## Serial Verbs and the VP shell in Vurës (Vanuatu)

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## Serial verb construction (SVC)

- Descriptive term.
- Two or more verbs in succession acting together as a single predicate.
- All verbs in an SVC must be able to occur independently in predicate position.
- In languages with TAMP marking, all verbs share same TAMP (marked once or continuously).
- Key literature:
- Foley \& Olson (1985)
- Durie (1997)
- Cleary-Kemp (2015)
- Haspelmath (2016)
- Hopperdietzel (2020)
- Krauße (2021)
- Aikhenvald $(2006,2018)$ defines SVCs based on her criteria and presents a typology of SVCs
- Baker \& Harvey (2010) present an account of SVCs as complex predicates using LCS applies the VP shell to SVCs in the Oceanic language Koro
propose a distinction between core-layer and nuclear-layer serialization lists several criteria for an SVC
criticises Aikhenvald's criteria of SVCs and provides his own definition
applies the VP shell to resultative serial verbs in two Oceanic languages
compares SVCs and coverbs and applies his VP shell theory of complex predicates to Vurës SVCs


## Vurës SVC questions

1. How do we account structurally for
a) adjacency of verbs (nothing can intervene)?
b) similar behaviour of SVC object argument with an underlying $\mathrm{V}_{2}$ subject and with an underlying $\mathrm{V}_{2}$ object?
(1) a. Nēk $i=d a$ malaklak no.

2SG 2SG.GNO=make be.happy 1sG
'You make me happy.' (Malau 2016:568)
b. Na=siag diar na gë-k.

1sG.GNO=sit wait.for ART CL.FOOD-1sG.P
'I sat waiting for my food.' (Malau 2016:570)

## Vurës SVC questions

1. How do we account structurally for
a) adjacency of verbs (nothing can intervene)?
b) similar behaviour of SVC object argument with an underlying $\mathrm{V}_{2}$ subject and with an underlying $\mathrm{V}_{2}$ object?
c) different behaviour of underlying $\mathrm{V}_{2}$ subject when it is coreferential with the $\mathrm{V}_{1}$ subject, vs. a switch subject?
(2) a. Rōrō a=gav qilian.

2DU NSG.GNO=fly be.out.of.sight
'The two of them flew out of sight.' (Malau 2016:602)
b. Nēk $i=d a$ malaklak no.

2SG 2SG.GNO=make be.happy 1sG
'You make me happy.' (Malau 2016:568)

## Vurës SVC questions

2. How do we account for the behaviour of the SVC object argument?
a) any adverbs must intervene between the verb series and the object, separating the object from its verb
(3) a. Nē ga=da ēs~ēs kēl le nēk.

3SG IPFV=make DUR~live again able 2sG
'He can make you live again.' (Malau 2016:568)

## Vurës SVC questions

2. How do we account for the behaviour of the SVC object argument?
a) any adverbs must intervene between the verb series and the object, separating the object from its verb
b) objects may occur before or after some adjuncts
(3) a. Nē ga=da ēs~ēs kēl le nēk.

3SG IPFV=make DUR~live again able 2SG
'He can make you live again.' (Malau 2016:568)

| b. Le tēqēl | gamlöt me min | no | me | tibiar. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| transfer go.down quickly | hither DAT | 1SG | ART basket |  |
| 'Pass down quickly hither to me the basket!' |  |  |  |  |

c. Le tēqēl gamlöt me o tibiar min no.
transfer go.down quickly hither ART basket DAT 1SG
'Pass down quickly hither to me the basket!'

## Vurës SVC questions

3. How can theoretical linguistics (minimalism) help us understand terms from descriptive linguistics (a serial verb construction)?

## Assumptions: VPISH

- Evidence that subject is generated in a VP-internal position
- e.g. evidence from quantifier float
- VP-Internal Subject Hypothesis (VPISH), (cf. Kitagawa 1986; Koopman \& Sportiche 1991:246; van Gelderen 2013:14)
- Subject is generated in SPEC-VP and moves up into SPEC-TP



## Assumptions: VP shell

- Single verbal phrase level cannot easily account for double object constructions, secondary predicates, causative constructions, etc.
- e.g. they made the ball roll down the hill
- In VP shell: causative verb make is head of ' $V P$ ', intransitive theme verb roll is head of 'VP'



## Assumptions: VP shell

- Single verbal phrase level not easily account for double object constructions, secondary predicates, causative constructions, etc
- e.g. they made the ball roll down the hill
- In VP shell: causative verb make is head of ' $v P$ ', intransitive theme verb roll is head of 'VP'
- Equivalent to: they rolled the ball down the hill
- Transitive roll includes both the causative (in $v$ ) and the theme (in V).



## Vurës

- ~2000 speakers
- South/southwest of Vanua Lava, Vanuatu

Southern Oceanic
North/Central Vanuatu
Northern Vanuatu
Torres-Banks
Banks
Vurës/Mwesen

- Fixed SV/AVO order, no case marking, nominative-accusative alignment
- Obligatory aspect \& polarity marking


François 2015:143 \& Malau 2016:3)

- grammar: Malau (2016)
- dictionary: Malau (2021) through verbal proclitics


## Vurës SVCs in VP shell

- Few attempts to apply VP shell to SVCs, but cf:
- Aboh (2009): Gungbe (Niger-Congo)
- Cleary-Kemp (2015): Koro (Oceanic, PNG)
- Pearce (2016): Unua (Oceanic, Vanuatu)
- Hopperdietzel (2020): resultative SVCs in Samoan (Oceanic, Polynesian) and Daakaka (Oceanic, Vanuatu)
- Krauße (2021): complex predicates including SVCs in Vurës
- We show that the VP shell can account for serialised intransitive, transitive, and causative constructions in Vurës.


## Vurës SVCs in VP shell: assumptions

- (this type of) SVC = complementation (not adjunction)
- VPISH
- VP shell
- $\mathrm{V}_{1}$ subject: SPEC-vP
- $\mathrm{V}_{2}$ subject: SPEC-VP
- $\mathrm{V}_{2}$ object: COMP-V

( $\mathrm{V}_{2}$ object)


## $\mathrm{V}_{2}$ subject equi-deletion

- $\mathrm{V}_{2}$ subject $=\mathrm{V}_{1}$ subject
- $V_{2}$ subject:
- generated in SPEC-VP
- equi-deleted
- $V_{i t r}+V_{i t r}$



## $\mathrm{V}_{\mathbf{2}}$ subject equi-deletion

- $\mathrm{V}_{2}$ subject $=\mathrm{V}_{1}$ subject
- $V_{2}$ subject:
- generated in SPEC-VP
- equi-deleted
- $V_{\text {itr }}+V_{t r}$
(5) No mē=siag diar na gë-k.

1SG PRF=sit wait.for ART CL.FOOD-1SG.P 'I sat [and] waited for my food.'


## $\mathrm{V}_{2}$ subject extraction

- $V_{t r}+V_{i t r}$
- $\mathrm{V}_{2}$ subject $\neq \mathrm{V}_{1}$ subject
- $\mathrm{V}_{2}$ subject:
- generated in SPEC-VP
- extracted to right periphery
(6) Nēk i=da malaklak no.

2sG 2sG.GNO=make be.happy 1sG 'You make me happy.' (Malau 2016:568)


## $\mathrm{V}_{2}$ subject extraction

- Why extraction to right-periphery?
- Not in COMP-V
- Intervention of VP and vP adjuncts
(7) $N \bar{e}$ ga=da ēs~ēs kēl le nēk.

3SG IPFV=make DUR~live again able 2sG
'He can make you live again.' (Malau 2016:568)

- kēl has scope over ēs~ēs: VP-level adjunct
- le has scope over da: vP-level adjunct
- Subject extraction to right-periphery of $v P$



## $\mathbf{V}_{2}$ subject extraction: VP and vP

- Subject extracts to right periphery of $v P$
(8) Le tēqēl gamlöt me min no o tibiar. transfer go.down quickly hither DAT 1SG ART basket 'Pass down quickly hither to me the basket!'
- gamlöt 'quickly' and me 'hither' have scope over tēqēl 'go.down', so VP-level
- min no 'to me' has scope over le 'transfer', so vP-level



## $\mathrm{V}_{2}$ subject extraction: VP and vP

- But subject can also extract to right periphery of VP
(8) Le tēqēl gamlöt me min no o tibiar. transfer go.down quickly hither DAT 1SG ART basket 'Pass down quickly hither to me the basket!'
(9) Le tēqēl gamlöt me o tibiar min no. transfer go.down quickly hither ART basket DAT 1SG 'Pass down quickly hither to me the basket!'



## Object locus

- Vurës $\mathbf{V}_{\text {itr }}+\mathrm{V}_{\text {tr }}$ SVCs have $\mathrm{V}_{2}$ object
- Not in COMP-V
- Adjuncts intervene between verbs and object:

- Where is $V_{2}$ object?


## Object locus: English particle verbs

- Consider English particle verbs
(11) He cut the branch (right) off. He cut it (right) off.
He cut off the branch.
*He cut right off the branch. *He cut off it.
- Intervention of particle between verb and object resembles Vurës

Underlying structure:


## Object locus: English particle verbs

- Consider English particle verbs
(11) He cut the branch (right) off. He cut it (right) off.
He cut off the branch.
*He cut right off the branch.
*He cut off it.
- Many analyses - two relevant here
- Both problematic for English
- Particle incorporation



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- Consider English particle verbs
(11) He cut the branch (right) off. He cut it (right) off.
He cut off the branch.
*He cut right off the branch.
*He cut off it.
- Many analyses - two relevant here
- Both problematic for English
- Object extraction



## Object locus: single $\mathrm{V}_{\mathrm{tr}}$

- Vurës object locus either:
- adjunct incorporation
- $\mathrm{V}_{2}$ object extraction to right periphery
- Incorporation implausible: incorporation of lexical adverbs; multiple adjuncts; PPs

```
(12)a. ...a=rēv sur min nē o ak...
    NSG=pull down DAT 3sG ART canoe
    '...[they] pulled down a canoe for him...' (Malau 2016:331)
```


## Object locus: extraction to vP periphery

- Object:
- generated in COMP-V
- extracted to right periphery
- Extraction to right periphery of vP

```
(12)a. ...a=rēv sur min nē o ak...
    NSG=pull down DAT 3sG ART canoe
    '...[they] pulled down a canoe for him...' (Malau 2016:331)
```



## Object locus: extraction to VP periphery

- Object:
- generated in COMP-V
- extracted to right periphery
- Extraction to right periphery of vP
- Extraction to right periphery of VP also possible
(12)a. ...a=rēv sur min nē o ak...

NSG=pull down DAT 3SG ART canoe
'... [they] pulled down a canoe for him...' (Malau 2016:331)
b. Nē mö=qöqös lō o gengen min no.

3SG PRF=spit out ART food DAT 3sG
'S/he spat out food onto me.' (Malau 2016:333)


## Object locus: SVCs

- Most SVCs: object of SVC $=\mathrm{V}_{2}$ subject
- One SVC type has $V_{2}$ object
- Object of transitive $\mathrm{V}_{2}$ extracts like single $V$ object
(13)a. Na=sig~siag rēv~rēv ti 1SG.GNO=DUR~sit DUR~write EVENT min nē o lētes. 'I was sitting writing a letter to him...'

Table 42: Argument Structure and Alignment of Vurës SVC Types

| Type | Arguments of $V_{1}$ | Restriction on $V_{1}$ | Restriction on $V_{2}$ | Arguments of $V_{2}$ | Valency of clause | Alignment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cause-effect ${ }_{1}$ | $\mathrm{A}+\mathrm{O}$ | $\mathrm{V}_{\text {TR }}$ | $\mathrm{V}_{\text {UE }}$ or $\mathrm{V}_{\text {UA }}$ | S | TR | switch |
| cause-effect 2 | S | $\mathrm{V}_{\mathrm{UA}}$ | $\mathrm{V}_{\text {UE }}$ or $\mathrm{V}_{\text {UA }}$ | S | TR | cf. §8.3.2 |
| causative | $\mathrm{A}+\mathrm{O}$ | da 'make' | $\mathrm{V}_{\text {UA }}$ | S | TR | switch |
| positional ${ }_{1}$ | S | $\mathrm{V}_{\text {UA }}$ | $\mathrm{V}_{\text {TR }}$ | $\mathrm{A}+\mathrm{O}$ | TR | same |
| positional 2 | S | $\mathrm{V}_{\text {UA }}$ | $\mathrm{V}_{\text {UE }}$ or $\mathrm{V}_{\text {UA }}$ | S | INTR | same |
| directional ${ }_{1}$ | $\mathrm{A}+\mathrm{O}$ | $\mathrm{V}_{\text {TR }}$ | $\mathrm{V}_{\text {UE }}$ | S | TR | switch |
| directional ${ }_{2}$ | S | $\mathrm{V}_{\text {UE }}$ or $\mathrm{V}_{\text {UA }}$ | $\mathrm{V}_{\text {UE }}$ | S | INTR | same |
| manner $_{1}$ | $\mathrm{A}+\mathrm{O}$ | $\mathrm{V}_{\text {TR }}$ | $\mathrm{V}_{\text {UA }}$ | $\varnothing$ | TR | switch |
| manner $_{2}$ | S | $\mathrm{V}_{\text {UE }}$ or $\mathrm{V}_{\text {UA }}$ | $\mathrm{V}_{\text {UA }}$ | $\varnothing$ | INTR | switch |
| modal | $\mathrm{A}+\mathrm{O}$ | $\mathrm{V}_{\mathrm{tr}}$ | none | A/S | TR/INTR | same |

(Krauße 2021:254)
b. Na=sig~siag rēv~rēv ti o lētes min nē.

1SG.GNO=DUR~sit DUR~write EVENT ART letter DAT 3SG
'I was sitting writing a letter to him...'

## Object locus: extraction to vP periphery

- $\mathrm{V}_{2}$ object:
- generated in COMP-V
- extracted to right periphery of $\mathbf{v P}$
(14) $N a=s i g \sim s i a g ~ r e ̄ v \sim r e ̄ v ~ t i ~ m i n ~ n e ̄ ~ o ~ l e ̄ t e s . ~$ 1sG.GNO=DUR~sit DUR~write EVENT DAT 3sG ART letter 'I was sitting writing a letter to him...'



## Object locus: extraction to VP periphery

- $\mathrm{V}_{2}$ object:
- generated in COMP-V
- extracted to right periphery of VP
(15) $N a=s i g \sim s i a g$ rēv~rēv $t$
- lētes min nē... 1sG.GNo=DUR~sit DUR~write EVENT ART letter DAT 3sG 'I was sitting writing a letter to him...'



## Vurës summary

- Extraction to right periphery - of VP or vP, but not both
- Single $\mathrm{V}_{\mathrm{tr}}$ - object extraction
- SVC underlying argument loci:
- $V_{1}$ subject: SPEC-vP
- $\mathrm{V}_{2}$ subject: SPEC-VP
- $\mathrm{V}_{2}$ object: COMP-V
- SVCs:
- $\mathrm{V}_{2}$ same subject: equi-deletion
- $V_{2}$ switch subject: extraction
- $\mathrm{V}_{2}$ object: extraction
- Extraction of single argument: $\mathrm{V}_{2}$ switch subject or $\mathrm{V}_{2}$ object
- Hence prohibition of switch subject transitive $\mathrm{V}_{2}$


## Vurës summary

- VP shell useful in accounting for:
- similar behaviour of underlying $\mathrm{V}_{2}$ subject and $\mathrm{V}_{2}$ object as SVC object argument (extraction to right periphery)
- different behaviour of underlying $\mathrm{V}_{2}$ same subject vs switch subject (equi-deletion vs extraction)
- intervention of adverbs between verb(s) and object (obligatory extraction)
- occurrence of objects before or after some adjuncts (extraction to right periphery of vP or VP)


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## Varian gö luwō, Mam Eli!



## Object locus: Koro

- Cleary-Kemp (2015): Koro SVC = VP shell
- Object is generated in SPEC-VP
- "assumes" V moves into v
Yourun k-a la kah pamei

1EXCL.PL IRR-NSG go.to find betelnut
'We were going to go and look for betelnut' (Cleary-Kemp 2015:244)


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- Object is generated in SPEC-VP
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Yourun k-a la kah pamei
1EXCL.PL IRR-NSG go.to find betelnut
'We were going to go and look for betelnut' (Cleary-Kemp 2015:244)

- But... kah is transitive
- $\mathrm{V}_{2}$ subject $=\mathrm{V}_{1}$ subject, so equi-deleted
- pamei is V2 object so in COMP-V not SPEC-VP
- No movement needed


| ... mala pwi | to | k-a | kah <br> in.case | karahat <br> 1INCL.PL |
| :--- | :--- | :--- | :--- | :--- |
| IRR-NSG |  |  |  |  |
| find |  |  |  |  |

'...in case we find any mud crabs' (Cleary-Kemp 2015:53)

## Object locus: Vurës $V_{i t r}+V_{t r}$

| Na=sig~siag gen~gen mölumlum na gë-k o qiat. |  |
| :--- | :--- | :--- | :--- | :--- |
| 1SG.GNO=DUR~sit DUR~eat slowly | ART CL.FOOD-1SGP ART taro |

- $\mathrm{V}_{2}$ object:
- generated in COMP-V
- extracted to right periphery



## Object locus: Vurës

...nēr töl a tövun wareg nē la=tan.
3PL three NSG bury properly 3SG COM.LOC=ground
'...the three of them buried him properly in the ground.' (Malau 2016:602)

