TOWARDS THE TYPOLOGY OF VERBAL COMPOUNDS¹

0. Roadmap and 'comparative concepts'

- > Serial verb construction and current approaches to it
- ➢ How to compare 'restrictedness'
- Constructional and independent usage
- Word problem'
- Argument structure composition (WIP)

Serial Verb Construction

A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no marker linking them.

Independent verb

Independent verb is a form that can function as a single predicate without special coding. This verb should add at least some lexical semantic content to the meaning of the whole SVC. The semantic contribution of this verb to the meaning of the SVC should be either more or less compared to its semantics in independent usage, but not more and less simultaneously.

Verbal Compound Construction

Verbal compound construction is a serial verb construction, elements of which can be separated only by non-word-class-changing derivational elements or by inflectional elements which belong to the whole construction. Semantically empty morphological elements are considered as derivation, but not a linking marker.

Limited slot

A slot X is limited relatively to slot Y if verbs which occupy slot X are grouped by more general semantic or syntactic criteria than verbs which occupy slot Y.

Restricted slot

Slot X is considered more restricted than slot Y if there are more unpredictable lexical exceptions in the semantic or syntactic group of slot X than in the semantic or syntactic group of slot Y.

1. Verbal compounds and serial verb constructions. Setting the stage

1.1. VC - what is it? State of the art

A construction with two or more non-linked verbs can be not only monoclausal (1; 3) ([Aikhenvald & Dixon 2006]; [Haspelmath 2015] and othrs), but also 'monoverbal' (2; 4):

(1) Kune dialect of Bininj Kun-Wok (Gunwinyguan, [Evans 2003: 547])

kun-dulk nakkanj ka-warme ka-re

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IV-stickthat3-float.NP3-go.NP'A stick is floating along (down the river)'.

(2) Dalabon (Gunwinyguan, [Evans 2003: 547])

dulh djakihkah-warme-ye-bo-n stick that 3-float.-IVF-go-PR 'A stick is floating along (down the river)'.

(3) Taba (North Halmahera, Papuan, [Bowden 2001]; cited by [Aikhenvald 2006: 7])

n=babas welik n=ha-mot i 3SG=bite pig 3SG=CAUS-die 3SG 'It bit the pig and killed it'.

(4) Alamblak (Sepik, Papuan, [Bruce 1979: 262])

wa-rim-ak-ni-n-m IMPER-ELEV-get-go-2SG-3PL 'Get them (and) go away from me'.

Monoclausal multi-verb construction with no subordination or coordination = serial verb construction (SVC):

'A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no elements linking them and with no predicate-argument relation between the verbs'²

[Haspelmath 2015]

*Components of a serial verb construction may or may not form independent grammatical or phonological words*²

[Aikhenvald 2006: 3]

- ✓ Many comparative studies of SVCs in general ([Durie 1997]; [Aikhenvald & Dixon 2006]...)
- ✓ No studies of 'one-word' SVCs in particular (to my knowledge)
- ✓ Problems with 'word' as a comparative concept ([Haspelmath 2012])

For current purposes, I leave the concept of 'word' intact and refer to 'one word' SVCs as verb(al) compound construction (VCCs). The term SVC is kept for constructions where two verbs don't form the single word.

1.2. SVCs and VCCs – frameworks and generalizations

 $^{^{\}rm 2}$ Some changes will be added to this comparative concept of SVC in Section .

[Aikhenvald & Dixon 2006]: means of composition of SVCs correlate with semantics and morphosyntax.

Distinction between symmetrical (5-7), (8) and asymmetrical (9-10) SVCs

Table 1. Two types of SVC

SYMMETRICAL	ASYMMETRICAL	
both verbs from open classes	one verb – from closed class	
equal contribution to the whole's	one verb adds more lexical information	
semantics		
equal contribution to the argument	one verb determines argument structure	
structure		

Symmetrical serialization in Tlachichilco Tepehua (Mexico, Totonac): two concominant actions, V1 – 'manner' of V2, from [Watters 1988 93-95]

- (5) *takyaw-min* run-come.IMPF X comes, running.
- (6) *miłpah-skiti-y* sing-grind-IMPF
 X grinds Y, singing.
- (7) ^salaw-ma:stu-y steal-take.out-IMPF
 X takes out Y, stealing.
- (8) Hup (Nadahup, Amazon basin), iconic root order [Epps 2008: 396]

2čeytcen=yí?hidmceh-b'uy-d'ah-ham-yí?-ay-áhtogether=TEL3PLkill-throw-send-go-TEL-INCH-DECLTogether they killed them and threw them out.

Asymmetrical serialization in Tlachichilco Tepehua: V1 -'major' open class verb (action), V2 -'minor' closed class of intransitive 'stative' verbs (position, orientation verbs)

- (9) *skaw-knu:-y*search.for-be.under.surface-IMPF
 'X searches for Y under ground'.
- (10) *maqni:-ma:-ł* kill-lay.down-PFV

'X kills Y laying it down'.

Generalizations (based on [Aikhenvald 2006: 35] with my reformulations and additions):

Table 2.

	Asymmetrical	Symmetrical
Semantics	'major' verb's event +	sequence of events, cause-
	'grammatical'	effect, manner
	specifications by 'minor'	
	verb	
Argument structure	as 'major' verb's	combination of ASes
Component order	No iconic order ()	iconic for sequential () and
		cause-effect; arbitrary for
		manner
Further development	grammaticalization	lexicalization

Questions that I ask myself:

- To what extent generalizations about 'multi-word' SVCs can be applied to 'single-word' VCCs?
- Can any new comparative claims be made about VCCs in general or about specific subtypes of VCCs?
- Do any connections between VCCs and other types of 'compounding' exist? (The debate about the nature of polysynthesis and verb compounding (see [Matissen 2004]; [Mithun, Evans, Fortescue 2017])).

2. Current approaches: limitations and problems

2.1. Problems shared with SVCs in general

Both 'prototype-based' approach of [Aikhenvald & Dixon 2006] and 'comparative concept approach' of [Haspelmath 2015] suffer from various problems.

2.1.1. Symmetric and asymmetric serialization

Mentioned above compositional distinction helps to make some generalization. However, the distinction between 'symmetrical' and 'asymmetrical' constructions is fuzzy ([Enfield 2009]):

- Even 'symmetrical' construction are more restricted than the combination of two clauses ([Durie 1997] and others)
- What counts as 'closed class' (dynamic events VS motion verbs/statives?; all verbs VS only intransitives?; many verbs VS few verbs?; no arbitrary lexical restrictions VS arbitrary lexical restrictions?...)
- Both slots in SVC/VCC can be 'closed' in different ways:

Case 1: Lexical restrictions on both slots in Chukchi 'event-motion sequence' construction

V1: dynamic action (but only some traditional activities mostly associated with reindeers, 'participate in a reindeer race', 'scout on a reindeer sledge', 'watch herd at night', 'watch herd at day'):

- (11) tə-re-r?il-ekwet-y?e eryatə-k
 1SG.S/A-FUT-participate.in.a.race-depart-TH tomorrow-LOC
 'Tomorrow I will go away to take part in a reindeer race'. (elicitation)
- (12) tə-ra-raswəŋ-akwat-y?a
 1SG.S/A-FUT-compete.running-depart-TH
 '#I will go to take part in a running competition '

'#I will go to take part in a running competition.' (possible only in 'I will go away running in a competition' sense)

V2: restricted set of translational motion verbs with no manner specification ('go', 'depart', 'arrive', 'come back'...)

Case 2: Lexically restricted (according to [Evans 2003]) V1 and semantically restricted V2 (Bininj Kun-Wok 'move along/be in position V1-ing')

- (13) ga-ganj-ngu-nihmi-re
 3-meat-eat-IVF-go.NP
 He goes along eating meat. ([Evans 2003: 536])
- (14) Ø-nalk-kih-durn-durnd-i
 3P-cry-IVF-ITER-return-PP
 'He went all the way back crying'. ([Evans 2003: 544])
- (15) ga-wayini-yerrga-n
 3-sing-sit-NP
 'He is sitting crying'. ([Evans 2003: 544])

Case 3: Both slots restricted semantically. Path VCC in Ese'eja (Takanan, Bolivia). V1 – one of posture or caused posture verbs, V2 – one of four motion or caused motion verbs encoding path ([Vuillermet 2017]).

Slot can be closed/open only relatively to another slot ([Enfield 2009])

[Haspelmath 2015] doesn't employ distinction between symmetric/asymmetric SVCs. He doesn't count many of [Aikhenvald & Dixon 2006]'s asymmetric SVCs as SVCs, because:

"....serial verb must be productive schematic CONSTRUCTION...."

'...verbs in SVC must be INDEPENDENT VERBS <...>. '...independent verb is a form that can express a dynamic event <...> and that can occur <...> without another verb '

[Haspelmath 2015]

The criteria of 'productivity' is too informal – all SVCs and VCCs are somehow unproductive or irregular (to different degrees and in different ways)

My proposal:

- Eliminate the notion of productivity (consider as VCCs unproductive constructions like in Chukchi)
- Decompose [Aikhenvald & Dixon 2006] 'symmetric'/'asymmetric' distinction

LIMITED: the list of verbs in a particular slot can be defined by general semanticsyntactic classification like 'position', 'motion', 'speech', 'verbs with sentential argument'etc

RESTRICTED: the list of verbs in a particular slot must be specified lexically ('see', 'listen' but not 'watch', 'hear')

Limitedness/restrictedness of slot X is determined relatively to limitedness/restrictedness of slot Y (not 'V1 slot is limited and V2 is unlimited', but 'V1 is more limited than V2'). According to that, we can use [A & D 2006]'s notions 'major' and 'minor'.

	V1 to V2	A & D 2006's class
Chukchi	restricted ³ ,	asymmetrical, V1
	unlimited	major
Bininj Kun-Wok	restricted,	asymmetrical, V1
	unlimited	major
Ese'eja	equal?, equal?	??
Tepehua 'Manner'	equal, equal	symmetrical
Tepehua 'Posture'	unrestricted,	asymmetrical
	unlimited	

 Table 3. Application (only VCCs considered here!)

³ The majority of translational non-caused motion verbs in Chukchi can occur as V2, but the minority of 'activity verbs' can occur as V1.

- ✓ Makes a distinction between different types of 'closed classes'
- ✓ Avoids [Haspelmath 2015]'s 'productivity' problem
- ✓ Uses single generally-applicable criterea

Cons:

- More information from source grammar needed
- Potential 'particularism' (why 'posture verbs' is more reasonable class than 'traditional herding activity verbs')

2.1.2. Construction and 'independent verb'

"... the meaning of a concrete construct can be determined on the basis of the meaning of its parts and the construction meaning"

'...independent verb is a form that can express a dynamic event <...> and that can occur <...> without another verb'

[Haspelmath 2015]

The element in VCC can have the same form as an independent verb, but different semantics:

Grammaticalization without phonological changes:

(16) Bininj Kun-Wok (Gunwinyguan, [Evans 2003: 541])

ga-worrkm-i-wo-n 3-fill-IVF-give-NP 'He fills her' (e.g. with the wood).

Compare (17), from Alamblak, Sepik [Bruce 1979: 242]) and (18) from Hup (Nadahup, Amazon [Epps 2008: 423]).

(17) noh-dbëhna-më-r
 die-sick-R.PST-3SG.M
 'He was deathly sick.'

(18) *cet-ham-tubud-yi*?-*i*y *hup* carry.on.back-go-die-TEL-DYNM pers He carried the girl *a long* way off!

hup=?ay-ăn person=FEM-OBJ

➢ Partial desemantization, although some lexical content remains.

In (19), the verb *cop* 'go.away.from.river' adds only 'away.from.river' to the whole construction's meaning ([Epps 2008: 415]).

(19) Hup, Nadahup

kaninícɔp-ham-pó-h!'sleepy'(Tuk)go.away.from.river-go-EMPH1-DECL'Sleepyhead has gone away (into the forest)!'.

> Additional grammatical meaning in the construction.

[Sullivan 1988] notes, that in Classical Nahuatl the verb *nemi* 'to go around, to live' used as V2 adds 'continuously' semantics.

(20) Classical Nahuatl, Uto-Aztecan [Sullivan 1988: 226]⁴

...ti-m-altzotzon-ti-nemiiniuhqui...2SG.A-2SG.A_I/2SG.O_I-to.pant-TH-to.go.aroundCONN takemixtidatura`...You go around beating your chest as if you had taken datura'.

Partial lexicalization:

(21) Chukchi (fieldwork, elicitation)

- a. *tə-ławtə-pəytə-yała-y?a-k*1SG.S/A-head-to.ache-pass.by-TH-1SG.S
 'My headache passed'.
- b. *#yəmnin pəytə-yəryə-n Ø-yała-y?-e* my to.ache-NMLZ-NOM.SG 2/3.S/A-pass.by-TH-2/3SG.S Expected: 'My headache passed' (only literal (motion) meaning is possible).
 - The 'constructional meaning' of the verb can differ from its 'autonomous meaning' in many ways and degrees
 - Constructions have their own meanings
 - It's tempting to distinguish cases with full grammaticalization ('die' -> intensificator in Hup) from borderline cases ('go.away.from.the.river' -> 'away.from.the.river' in Hup)
 - Grammaticalization and lexicalization⁵ are associated with both loss of lexical content and acquisition of new semantic content (grammatical or lexical)

⁴ It's possible that the element glossed as TH is an adverbalizer. Further study is needed (for the criteria – see Sections 2.1-2.2.

⁵ Sometimes there's no 'loss' in case of lexicalization of two elements

My proposal:

To count as a lexical verb, a verbal element must have at least some lexical contribution to the semantics of the whole construction. Moreover, verbal element in VCC is considered the lexical verb only if it contributes either more or less semantic content to the meaning of the whole construction compared to the meaning of this element used as a single predicate.

Table 4. Application:

	Lost	Acquired	Same verb?
	semantics	semantics	
Bininj 'give'	all lexical	to cause	No
	semantics		
Hup 'die'	all lexical	intensive	No
	semantics		
Hup	motion	-	Yes
'go.away.from.river'			
Nahuatl 'go.around'	-	continuously	Yes
Chukchi 'pass.by'	motion	aspect?	No?

Pros:

- ✓ Draws a (relatively) clear borderline on grammaticalization continuum
- ✓ Same criteria for different languages
- ✓ 'Fully grammaticalized' verbs are excluded (they loose lexical and acquire grammatical meaning
- ✓ Semantically 'major' and 'minor' slots can be compared to compositionally restricted/limited slots independently (see 2.1.1. above)

Cons:

- Different verbs in different constructions can be semantically bleached to different degrees
- A lot of lexico-semantic information from source books is needed

2.1.3. No predicate-argument relation

[Haspelmath 2015] excludes predicate-argument SVCs from his comparative concept in order to not regard (22) as SVCs.

(22) She helped me solve the problem.

I count it unnecessary. (22) can be excluded based on monoclausality criteria. No predicate-argument is unnecessary criteria for VCCs, too (two verbal elements belong to single word-like unite).

2.2. Problems specific for VCCs

2.2.1. Word/phrase distinction problem

[Haspelmath 2012]: we don't have universally-applicable criteria for the concept of 'word'.

My proposal:

- ➤ try the 'most restrictive criterion' study only 'most tight' VCCs
- leave aside any phonological criteria
- Focus on contiguity

Free element (similar to [Haspelmath 2012]'s 'free construct'): an element which can constitute a minimal utterance.

Inflection – a non-free element of a category whose presence is required by particular part of speech and which doesn't require presence of element from any other category by itself (similar to [Bickel & Zuniga 2017] definition).

(23) My definition of VCC:

Verbal compound construction is a type of SVC which meets following additional criteria. Verbal elements can only be separated by non-word-class-changing derivational elements⁶, which belong either to one of the components or to the whole construction, and by inflectional elements which belong to the whole construction.

According to this criterion, (24) form Paamese (Austronesian) is classified as VCC, while (25) from the same language is classified as SVC ([Crowley 1987])

(24)	а-тиа	vinii-nV	vuasi
	3PL.REAL.hit	kill-COMM.OBJ	pig
'They killed the		e pig'.	

(25) *kaile a-muasi vuasi e-mate* 3PL 3PL-REAL.hit pig 3SG-REAL.die 'They killed the pig by hitting it'.

The following construction of Lakhota (Siu, [Boas & Deloria 1941]) wouldn't be counted as VCC, although it exhibits phonological cohesion (26).

(26) *yus-c'i'-şi* take.off.skin-1SG.ACT/2.STAT-order

⁶ The term 'derivation' here subsumes incorporated nouns, too (like in Mwotlap, Austronesian ([Franois 2006: 226]).

'I ordered you to take off a skin'.

2.2.2. No linking element problem

[Aikhenvald & Dixon 2006] and other studies require elements of SVCs not to be linked by any markers of subordination or coordination. [Haspelmath 2015]'s position is more restrictive – he argues that constructions with 'dummy' element shouldn't be counted as SVCs.

Nominalizers, coordinators and subordinators are excluded by (27) definition, while in some languages morphemes with no clear meaning appear between members of VCC:

(27) Bininj Kun-Wok

ga-ganj-ngu-nihmi-re 3-meat-eat-**IVF**-go.NP He goes along eating meat. ([Evans 2003: 536])

As [Evans 2003] notes, the form of this 'linking element' is partially determined by the conjugational class of V1. There are several forms of this 'linking element' (*-mi-*; *-* yh-; *-kih*-...).

- In some languages, compounds require a 'dummy' linking element (e.g. Russian *dom-o-vladelets* 'house-owner')
- We would count this linking element as derivational if it doesn't occur elsewhere and has no own meaning.

3. Summary. Our Comparative concepts

(i) Serial Verb Construction

A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no marker linking them.

(ii) Independent verb

Independent verb is a form that can function as a single predicate without special coding. This verb should add at least some lexical semantic content to the meaning of the whole SVC. The semantic contribution of this verb to the meaning of the SVC should be either more or less compared to its semantics in independent usage, but not more and less simultaneously.

(iii) Verbal Compound Construction

Verbal compound construction is a serial verb construction, elements of which can be separated only by non-word-class-changing derivational elements or by inflectional elements which belong to the whole construction. Semantically empty morphological elements are considered as derivation, but not a linking marker. (iv) Limited slot

A slot X is limited relatively to slot Y if verbs which occupy slot X are grouped by more general semantic or syntactic criteria than verbs which occupy slot Y

(v) Restricted slot

Slot X is considered more restricted than slot Y if there are more unpredictable lexical exceptions in the semantic or syntactic group of slot X than in the semantic or syntactic group of slot Y

4. Composition of argument structure

4.1. SVCs and transitivity

Consider [Aikhenvald 2006]'s generalizations:

'The transitivity value of an **asymmetrical** SVC is usually the same as that of the verb from an unrestricted class'.

'Symmetrical serial constructions are not 'headed' in the way asymmetrical ones are: all their components have equal status in that none of them determines the semantic or syntactic properties of the construction as a whole'

[Aikhenvald 2006: 21-22]

Why?

'(In **asymmetrical** SVC) the verb from a closed class provide a modificational specification: it is often a motion or posture verb'.

[Aikhenvald 2006: 21]

Is it 'formal' headedness or 'semantic' headedness?

4.2. How to determine 'transitivity'?

Problems to study argument structure:

- ➤ Transitive-intransitive is a continuum
- No universally-applicable criteria for argument/adjunct
- How can we know that '...the transitivity value <...> is that of a (particular) verb'?

Consider VCC from Kiowa (Kiowa-Tanoan, Nrth America):

V1 - open class of action verbs; V2 - complement-taking verbs

Complex pronominal prefix system (distinguishing between explicit/implicit participants; up to 3 participants indexed; interaction between person/number of all participants).

When V1 is lexically transitive, its P-like participant is obligatory incorporated (28):

(28) à-hóldà-kộ:tò-bà:
1SG-dress-buy-go.PF
I went to buy a dress. ([Watkins 1980: 283])

However, when V2 is ditransitive and the combination of primary/secondary object is of particular kind, the P-like argument of V1 is expressed by pronominal prefixes ((29), P expresses secondary object, the literal translation of 'implied agent construction is 'I will learn you how to make shawls'):

(29) yán-khộ:-ộm-háydé-t'ò:

(1SG.A):2SG.P:PL.OBJ-shawl-make-learn-FUT

'You'll learn how to make shawls'. ([Watkins 1980: 284])

What verb 'determines' the argument structure?

> VCC is 'syntactically' monotransitive (P-argument of V1 can't be expressed)

VCC is morphologically ditransitive (pronominal indexes)

Conclusion: no universally-applicable criteria of 'transitive' or 'intransitive' construction

Our proposal:

- ✓ Compare which participants can be expressed as free expressions ('words') with both components of VCC and with the whole VCC
- ✓ Don't make a distinction between 'arguments' and 'adjuncts'

Limitation:

Difficult to find explicit information about possibility to express special participants

4.3. 'Types' of A(rgument) S(tructure) composition

(vi) Combination of argument structures

Argument structures are 'combined' if every participant which can be expressed as free-standing form when components of VCC are used independently can also be expressed with the whole VCC. VCC's components doen't impose restrictions on the number of each other's participants.

Common for [A & D 2006]'s 'symmetrical serialization' (our 'unlimited' type)

(vii) Harmonization of argument structures

Argument structures are 'harmonized' if only verbs with the same number of participants expressed in their independent usage can be combined.

This is similar to 'transitivity harmony' (see [Valenzuela 2003]; [Vuillermet 2003; 2017]; [LaPolla 2010]). The harmonization can be achieved by valency-increasing derivation ((30) Saliba, Austronesian ()) or by choice of (at least synchronically) different lexeme ((31) Ese'eja, Takanan, [Vuillermet 2017]).

(30) Saliba, [Margetts 1999: 118]

ye-kabi-[he-keno]-Ø 3SG-touch/make-[CAUS-lie/sleep]-3SG.O 'He threw him down'.

(31) mahoya=se [nekia-'okia]-ka-ani
then=1INCL.ABS stand.TR-put.down.TR-3A-PRS
[neki-'oke]-ki-ani
stand.ITR-go.down.ITR-GO.TO.DO-sit/PRS
'Then they make us go down (lit. in a standing position), we go down (off the

truck...) (lit. in a standing position)'.

Interestingly, I don't know VCCs where less limited slot harmonizes with more limited (are there such languages)?

(viii) Restriction of argument structures

The argument structure of VCC is formed through 'restriction' if only participants of the verb in a particular slot can be expressed. Participants of the other verb which this verb doesn't share with 'restricting' verb are either suppressed by derivation or only implied.

Tlachichilco Tepehua (Totonac)

(32) V1_{ITR}, V2_{ITR} [Watters 1988: 93]

takyaw-min run-come.IMPF X comes, running.

(33) V1_{ITR}, V2_{TR} [Watters 1988: 93]

miłpah-skiti-y sing-grind-IMPF X grinds Y, singing. (34) V1_{TR}, V2_{TR} [Watters 1988: 93]

^salaw-ma:stu-y steal-take.out-IMPF X takes out Y, stealing.

(35) V1 – AP, V2 – ITR ([Watters 1988: 95])

- a. $c^{s}a$ -nah-min-ta plant-AP-come-PF X is coming, planting.
- b. **c*^{*s*}*an-min-ta* plant-come-PF Expected: Idem.

Bininj Kun-Wok

- (36) ga-ganj-ngu-nihmi-re3-meat-eat-IVF-go.NPHe goes along eating meat. ([Evans 2003: 536])
- (37) ga-bon-ngu-nihmi-re3-liquid-eat-IVF-go.NPHe goes along drinking. ([Evans 2003: 543])
- (38) Ø-nalk-kih-durn-durnd-i
 3P-cry-IVF-ITER-return-PP
 'He went all the way back crying'. ([Evans 2003: 544])

V1 can't be transitive – it's either inherently intransitive (3) or detransitivized by means of NI ((1-2), [Evans 2003: 537]⁷).

This is different from [A & D 2006]'s 'asymmetrical SVCs'. 'Restricting' slot isn't more 'unlimited'.

4.4. Goals and aims

Does difference in argument structure formation entail other differences?
 Connection with Noun Incorporation?

Compare a small number of VCCs with 'combination' and 'restriction':

Table 5. A tiny sample

	Restriction	Combination	NI present?
Chukchi	+	-?	III
Kiowa	+	-	IV

⁷ NI in Bininj Gun-Wok is Type IV and person prefixes don't index inanimates.

Bininj Kun-Wok	+	-	IV
Tlachichilco Tepehua	+	+	II/III
Japhug (Sino-Tibetan)	+	-(?)	I
Caddo (Caddoan)	+?	-	IV
Classical Nahuatl	+	+	II/III
Нир	-	+	I
Kwaza (unclassified, Amazon)	-	+	-
Olutec (Mixe-Zocean)	-	+	II
Yimas	-	+	
Fore	-	+	-
Alamblak	-	+	=

Languages with 'restriction' have Noun Incorporation ([Mithun 1984]'s Types II-IV, except Japhug with Type I). Some of the languages with only 'combination' doesn't exhibit NI (Fore, Kwaza), some exhibit type II and III (Olutec, Alamblak) and no Type IV is found.

- Order of components?
- ♦ MAX number of components (all types of VCC together).

Within languages with 'restriction', only Chukchi and Classical Nahuatl can have up to 3 verbs in VCC. As for 'combination-only' languages, Yimas and Olutec have 3, Kwaza and Alamblak can have up to 4, Hup – up to five.

- Although VCCs formed by 'restriction' can have no difference between 'limitedness' and 'restrictedness' of their slots, in this tiny sample there none of such VCCs can express the combination of sequentially ordered events.
- > What determines order of Head/Dependent? Limited/Unlimited? (whole branching strategy?)

Eurasia:	Northern America:
Chukotko-Kamchatkan (1 lg)	Na-Dene (11g from northern area)
Enisean (1 lg)	Siu (1-2 lgs?)
Nivkh	Uto-Aztecan (2 lgs?)
Sino-Tibetan (2 lgs); Austroasiatic (1 lg)	Kiowa-Tanoan (1 lg)
Japanese	Caddoan (1 lg)
	Algic (1 lg (deal with medials/initials)
South America	Mesoamerica
Nadahup (1 lg)	Totonac (1 lg)
Kwaza	Mixe-Zoque (1 lg)
Tacanan (1 lg)	
Araucanian (1 lg)	
Arawak?	
Africa	Oceania et al.
Niger-Kongo (1 lg)	Austronesian (2-3 lgs)
	Non-austronesian (1 lg)??
Papuan region	Australia
Sepik (1 lg)	Gunwinyguan (1 lg)
Sepik-Ramu (1 lg)	Daly river lgs??
Nuclear Trans New Guinea (2 lgs?)	

5. Appendix. I need a sample