjunct constructions

Although Kalam has a small, closed-class of verbs, its verbal system is augmented by an open class of hundreds of verb adjuncts (Pawley and Bulmer 2011:46). These verb adjuncts each function together with one of about 20 verbs to form complex predicates as shown in (18) and (19).

(18) Suk  ag-ya-k.
    shouting  say-3PL-PAST
    ‘They shouted.’ [Pawley and Bulmer 2011:47]

(19) Cn  wsn  kn-nu-k
    we  sleeping  lie-1PL-PAST
    ‘We slept.’ [Pawley and Bulmer 2011:47]

Verbal adjuncts do not fit neatly into any one syntactic category. Pawley (2006b:10) summarizes the criteria that distinguish these adjuncts from verbs, nouns, adverbs, and adjectives; however, the syntactic status of these adjuncts does not concern us here. In typical VACs, “the verb root serves as a classifier for the event: the verb of sounding/speaking occurs with adjuncts denoting sounds, verbs of locomotion occur with adjuncts denoting movement or transport, and so on” (Pawley 2012, personal communication) as shown in (20) and (21)
respectively (taken from Pawley and Bulmer 2011:47). The verbal adjuncts are shown in the left-hand columns and the verbs they combine with are shown in the right-hand columns.

(20) sb ‘begging’  ag- ‘make a sound, say’  (21) ad ‘carrying’  am- ‘go’
bu ‘exploding’  kleyd ‘crawling’
gigu ‘jingling, rattling’  kod ‘accompanying’
gu ‘resounding, thudding’  kosiŋd ‘carry pick-a-pack’
guglak ‘croaking’  podj ‘leading’
guglum ‘snoring’  waŋd ‘floating’
gullag ‘rumbling’  wŋd ‘flying’
jiken ‘coughing’

According to Pawley (2006:10), VACs have a number of grammatical and semantic characteristics:

(a) They consist minimally of a verb adjunct plus a verb. Verb adjuncts are an open class of roots and derived words, with several hundred recorded members, which occur only as the partner of a verb in a complex predicate. (New members may be recruited to the class by derivational processes and/or by borrowing.)
(b) The verb root is inflected, except when the VAC functions as a non-final serial verb.
(c) They express a single event.
(d) The verb root serves as a classifier. It marks the event as being of a certain general semantic type. The verb adjunct specifies the event as being of a particular subtype of this class or as adding an associated activity to that depicted by the verb root. Only about 20 verbs take part in verb adjunct constructions.
(e) The verb adjunct contributes to the argument structure of the VAC and can be viewed as a co-predicate.

Of the criteria listed above, (d) is of special importance. Pawley (2006b:9) notes that, “Some verbs in VACs are light verbs, which contribute little meaning to the predicate but most have one of their usual lexical senses.” However, as stated in criterion (d) most verbs in VACs act as classifiers with their full lexical senses rather than a semantically bleached sense. It is for this reason that Pawley (2012, personal communication) does not feel that the notion of light verb is accurate in analyzing the final verb in Kalam VACs. However, according to Pawley (2012, personal communication) the one verb which functions as a true light verb in Kalam rather than as a classifier is g- ‘do’. While Pawley has mentioned this in personal communication, he has not to my knowledge argued this point in print. Thus, I do so in the following sections.

6. g- ‘do’ in VACs

Although in most respects g- ‘do’ behaves like other verbal predicates in VACs, it does not behave in the predicted manner with respect to criterion (d). While all other predicates function as classifiers of the verb adjunct, g- ‘do’ functions with reduced semantic content mainly to verbalize syntactic categories (verb adjuncts, adverbs, etc.) which otherwise cannot function as verbs.
7. *g*- ‘do’ in VACs and *g*- with adjectives as a light verb

Given that *g*- ‘do’ functions uniquely in VACs, it seems that an alternative analysis is necessary to best account for the construction. I argue here that when it occurs with verb adjuncts and with adjectives, *g*- functions as a light verb.

Drawing on previous work on light verbs such as Butt (1993, 2009), Butt and Lahiri (2002), Seiss (2009), Grimshaw and Mester (1988), I have summarized a few criteria that distinguish light verbs from other syntactic categories. Those criteria that are most relevant in Kalam are shown below:

(a) Light verbs are identical in form to a corresponding main verb (i.e. a heavy verb).
(b) Light verbs exhibit combinatorial restrictions with certain lexical items.
(c) Light verbs are missing some (or all, cf. Grimshaw and Mester (1988)) of their arguments.
(d) Light verbs combine argument structures with another lexical category (e.g. verb, noun, adjective) to form a complex predicate.

In the following section, I argue that *g*- ‘do’ in VACs is a light verb based on its identical form to a heavy version of *g*-, its combinatorial properties, and its merged argument structure.

7.1 Form identical to main verb

The example in (22) exhibits the form of the heavy version of *g*- ‘do’, and the light version in (23)-(25) is identical, represented by the morpheme *g*—.

(22) Yad kn-n-k-nŋ, nuk wog g-ab-ø.  
1sg sleep-1sg-PAST-DS:SIM 2sg garden do-REC:PAST-3sg  
‘While I was asleep, he has been working.’ [1.40]

(23) Am wog-day okok kpl g-ab-in o-p-in.  
go garden-section here:and:there weeding do-REC:PAST-1sg come-PERF-1sg  
‘I have just gone and weeded in the garden.’ [3.2]

(24) Kotwal nb ak yad nŋ tep ma-g-in...  
scrub:wallaby so this I perceive good NEG-do-PERF-1SG  
‘I don’t know the kotwal well…(i.e. I am not familiar with the kotwal.)’ [1.55]

(25) Mñab btetyt yb buk ak raitim³ g-ng...  
land former truly book this writing do-SS:PROSP  
‘In order to write of the earliest (state of this) country…’ [4.15]

7.2 Combinatorial properties

When *g*- ‘do’ occurs as a light verb, it can combine with a number of lexical items from a range of syntactic categories including verb adjuncts as in (26), adjectives as in (24), and foreign language borrowings as in (25).

³Note that *raitim* ‘writing’ is a Tok Pisin borrowing. *g*- ‘do’ is frequently used to verbalize borrowings in Kalam.
(26) Bin ag nŋ-ab-in, kuk g-ab-ø,
woman say perceive-REC:PAST-1SG calling:out do-REC:PAST-3sg
‘I asked (i.e. tried to abduct) the woman, she cried out...’ [1.14]

Furthermore, within the category of verb adjuncts, there are only certain verb adjuncts with which g- ‘do’ can combine. See the chart in §7.3 for a list of such adjuncts. Note that combinatorial restrictions are not present with g- ‘do’ as a pro-verb.

7.3 Argument structure

When g- ‘do’ occurs in VACs, it is semantically empty and takes no arguments. This is exemplified in the verb adjuncts listed in (27) quoted from Pawley (n.d.:13-14). As can be seen, when g- ‘do’ combines with a verb adjunct, its transitivity is ambiguous; it can be either transitive or intransitive. In most cases, it seems that the particular verb adjunct that combines with g- ‘do’ determines the transitivity of the predicate.9

(27) Some verb adjuncts occurring with g- ‘do’:

(a) intransitive VACs denoting intentional acts
   gub g- (perching.together do) (of birds) perch together
   jlan g- (nodding do) nod the head rhythmically
gsey-bsey g- (hurry-scurrying do) hurry, be in a hurry or rush
   ŋk g- (crouching do) crouch, duck
(b) transitive VACs denoting intentional acts
   bl g- (abstaining do) abstain from an activity
gadal-badal g- (criss-crossing do) lay things criss-cross
gdey-bdey g- (rumple-dumpling do) do something roughly
   saj g- (compensating do) pay compensation
(c) transitive VACs denoting events with inanimate effectors
   gtŋ-gtŋ g- (ding-donging do) make a lot of noise, make a din or racket
gley-wley g- (clitter-clattering do) rattle, clutter, as bones, metal objects
   kawn g- (swaying do) swing, rock, sway, flap
   kopay-mopay g- (blowing.fiercely, do) (of storm-winds) blow fiercely
   lm g- (shooting do) (of plant suckers) shoot up
   wnwn g- (peeling do) (of e.g. bark) peel off, fall to bits
(d) intransitive VACs denoting states
   gadal-badal g- (criss-crossing do) be higgledy-piggledy, criss-crossed
   gdey-bdey g- (rumple-dumpling do) be in disarray
   gogeb-mageb g- (twisted do) be twisted, crooked
   gutgat g- (drenched do) be drenched and cold
   kolkol g- (tangled do) be tangled
   jl g- (loose-fitting do) be loose, loose-fitting

---

9However, notice that gdey-bdey g- ‘rumple-dumpling do’ is both intransitive and transitive. In this case, it is not clear what element determines the transitivity of the complex predicate.
The fact that \textit{g-‘do} does not subcategorize even for an external argument (i.e. a subject) is exemplified by the fact that there are two distinct categories of intransitive predicates. Thus, subcategorization for subject is also determined by the verb adjunct.

A similar alternation in the transitivity of the complex predicate is illustrated when \textit{g-‘do} occurs with adjectives as shown in (28).

\begin{itemize}
  \item \textbf{(28)} ‘Kuj g tep g-sp-in’, ag-a-k.
  \textit{magic do good do-PRES:PROG-1SG sa-3SG-PAST}
  ‘I am making magic well’, he said (cf. \textit{kuj g- ‘make magic’}). [1.59]
\end{itemize}

The light verb form consists of an intransitive \textit{g-‘do} plus \textit{tep ‘good} which combine to modify the preceding predicate, whereas the heavy verb form consists of transitive ‘do’ plus its object \textit{kuj ‘magic’}.

7.4 Summary

To summarize, because \textit{g-‘do} has an identical form in both a heavy and a light version, can combine with a range of syntactic categories, has lexical restrictions with certain verb adjuncts, and combines with verb adjuncts which determine its argument structure, \textit{g-} can be best analyzed as a light verb.

8. Distinguishing \textit{g-‘do} in VACs and (Covert) Clause Chains

It may be argued by some that \textit{g-‘do} in VACs and \textit{g-} in (covert) clause chains are actually instantiations of the same sense of ‘do’. However, the combinatorial properties, functions, and selectional restrictions of \textit{g-} in each construction distinguish the two uses.

8.1 Combinatorial properties

When \textit{g-‘do} occurs as the last verb in a (covert) clause chain, it can only combine with other clauses made up of other verbs, as shown in (29).

\begin{itemize}
  \item \textbf{(29)}  ññïloŋ ay g-
    (playfully put do) ‘tease (s.o.), pretend to do s.th.’
  \item \textit{pug dad ap tan ap yap g-}
    (sniff carrying come ascend do) ‘pick up a scent and follow it around (as a dog does)’
  \item \textit{punŋ ap tan ap yap g-}
    (pierce come ascend come descend do) ‘lose one’s way, get lost and wander about’
  \item \textit{tb lak d ap g-}
    (cut split get come do) ‘cut and bring (timber)’
  \item \textit{wik d ap tan d ap yap g-}
    (rub touch come ascend touch come descend do) ‘massage s.o., give s.o. a rubdown’
\end{itemize}
This contrasts with the use of g- ‘do’ as a light verb, which is discussed in §7, in that g- can only combine with other clauses rather than verb adjuncts or adjectives. Furthermore, whereas in light verb constructions g- ‘do’ is obligatory, as a pro-verb “…‘do’ can be omitted with little or no change in meaning” (Pawley 2008:182).

8.2 Function

As discussed in §4.1 and §4.2, as a pro-verb g- ‘do’ is used to refer to previous events in the discourse or to unspecified events. However, these uses are not possible with g- as a light verb. Furthermore, as discussed in §7.3 g- as a light verb is used to verbalize a non-verbal element through combining argument structures. However, as a pro-verb g- ‘do’ occurs alone as a constituent and does not combine argument structures with a non-verbal element.

8.3 Selectional Restrictions

As discussed in §7.2, light verb g- ‘do’ can only occur with certain verb adjuncts based on lexicalized selectional restrictions. However, pro-verb g- ‘do’ can occur alone in a clause, and does not have semantic selectional restrictions on what verbs can occur within the rest of the clause chain.

9. Conclusion

In this paper, I have argued that ‘do-support’ SVCs as they have been analyzed by Pawley and Bulmer (2011), Lane (2007), Pawley (n.d.), and Pawley (2008) do not constitute a category of SVCs consistent with the criteria of canonical SVCs. Instead, I have argued that when g- ‘do’ occurs as the final verb in a (covert) clause chain, it functions as a pro-verb. To demonstrate this, I provided evidence illustrating the anaphoric relationship between g- ‘do’ and other verbs in the discourse and the ability of g- to refer to unspecified events. Furthermore, I argued that aspectual properties associated with g- ‘do’ are in fact associated with iteration of verb roots and the anaphoric relationship g- has with other verbs. Additionally, I have argued that g- as it is used in VACs (and with adjectives and lexical borrowings) can be classified as a light verb. I have argued for this point by illustrating the identical form between the heavy and light version, the restrictions in lexical combinations with g- ‘do’, and the change in the argument structure of g- with the addition of the verb adjunct. I concluded this paper by illustrating that g- ‘do’ as a pro-verb and g- as a light verb are separate instantiations of the verb based on their combinatorial properties, functions, and selectional restrictions.
Abbreviations
1 first person
2 second person
3 third person
DS different subject
NEG negative
PAST past
PERF (present) perfect tense-aspect
PL plural
PRES present
PRIOR prior to time of act denoted by next following verb
PROG progressive aspect
PROSP prospective/future action
REC recent past
SG singular
s.th. something
s.o. someone
SS same subject (as following verb)
SVC serial verb construction
VAC verb adjunct construction

References
Pawley, Andrew. 2006b. Where have all the verbs gone? Remarks on the organization of languages with small, closed verb classes. 11th Biennial Rice University Linguistics Symposium, 16-18 March 2006.
