

Valence Matching in Saliba

Mike Berger

1. Introduction

In Saliba (Oceanic, Papua New Guinea), complex verbs exhibit valence matching (Margetts 1999): all constituent verbs must be either intransitive or transitive. The complex verbs in (1) involve simple, i.e. underived, (in)transitive verbs: (1-a) consists of two intransitive verbs, while (1-b) consists of two transitive verbs; since all constituent verbs are either simple intransitives or simple transitives, matching is fulfilled. By contrast, the complex verbs in (2) each consist of a simple transitive V_1 , and a simple intransitive V_2 . Consequently, V_2 must be derived into a transitive in order to satisfy matching:

- | | | | | | |
|-----|----|-------------------------------|-----|----|---|
| (1) | a. | <i>intr + intr</i> | (2) | a. | <i>trans + <u>trans</u></i> |
| | | Ye-[kamposi]-[dobi] | | | Ye-[koi]-[* (he) -beku]- \emptyset |
| | | 3SG.S-jump-go.down | | | 3SG.S-hit-CAUS-fall-3SG.O |
| | | ‘(S)he jumped down’ | | | ‘(S)he made it fall down’ |
| | b. | <i>trans + trans</i> | | b. | <i>trans + <u>trans</u></i> |
| | | Ye-[koi]-[kesi]-di | | | Se-[gabae]-[dobi-*(ei)]- \emptyset |
| | | 3SG.S-hit-break-3PL.O | | | 3SG.S-throw-go.down-APPL-3SG.O |
| | | ‘(S)he broke them by hitting’ | | | ‘(S)he threw it down’ |

(Margetts, 1999:99, 103); (Margetts, 2005:79)

I propose that valence matching results from a rule of type-symmetric Event Composition at the V-level, which forces the combination of like-typed predicates. This mode of complex verb formation may give rise to verbs which, while obligatorily intransitive in isolation, must exceptionally transitivize in the context of a transitive co-verb in order to realize the latter’s internal argument.

2. Background on Saliba

Saliba is largely head-final language with canonical SOV order. Margetts (1999) classifies Saliba as a **fundamentally intransitive** language with **rigid valence**: most verbal roots are intransitive and so must be transitivized via valence-increasing operations in order to license objects. Valence-decreasing operations are unproductive and largely restricted to a few lexicalized cases. (3) shows a simple intransitive verb, with only subject agreement, and (4) shows a simple transitive verb with both subject and object agreement. (5) and (6) show verbs with underlying simple intransitive roots, which must be transitivized in order to license an object, either via the applicative (5-b) or the causative (6-b):

- | | | | |
|-----|------------------|-----|----------------------|
| (3) | <i>intr</i> | (4) | <i>trans</i> |
| | Se-dobi | | Ya-kita-di-ko |
| | 3PL.S-go.down | | 1SG.S-see-3PL.O-PERF |
| | ‘They went down’ | | ‘I saw them’ |

* University of Leipzig, mike.berger@uni-leipzig.de. I thank Barbara Stiebels, Anna Margetts, Gregory Kobele, Imke Driemel, Gereon Müller, Malte Zimmermann, Andrew Murphy and the audience at AFLA 27 for their help.

(5) *intr* ~ *trans* via APPL

- a. Ye-bahe
3SG.S-carry
'He carried'
- b. Ye-bahe-i-di
3SG.S-carry-APPL-3PL.O
'He carried them'

(6) *intr* ~ *trans* via CAUS

- a. Ye-bida
3SG.S-dirty
'It is dirty'
- b. Ye-he-bida-ø
3SG.S-CAUS-dirty-3SG.O
'She made it dirty'

(Margetts, 1999:41, 47, 78, 165)

3. Complex verbs

Complex verbs involve the combination of two to four verbs, most of which occur as full verbs in isolation (Margetts 1999, 2005).¹ There is only one inflectional domain, i.e. one set of TAM and agreement markers, and negation can only target the entire complex, not individual verbs. Complex verbs are contiguous, i.e. no material whatsoever, such as nominals, adverbs or particles, may occur between verbs. In terms of the common distinction between nuclear-layer and core-layer serial constructions, Saliba complex verbs are of the nuclear-layer type (Foley & Olson 1985); their template is given in (7):

(7) (Subject) (Object) AGR_S-[V₁-...-V_n]-AGR_O

There are four positional slots (Table 1): V_a expresses the main or the means event; V_b expresses the main or the result event; V_c expresses the direction of an action; V_d expresses manner or phasal modification. These positions constitute relative positions that need not be filled, except for the V_a slot:

	V _a	V _b	V _c	V _d
Typical meaning	main event means	main event result	directionality	manner phasal
# of stems	open	≥ 39	closed, 7	closed, 12

Table 1: Positional slots in Saliba complex verbs (Margetts 2005)

3.1. Valence matching

Complex verbs show strict **valence matching**: all verbs must be either intransitive or transitive. The complex verbs in (8) involve simple intransitives (8-a) and transitives (8-b), respectively. By contrast, the complex verbs in (9) involve a simple transitive V₁, but a derived transitive V₂. Since the underlying root of V₂ is intransitive, it must be transitivized, either via the causative (9-a) or the applicative (9-b):²

(8) a. *intr* + *intr*

Ye-[kamposi]-[dobi]
3SG.S-jump-go.down
'(S)he jumped down'

b. *trans* + *trans*

Ye-[koi]-[kesi]-di
3SG.S-hit-break-3PL.O
'(S)he broke them by hitting'

(9) a. *trans* + *trans*

Ye-[koi]-[***(he)**-beku]-ø
3SG.S-hit-CAUS-fall-3SG.O
'(S)he made it fall down'

b. *trans* + *trans*

Se-[gabae]-[dobi-*(**ei**)]-ø
3SG.S-throw-go.down-APPL-3SG.O
'(S)he threw it down'

(Margetts, 1999:99, 103); (Margetts, 2005:79)

¹ In Margetts (1999), complex verb constructions of the kind discussed here are referred to as *complex verbs*, rather than *serial verb constructions*, even though they exhibit the full range of properties associated with serial verb constructions: a mono-clausal sequence of verbs without any formal indication of co- or subordination, jointly expressed as one predication within a single inflectional domain, and construed as a single macro-event.

² Space does not permit me to go into the distribution of valence-increasing devices across the positional slots.

(10) shows that both stems may be derived transitives, and (11) shows that it is impossible to combine an intransitive V_1 with a transitive V_2 :³

- (10) Ya-tupa-[**he**-yoli]-[**he**-gehe]-di
1SG.S-IMPACT-CAUS-sink-CAUS-finished-3PL.O
'I will drown all of them'
- (11) *Ye-[sobu]-[kesi]- \emptyset
3SG.S-dance-break-3SG.O
'(She broke it by dancing)'
- (Margetts, 2005:67); (Anna Margetts p.c.)

3.1.1. Contextual transitivity

A handful of verbs in the V_d slot cannot be transitive in isolation, but must exceptionally transitivize within complex verbs in the context of a transitive co-verb (Table 2). The verb *uyo* 'return', for example, has an intransitive use in isolation, with a subject referring to the person returning (12). But *uyo* on its own disallows any valence increase, e.g. via the applicative, which would license an object referring to, say, a concomitant object or the location returned to (13).^{4,5} The same holds for *namwa* 'be good': while *namwa* occurs as an intransitive in isolation (14), it is unable to license an object (15):

- (12) Se-[uyo]-ma
3PL.S-return-hither
'They came back'
- (13) *Se-[uyo-i]- \emptyset
3PL.S-return-APPL-3SG.O
'(They came back with / to it)'
- (14) Kana heyatu ne ye-[namwa]
3SG.POSS tattoo DET 3SG-be.good
'His tattoo is good'
- (15) *Ye-[namwa-i]- \emptyset
3SG-be.good-APPL-3SG.O
'(She did it well)'
- (Margetts, 2005:75); (Margetts, 2013:13)

Stem	As main V	As V_d	Valence	Valence change
<i>namwa</i>	'be good'	'properly'	intr	APPL, only as V_d
<i>nogowai</i>	'be slow'	'slowly'		
<i>mwamwayau</i>	'be quick'	'quickly'		
<i>uyo</i>	'return'	'back' / 'again' / REFL / RECIP		

Table 2: Contextually transitive V_{dS}

Within complex verbs, however, when *uyo* 'return' and *namwa* 'be good' occur as V_{dS} with a transitive co-verb, they exceptionally can, and in fact must be transitive:

- (16) Ta-[he-yoli]-[uyo-*(i)]- \emptyset
1INC.S-CAUS-sink-return-APPL-3SG.O
'We again make it sink'
- (17) Ye-[he-kata]-[namwa-namwa-*(i)]-gai
3SG.S-CAUS-learn-RED-be.good-APPL-1EXCL.O
'She teaches us properly'
- (Margetts, 2005:66, 80)

That is, V_{dS} like *uyo* 'return' and *namwa* 'be good', despite being unable to function as transitives in isolation, are not exempt from matching, but rather undergo matching via transitivization if and only if they occur in a certain context, viz. within a complex verb with a transitive co-verb. I term this property of certain verbs, i.e. the fact that they are transitive only in a certain context, **contextual transitivity**, which is noteworthy for two reasons. First, while rigid valence matching as found in Saliba is rare,

³ The hypothetical meaning in (11) could refer to a situation where, say, someone dances on a table to the effect of breaking it. Such a situation must be expressed using a bi-clausal coordination structure (Anna Margetts p.c.).

⁴ Either role may be introduced by the Saliba applicative *-(e)i*, depending on the base verb Margetts (1999).

⁵ (13) and (15) are constructed examples. While Margetts (1999, 2005) explicitly list contextually transitive verbs, no specific examples showing their ill-formed transitive use are given.

both within and outside Oceanic, the exceptional valence-increase of certain verbs within complex verbs systematically recurs within Oceanic. In Daakaka (Vanuatu), for instance, the verb *bup* ‘tumble’ is unable to function as a transitive outside of complex verbs (18); yet within complex verbs, *bup* must exceptionally transitivize when occurring with a transitive co-verb (19):

Daakaka

- (18) *ma bup-ane ding (19) Ma [ling] [bup-ane] ding
 REAL tumble-TRANS mat REAL put tumble-TRANS mat
 (‘She tumbled the mat’) (‘S)he put the mat the wrong way up’
 (von Prince, 2015:315f.)

Second, cross-linguistically, there is a general tendency for some verbs occurring in serial verb constructions to have a reduced potential, relative to their use in isolation (e.g. in terms of argument structure). In Saliba, the situation is reversed: contextually transitive verbs have an increased morpho-syntactic potential relative to their use in isolation.

4. Analysis

4.1. Syntactic composition and headedness

Given that (i) Saliba complex verbs disallow the occurrence of any inter-verbal material, and (ii) behave as a single unit in terms of inflection, they must involve composition at the V-level. Furthermore, the final verb in the series, V_n , is the syntactic head of the complex verb, in that it determines (i) the way the object is realized, and (ii) the object’s sortal properties. Consider (20), which shows that the verb *lao* ‘go’ in isolation takes a PP expressing the path of the going event. This behavior is preserved when *lao* occurs as V_n in a complex verb: in (21), the object of the complex verb must be oblique. Yet when V_n is not *lao* ‘go’, but a transitive verb like *gabae* ‘throw’, the object of the complex verb is realized structurally (23), just as the object of *gabae* in isolation (22):

- (20) Ye-lao [bili wa unai] (21) Ye-[kai-kaikewa]-[lao] [ka-na kaha ne unai]
 3SG-go room inside POSTP 3SG.S-RED-look.at-go CLF2-3SG.POSS friend DET POSTP
 ‘She went into the room’ ‘He is looking over to his friend’
- (22) Se-gabae- \emptyset (23) Kabo ya-[lao]-[gabae]-[go]
 3PL.S-throw-3SG.O TAM 1SG.S-go-throw-2SG.O
 ‘They throw it away’ ‘I will leave you’

(Margetts, 2005:73, 83); (Margetts, 2013:3, 8)

It is also V_n which determines the object’s sortal properties. E.g. when the verb *ini* ‘pour’ occurs on its own, its object denotes the thing poured (24). But when it occurs in a complex verb with the verb *he-mwayau* ‘fill’ as V_n , the object of the complex denotes the thing filled, not the thing poured (25). That is, it is the object of the V_n *he-mwayau* ‘fill’, which is sortally distinct from that of the V_{n-1} *ini* ‘pour’:

- (24) Ka-m [ti] ya-*ini*- \emptyset ? (25) [Kaputi] ku-[ini]-[he-mwayau]- \emptyset
 CLF2-2SG.POSS tea 1SG-pour-3SG cup 2SG.S-pour-CAUS-full-3SG
 ‘Shall I pour you some tea?’ ‘You fill the cup by pouring’

(Margetts, 2005:81)

Complex verbs cannot involve complementation, which predicts that valence-changing morphology on initial stems should scope over the entire complex, contrary to fact: in (10), the causative occurs and is interpreted on both verbs, rather than only once on V_1 . Another piece of evidence against complementation is that in the great majority of cases, there is no plausible selectional relationship between the verbs involved, as would be expected of complementation; see, for instance, Svenonius

(2016). It follows that complex verbs must be formed via adjunction.⁶ So complex verbs involve V-level adjunction, where V_1 - V_{n-1} are verbal adjuncts to the head V_n .

4.2. Semantic composition

As discussed in Zimmermann & Amaechi (2018), different types of serial verb constructions come with distinct interpretations. I propose that, at the event-semantic level, Saliba complex verbs involve Event Cumulation (26): they denote a macro-event E consisting of symmetric sub-events e_1 and e_2 . This derives their mono-clausal behavior, and their reading as a single, coherent event:

(26) *Event Cumulation*: $\exists E, e_1, e_2. [E = e_1 \oplus e_2 \ \& \ P(e_1) \ \& \ Q(e_2)]$ (Zimmermann & Amaechi 2018)

We can rule out certain other construals of complex verbs, such as Predicate Modification.⁷

4.3. Valence matching

Valence matching does not follow from any general property of Saliba, and most known languages lack it, even if the language in question patterns with Saliba in the relevant respects (e.g. nuclear-layer composition, rigid valence or fundamental intransitivity). Valence matching therefore needs to be parametrized to Saliba, specifically tied to how complex verb formation takes place.⁸ I hence propose the following rule: **type-symmetric Event Composition** (EC_{TS}). EC_{TS} takes two predicates of like types as its input, i.e. $\langle s, t \rangle$ in the case of intransitives (27-a), and $\langle e, st \rangle$ in the case of transitives (27-b), and yields a complex predicate of type $\langle s, t \rangle$ (intransitives) or $\langle e, st \rangle$ (transitives), respectively. This resulting predicate cumulates the sub-events e_1 and e_2 denoted by V_1 (P) and V_2 (Q), respectively, into a single macro-event E , and existentially quantifies over e_1 and e_2 .⁹ With transitive verbs, by default, EC_{TS} abstracts over the individual arguments of both, binding them by a single λ -operator (Haider 2010):

(27) a. *Intransitive EC_{TS}* : $\lambda P_{\langle s, t \rangle} \lambda Q_{\langle s, t \rangle} \lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ P(e_1) \ \& \ Q(e_2)]$ $\langle st, \langle st, st \rangle \rangle$
 b. *Transitive EC_{TS}* : $\lambda P_{\langle e, st \rangle} \lambda Q_{\langle e, st \rangle} \lambda z \lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ P(e_1, z) \ \& \ Q(e_2, z)]$
 $\langle est, \langle est, est \rangle \rangle$

This characterizes the generalized rule in (28), which takes two predicates of type $\langle \alpha \rangle$ and yields a predicate of that same type $\langle \alpha \rangle$; the input and denotation of the resulting predicate will depend on the initial input to EC_{TS} (intransitive vs transitive), represented here as a function R of P and Q :

(28) *Generalized EC_{TS}* : $\lambda P_{\langle \alpha \rangle} \lambda Q_{\langle \alpha \rangle} R(P, Q) \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ P(e_1) \ \& \ Q(e_2)]^{10}$ $\langle \alpha, \langle \alpha, \alpha \rangle \rangle$

In the case of transitives with non-shared objects (25), argument sharing fails, such that the internal argument of V_1 (P) remains implicit. The headedness of V_n follows from the fact that EC_{TS} converts any non- V_n into a Montagovian adjunct by making it into a functor requiring a second verb.¹¹

⁶ Coordination is also ruled out, as it would predict no headedness asymmetry between verbs, contrary to fact.

⁷ A Predicate Modification analysis of complex verbs would express the existence of a single event, yet with multiple event predicates. Consequently, one would be unable to distinguish sortally distinct Patients as functions of distinct sub-events, as in (25), where the cup is the Patient of filling, but not pouring.

⁸ Some degree of (at times seemingly arbitrary) parametrization is needed independently, for instance, in order to model the fact that some languages have nuclear-layer, but not core-layer serial verbs, or vice versa.

⁹ Macro-events (E) and sub-events (e) are ontologically identical, differing only in complexity.

¹⁰ EC_{TS} is a *parametrically polymorphic function*, with more than one type depending on the argument it applies to, but which behaves similarly at each of its types. Thanks to Gregory Kobele for pointing this out.

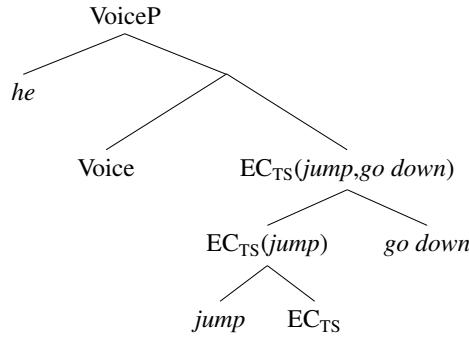
¹¹ All these steps and the 2-verb definition in (26) generalize to n number of verbs (in Saliba, maximally 4).

4.4. Derivations

As per standard practice, I assume that Agents / external arguments are introduced in Spec,VoiceP, while Patients / internal arguments are lexical arguments of the verb.^{12,13} Let us begin with intransitive complex verbs like (29), given the denotations in (31). First, EC_{TS} takes ‘jump’ of type $\langle s,t \rangle$ as its first input, thereafter requiring a second predicate of type $\langle s,t \rangle$ (32-a). After applying to ‘go down’, EC_{TS} yields a complex predicate of type $\langle s,t \rangle$ denoting a set of macro-events E consisting of a jumping sub-event e_1 and a going-down sub-event e_2 (32-b). The Agent is then introduced (32-c) and saturated via Function Application (32-d), and finally the macro-event E closed (33); see Tree 1.

(29) Ye-[kamposi]-[dobi]
3SG.S-jump-go.down
‘He jumped down’

(30) Ye-[koi]-[kesi]-di
3SG.S-hit-break-3PL.O
‘He hit-broke them’



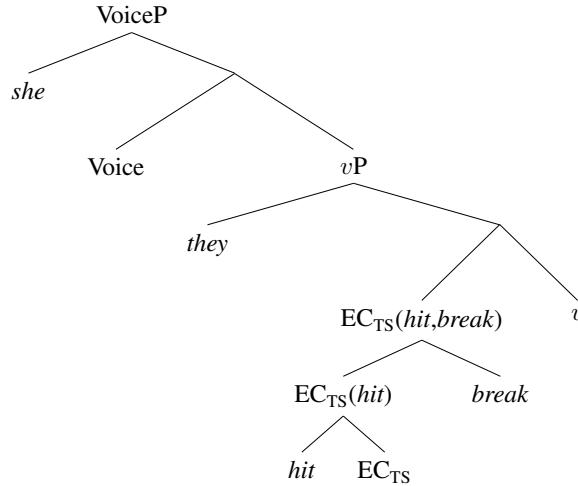
Tree 1: intr + intr (29)

- (31) a. $kamposi: \lambda e_1. [jump(e_1)]; dobi: \lambda e_2. [go.down(e_2)]$ $\langle s,t \rangle$
 b. $\lambda P_{\langle \alpha \rangle} \lambda Q_{\langle \alpha \rangle} R(P,Q) \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ P(e_1) \ \& \ Q(e_2)]$ EC_{TS}
- (32) a. $\lambda Q_{\langle s,t \rangle} R(P,Q) \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ jump(e_1) \ \& \ Q(e_2)]$ $EC_{TS}(jump)$
 b. $\lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ jump(e_1) \ \& \ go.down(e_2)]$ $EC_{TS}(jump, go down)$
 c. $\lambda w \lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ jump(e_1) \ \& \ go.down(e_2) \ \& \ AGT(E) = w]$ Ext. argument
 d. $\lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ jump(e_1) \ \& \ go.down(e_2) \ \& \ AGT(E) = he]$ FA(*he*)
- (33) $\exists E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ jump(e_1) \ \& \ go.down(e_2) \ \& \ AGT(E) = he]$ \exists -closure(E)
 = ‘He jumped and went down’ \approx ‘He jumped down’ = (29)

The derivation of transitive complex verbs like (30) proceeds similarly, except regarding the presence of internal arguments. After EC_{TS} takes ‘hit’ (35-a) and ‘break’ of type $\langle e,st \rangle$ as inputs, it pools their internal arguments into a single λ -bound argument (35-b). Then, this shared argument is saturated (35-c), the Agent introduced (35-d) and saturated (35-d), and lastly, the macro-event closed (36); see Tree 2.

¹² I also assume that T and *v* host subject and object agreement, respectively.

¹³ There are no detectable phrase-structural differences between unergatives and unaccusatives in Saliba (Margetts 1999).



Tree 2: trans + trans (30)

- (34) $koi: \lambda x \lambda e_1. [\text{hit}(e_1, x)]; kesi: \lambda y \lambda e_2. [\text{break}(e_2, y)]$ $\langle e, st \rangle$
- (35) a. $\lambda Q_{\langle e, st \rangle} R(P, Q) \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, x) \ \& \ Q(e_2, y)]$ $EC_{TS}(\text{hit})$
 b. $\lambda z \lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, z) \ \& \ \text{break}(e_2, z)]$ $EC_{TS}(\text{hit}, \text{break})$
 c. $\lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, \text{they}) \ \& \ \text{break}(e_2, \text{they})]$ $FA(\text{they})$
 d. $\lambda w \lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, \text{they}) \ \& \ \text{break}(e_2, \text{they}) \ \& \ \text{AGT}(E) = w]$ Ext. argument
 e. $\lambda E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, \text{they}) \ \& \ \text{break}(e_2, \text{they}) \ \& \ \text{AGT}(E) = \text{he}]$ $FA(\text{he})$
- (36) $\exists E \exists e_2 \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{hit}(e_1, \text{they}) \ \& \ \text{break}(e_2, \text{they}) \ \& \ \text{AGT}(E) = \text{he}]$ \exists -closure(E)
 = ‘He hit (them) and broke them’ \approx ‘He hit-broke them’ = (30)

In the case of transitive complex verbs with non-shared objects due to sortal distinctness (25), argument sharing fails, and hence the object of the V_{n-1} ‘pour’ (P) remains implicit (37):¹⁴

- (37) $\exists E \exists e_2 \exists x \exists e_1. [E = e_1 \oplus e_2 \ \& \ \text{pour}(e_1, x_i) \ \& \ \text{fill}(e_2, \text{the cup}_k) \ \& \ \text{Agt}(E) = \text{you}]$
 = ‘You pour (something) and fill the cup’ \approx ‘You fill the cup by pouring’ = (25)

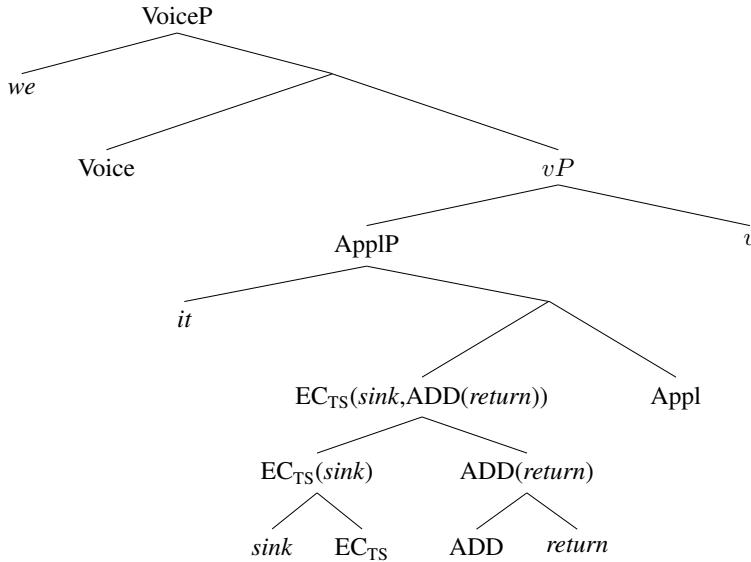
4.5. Contextual transitivity

I propose that contextual transitivity ((38) vs (39)) is a type of **repair**, i.e. a structural property ill-formed in the general case but well-formed in a specific case (cf. Murphy 2019). It occurs in order to realize the internal argument selected by the transitive co-verb, which cannot realize its object in situ due to the configuration of V-level adjunction. The context triggering contextual transitivity (a transitive co-verb) must be present before the target (a contextually transitive verb) is introduced into the structure. This follows from EC_{TS} , which takes the transitive co-verb as its first, and the contextually transitive verb as its second input. After EC_{TS} takes *he-yoli* ‘sink’ (40) of type $\langle e, st \rangle$ as its first input (42-a), *uyo* ‘return’ as it is cannot function as the second input due to being of type $\langle s, t \rangle$ (41). In order to resolve this type mismatch, I propose the operator **ADD**, which adds an **expletive internal argument** to verbs like *uyo* (42-b).¹⁵ Now that *uyo* has the right type, it can be fed into EC_{TS} , which then yields regular argument sharing (42-c). The rest of the derivation proceeds as above, yielding the result in (43); see Tree 3.

¹⁴ In cases like (25), it is impossible to express the object of *ini* ‘pour’, even as an oblique (Anna Margetts p.c.).

¹⁵ **ADD**: $\lambda P_{\langle s, t \rangle} \lambda x. [P(e) \ \& \ \text{EXPL}(e) = x]$. I take **ADD** to only be able to apply (i) in the context provided by a half-saturated EC_{TS} , and (ii) if its outcome does not contradict a verb’s argument structure.

- (38) *Se-[uyo-i]- \emptyset (39) Ta-[he-yoli]-[uyo-i]- \emptyset
 3PL.S-return-APPL-3SG.O 1INC.S-CAUS-sink-return-APPL-3SG.O
 ('They came back with / to it') 'We again make it sink'
 (40) *he-yoli*: $\lambda x \lambda e_1$. [sink(e_1, x)] $\langle e, st \rangle$ (41) *uyo*: λe_2 . [return(e_2)] $\langle s, t \rangle$



Tree 3: trans + contextual trans

- (42) a. $\lambda Q_{\langle e, st \rangle} R(P, Q) \exists e_2 \exists e_1$. [$E = e_1 \oplus e_2$ & sink(e_1, x) & $Q(e_2)$] $EC_{TS}(sink)$
 b. $ADD(\lambda e_2$. [return(e_2)]) = $\lambda y \lambda e_2$. [return(e_2) & EXPL(e_2) = y] $ADD(return)$
 c. $\lambda z \lambda E \exists e_2 \exists e_1$. [$E = e_1 \oplus e_2$ & sink(e_1, z) & return(e_2) & EXPL(e_2) = z] $EC_{TS}(hit, ADD(return))$
 (43) $\exists E \exists e_2 \exists e_1$. [$E = e_1 \oplus e_2$ & sink(e_1, x_i) & return(e_2) & EXPL(e_2) = it_i & AGT(E) = we]
 = 'We sink it and return' \approx 'We again make it sink' = (39)
 $FA(it)$, ext. argument, $FA(we)$, \exists -closure(E)

The proposal that contextual transitivity instantiates a repair finds further support. First, the object in (39) is realized structurally via the applicative *-(e)i*, Saliba's generic transitivizer (Margetts 1999): next to Patients, *-(e)i* introduces concomitant objects, stimuli and locations. This is consistent with the tendency for languages, in face of conflicting requirements, to resort to **unmarked strategies** that remedy otherwise illicit outputs. Second, we should expect to find **alternative resolutions** to similar conflicts in other languages, which we do. In Toqabaqita (Solomon Islands), objects of complex verbs with a transitive V_1 and an intransitive V_2 are realized as obliques (44), even though neither verb licenses obliques in isolation (Lichtenberk 2006). Importantly, the adposition chosen to license the object is the most generic one, with a wide range of functions (comparable to English *to* or *of*). I assume that ADD is also operative in Toqabaqita, and suggest that the way objects of contextually transitive verbs (or rather contextually *bivalent* in Toqabaqita) are realized - i.e. the "shape" of the repair - is a PF matter.

- (44) Nau ku [fanga]-[baqita] **qana alo** (45) Ye-[tu]-[isini]-[sae]-[kasaya-i]- \emptyset
 1SG 1SG.NF eat.CF-be.big OBL taro 3SG.S-throw-raise-put.up-in.vain-APPL-3SG.O
 'I ate a lot of taro' 'He threw it up in vain'
 (Lichtenberk, 2006:266) (Margetts, 2005:67)

Note that this account correctly predicts Saliba valence matching to occur across the board with more than two verbs (45). This follows from the fact that EC_{TS} is a local binary rule whose output is type-identical to its input, such that it can apply iteratively.

5. Outlook

The occurrence of valence matching seems to follow from two main ingredients: the mode of semantic composition, and the syntactic configuration. The latter involves complementation, adjunction or coordination, albeit at different structural levels (X^0 vs XP). To give one example of the absence of valence matching, consider the serial verb construction in (46), from Samoan (Oceanic, Samoa), with an intransitive V_1 and a transitive V_2 . Hopperdietzel (2019) argues that Samoan complex verbs employ Predicate Modification semantically, and vP -level adjunction syntactically - hence no matching occurs:

- (46) Sa [pese] [fa'a-moe=moe] e le teine le pepe
 PST sing CAUS-RED=sleep ERG SPEC mother SPEC baby.ABS
 'The girl sang the baby to sleep' (Hopperdietzel, 2019:1)

References

- Foley, William & Mark Olson (1985). Clausehood and verb serialisation. Nichols, Johanna & Anthony Woodbury (eds.), *Grammar inside and outside the clause*, Cambridge University Press, Cambridge, 17–60.
- Haider, Hubert (2010). *The syntax of German*. Cambridge University Press, New York.
- Hopperdietzel, Jens (2019). On resultatives with causative secondary predicates. Talk given at the IGRA-colloquium at the University of Leipzig.
- Lichtenberk, Frantisek (2006). Serial verb constructions in Toqabaqita. Aikhenvald, Alexandra & R.M.W. Dixon (eds.), *Serial Verb Constructions*, Oxford University Press.
- Margetts, Anna (1999). *Valence and transitivity in Saliba: an Oceanic language of Papua New Guinea*. Ph.D. thesis, Universiteit Nijmegen.
- Margetts, Anna (2005). Positional slots in Saliba complex verbs. *Oceanic Linguistics* 44:1.
- Margetts, Anna (2013). Saliba-Logea sub-lexicon (DoBes).
- Murphy, Andy (2019). Resolving conflicts with violable constraints: On the cross-modular parallelism of repairs. *Glossa* 4:1.
- von Prince, Kilu (2015). *A grammar of Daakaka*. Mouton de Gruyter, Berlin, Boston.
- Svenonius, Peter (2016). Complex predicates as complementation structures. Nash, Lea & Pollet Samvelian (eds.), *Approaches to complex predicates*, Brill, 212–247.
- Zimmermann, Malte & Mary Amaechi (2018). Find construction analyze: Making sense of serial verb constructions. Talk given at the Johann-Wolfgang-Goethe University in Frankfurt am Main on May 8, 2018.

Proceedings of the 37th West Coast Conference on Formal Linguistics

edited by D. K. E. Reisinger
and Marianne Huijsmans

Cascadilla Proceedings Project Somerville, MA 2021

Copyright information

Proceedings of the 37th West Coast Conference on Formal Linguistics
© 2021 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-477-5 hardback

A copyright notice for each paper is located at the bottom of the first page of the paper.
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information

Orders for the printed edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Berger, Mike. 2021. Valence Matching in Saliba. In *Proceedings of the 37th West Coast Conference on Formal Linguistics*, ed. D. K. E. Reisinger and Marianne Huijsmans, 89-97. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #3518.