Talmy’s typology in serializing languages: Variations on a vP

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GLOW 44
Virtual Conference
April 17, 2021
Resultative constructions

Resultative secondary predication

- In resultative constructions, a manner predicate specifies an (action) event that causes a change-of-state of an object with the result state named by a result predicate.

(i) a. Peter *hammered* the metal *flat*.

Resultative secondary predication


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<thead>
<tr>
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<tbody>
<tr>
<td>Main predicate</td>
<td>Manner (V)</td>
</tr>
<tr>
<td>Secondary predicate</td>
<td>Result (AP)</td>
</tr>
</tbody>
</table>
Resultative constructions

The *means* construction

- In resultative constructions, a manner predicate specifies an action/event that causes a change-of-state of an object with the result state named by a result predicate.

(i) a. *Peter hammered the metal flat.*

b. *Peter flattened the metal by hammering it.*

(Resultative Secondary Predication)

(MEANS Construction)


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<td>Manner (PP)</td>
</tr>
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</table>

Resultative constructions can differ with respect to the main predicate of the construction.
Resultative constructions

Two types of resultatives

- The variation between the two types of resultative constructions reflects the syntactic and semantic composition of the manner and result meaning components in relation to the (causing) event introducing head $v$.

(12) a. **resultative secondary predication**

\[
\text{\small \begin{array}{c}
vP \\
\text{\small v} \\
\text{\small v'} \\
\text{\small aP/PP}
\end{array}}
\]

b. **means constructions**

\[
\text{\small \begin{array}{c}
vP \\
\text{\small v} \\
\text{\small v'} \\
\text{\small PP/NP} \\
\text{\small v}
\end{array}}
\]

- **satellite-framed languages**
  e.g., Germanic languages such as English, German or Dutch etc.

- **verb-framed languages**
  e.g., Romance language such as French, Italien or Spanish

Resultative serial verb constructions
A distinct type?

- While in non-serializing languages the secondary predicate is expressed by a non-verbal element (aP/PP), in serializing languages both meaning components are realized by verbs.

(ii) a. Sā solo$_V$ fa’a-mamā$_V$ e Malia le laulau. Samoan
   PST wipe CAUS-clean ERG Mary ART table.ABS
   ‘Mary cleaned the table by wiping it.’

   b. Sanmao peng$_V$-lie$_V$-le jingzi. Mandarin
   Sanmao bang-crack-ASP mirror
   ‘Sanmao banged the mirror, cracking it.’ (Tham 2012: 602)

What is their syntactic and semantic type of composition?

Do they represent a uniform phenomenon?

How do they fit in Talmy’s typology?
Resultative serial verb constructions
A categorial split

• In this talk, I examine the syntactic and semantic properties of Samoan RSVCs with Mandarin RVCs which indicate that RSVCs exhibit the very same split as resultative in non-serializing languages regarding to the meaning component expressed by the main verb.

(iii) a. Resultative secondary predication (= Mandarin-type RSVCs)

\[
\begin{array}{c}
\text{vP} \\
v' \\
v \\
v \\
\end{array}
\]

b. Means constructions (= Samoan-type RSVCs)

\[
\begin{array}{c}
\text{vP} \\
v \\
v' \\
v \\
\end{array}
\]


⇒ RSVCs are not (that) special! (contra Ameka & Essegbey 2013, Slobin 2004)
Resultative constructions
Towards a typology

- These findings indicate that non-serializing languages, such as English and Romance, and serializing languages, such as Mandarin and Samoan, do not vary fundamentally in their underlying syntactic and semantic composition.

<table>
<thead>
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<tr>
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<td>Romance</td>
</tr>
<tr>
<td>serializing</td>
<td>Mandarin</td>
<td>Samoan</td>
</tr>
</tbody>
</table>

⇒ Talmy’s typology holds also in serializing languages!
Outline

1. Introduction
2. Resultative constructions
3. Mandarin RVCs
4. Samoan RSVCs
5. Towards a typology of resultatives
Resultative constructions

2.1 Event (de-)composition

- Manner and result predicates differ in their compositional status: While manner predicates modify an abstract ACT(ion) event (1a), result predicate name a certain (result) state (1b).

(1) a. Activity: [x ACT<\textit{Manner}>(y)]
   [Peter ACT<\textit{wipe}>(floor)]
   
   \textit{Peter wiped the floor.}

   b. States: [x <\textit{(Res-)STATE}>]
   [floor <\textit{clean}>]
   
   \textit{The floor is clean.}

- Since a single root cannot specify both the manner and the result meaning component simultaneously (cf. manner/result complementary), manner and result predicates combine in resultative constructions.

(2) Resultatives: [[x ACT<\textit{Manner}>]  \text{CAUSE}  [y <\textit{STATE}>]]
   [[Peter ACT<\textit{wipe}>]  \text{CAUSE}  [floor <\textit{clean}>]]
   
   \textit{Peter wiped the floor clean.}

Resultative constructions

2.1 Event (de-)composition

- Adopting a syntactic approach on event (de)composition, manner and result meaning components appear in designated syntactic positions relative to the verbalizer $v$, which introduces the causing event.

$\Rightarrow$ **Manner** = event modifiers (i.e. sisters of $v'$)  
$\Rightarrow$ **Result** = event arguments (i.e. complements of $v$)

(3)

```
(vP
  \ Manner
  \  v'
  \   \ v
       \  Result
```

(Folli & Harley 2020, Alexiadou & Lohndal 2011; also Alexiadou et al. 2015, Mateu & Acedo-Matellan 2015)
Resultative constructions

2.2 Resultative secondary predication

- In English resultative secondary predication, the manner component is realized by a manner verb (hammer) while the result component is realized by a pre-categorized aP (flat).

  (4) Mary *hammered* the metal *flat*.

- Syntactically, the manner root merges with the eventive v head forming the main predicate which takes the result aP as its complement.

  (5) \[ vP \]

  \[ \begin{array}{c}
  v \\
  v' \\
  \text{hammer}
  \end{array} \]

  \[ \begin{array}{c}
  v \\
  \text{aP}
  \end{array} \]


<table>
<thead>
<tr>
<th>Syntactic Computation</th>
<th>English RSP</th>
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<tbody>
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<td>Syntactic composition</td>
<td>Complementation</td>
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<td>Semantic composition</td>
<td>Causation</td>
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</tbody>
</table>
Resultative constructions

2.3 The *means* constructions

- In the English *means* construction, the result component is realized by a causative verb (*flatten*) while the result component is realized by a PP (*by hammering it*).

\[(5)\] Mary *flattened the metal by hammering it.*

- Syntactically, the result root merges with the eventive \(v\) head forming the causative main predicate which takes a manner-denoting PP as its adjunct.

\[(6)\]

<table>
<thead>
<tr>
<th>Syntactic composition</th>
<th>Semantic composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP (\text{by hammering})</td>
<td>Modification</td>
</tr>
<tr>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>(v')</td>
<td></td>
</tr>
<tr>
<td>(v)</td>
<td>Causative (VP)</td>
</tr>
<tr>
<td>(v)</td>
<td>Manner (PP)</td>
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</table>

Resultative constructions

2.4 Two types of resultatives

- Therefore, the variation within the resultative domain can be described in terms of the morphosyntactic and semantic properties of manner and result meaning components:

(7) a. resultative SP

\[ \begin{align*}
\text{vP} \\
v \\
\text{v'} \\
\text{aP/PP}
\end{align*} \]

b. *means* constructions

\[ \begin{align*}
\text{vP} \\
\text{PP/NP} \\
v \\
\text{v'} \\
v
\end{align*} \]

- **satellite-framed languages**
  e.g., Germanic languages such as English, German or Dutch etc.

- **verb-framed languages**
  e.g., Romance language such as French, Italien or Spanish

2.5 Serializing languages

• In contrast to non-serializing like English, both manner and result components are realized by verbal predicates in serializing languages, such as Mandarin or Samoan.

(8) a. Sanmao peng\textsubscript{V}-lie\textsubscript{V}-le jingzi. Mandarin
Sanmao bang-crack-ASP mirror
‘Sanmao banged the mirror, cracking it.’ (Tham 2012: 602)

b. Sā solo\textsubscript{V} fa’a-mamā\textsubscript{V} e Malia le laulau. Samoan
PST wipe CAUS-clean ERG Mary ART table.ABS
‘Mary cleaned the table by wiping it.’

⇒ What is the internal syntactic and semantic structure in serializing languages?
RVCs in Mandarin

3.1 Overview

• In Mandarin resultative verbal compounds (RVCs), the initial verb (V1) realizes the manner component while the non-initial verb (V2) realizes the result component.


(9) a. Sanmao  *peng-lie-le* jingzi.
Sanmao  bang-crack-ASP mirror
‘Sanmao banged the mirror, cracking it.’ (Tham 2012: 602)

b. Sanmao  *ca-gan-le* wanpan.
Sanmao  wipe-dry-ASP dishes
‘Sanmao wiped the dishes dry.’ (Tham 2009: 1)
RVCs in Mandarin

3.2 Transitivity

• In Mandarin RVCs, the result component is realized by intransitive anticausative predicates (such as lie ‘crack’) – contra causative verbs in Oceanic RSVCs.

(10) Sanmao peng-lie-le jingzi.
Sanmao bang-crack-ASP mirror
‘Sanmao banged the mirror, cracking it.’ (Tham 2012: 602)

• The anticausative nature of such verbs is indicated by the unavailability of stative (19b) and causative forms (19c) in the absence of further derivation.


(11) a. Anticausative:  
Jingzi lie-le.
mirror crack-ASP
‘The mirror cracked.’

b. Stative:  
* Jingzi hen lie.
mirror very cracked
Int.: ‘The mirror is badly cracked.’

c. Causative:  
* Sanmao lie-le jingzi.
Sanmao crack-ASP mirror
Int: Sanmao cracked the mirror.’

⇒ Manner verb is the main predicate of the construction.
RVCs in Mandarin

3.3 Narrow *again*

• Cross-linguistically, it has been shown that repetitive modifiers like English *again* are ambiguous with respect to their scope.
  

(12) *Peter hammered the metal flat again.*
  a. → The metal was *flat* before.  
  b. → *Peter hammered* the metal *flat* before.  

  ➔ RESTITUTIVE  
  ➔ REPETITIVE (WIDE)

• Crucially, an additional narrow repetitive reading, in which *again* solely scopes over the manner predicate is available in *means* constructions only.

(13) a. *Peter hammered the metal flat again.*
  → *Peter hammered* the metal before.  
  → # REPETITIVE (NARROW)

  b. *Peter flattened the metal by hammering it again.*
  → *Peter hammered* the metal before.  
  ➔ REPETITIVE (NARROW)
RVCs in Mandarin

3.3 Narrow again

• A narrow repetitive reading is only compatible in adjoined structures (21), since in comple-
  mentation *again* necessarily scopes over the whole complex event (20).


(14) VoiceP
    again
      VoiceP
        Peter
        Voice
        v₁P
        vhammer+ν₁
        aP
        flat the metal

(15) VoiceP
    Peter
      Voice'
        vP
        PP
        again
          PP
            flatten the metal
          by PRO₁ hammering (it).
RVCs in Mandarin

3.3 Narrow *again*

- Like in English RSP, the repetitive modifier *you* ‘again’ cannot be interpreted to scope over the manner predicate only. (JR Yu p.c., J. Liu 2019; cf. Xu 2016)

(16) Context:
A few weeks ago, Lulu bought himself jacket. As the jacket was new, it was perfectly clean. After repairing his motorbike, his jacket got some oil on it. Therefore, Lulu washed his dirty jacket yesterday. Unfortunately, he didn’t use any detergent. Therefore, the jacket was still dirty after the washing. Today, Lulu bought a detergent and washed the jacket again. This time, he managed wash the jacket clean.

# Lulu you xi-ganjing-le nei-jian shangyi.
Lulu again wash-clean-ASP that-CL jacket
Intended: ‘Lulu cleaned her jacket by washing it again.’
Instead: ‘Lulu washed her jacket clean again.’

⇒ Mandarin RVCs are derived via complementation.
RVCs in Mandarin

### 3.4 Verbal secondary predication

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(17) \[\begin{align*}
\text{VoiceP} & \quad \text{Sanmoa} \quad \text{Voice'} \\
\text{Voice} & \quad \nu_1P \\
\nu_2P & \quad \nu_1' \\

\nu_1 & \quad \nu_1' \\
\nu_2 & \quad \nu_2P \\
\text{ResP} & \quad \text{vlie+Res} \\
\text{jingzi} & \end{align*}\]

RSVCs in Samoan

4.1 Overview

In Samoan (Oceanic) resultative serial verb constructions (RSVCs), the initial verb realizes the manner component while the non-initial causative verb realizes the result component.


(18) a. Sā tipi fa’a-pa’ū e Pita le la’au.
   PST cut CAUS-fall ERG Peter ART tree.ABS
   ‘Peter fell the tree by cutting it.’

   b. Sā solo fa’a-mamā e Malia le laulau.
   PST wipe CAUS-clean ERG Mary ART table
   ‘Mary cleaned the table by wiping it.’
Samoan RSVCs

4.2 Transitivity

- In Samoan RSVCs, the result component is realized by causative predicates, which are derived by the causative prefix fa’a-.

  \[
  \text{(19) } \text{Sā } \text{ solo } \# \text{ (fa’a)-mamā } e \text{ Malia le laulau.}
  \]
  \[
  \text{PST wipe CAUS-clean ERG Mary ART table.ABS}
  \]
  \[
  \text{‘Mary cleaned the table by wiping it.’}
  \]

- The causative/transitive nature of such verbs is indicated by the ungrammaticality of stative/anticausative constructions (20b) in the presence of the causative prefix fa’a-.

  \[
  \text{(20) a. Causative:}
  \]
  \[
  \text{Sā fa’a-mamā } e \text{ Malia le laulau.}
  \]
  \[
  \text{PST CAUS-clean ERG Mary ART table.ABS}
  \]
  \[
  \text{‘Mary cleaned the table.’}
  \]

  \[
  \text{b. Stative/anticausative:}
  \]
  \[
  \text{Sā (fa’a-)mamā le laulau.}
  \]
  \[
  \text{PST CAUS-clean ART table.ABS}
  \]
  \[
  \text{‘The table is/became clean.’}
  \]

→ The causative V2 can be the main predicate of the clause.
4.3 Narrow *again*

- Like in the English means construction (and in contrast to Mandarin RVCS), the repetitive modifier *toe* ‘again’ can be interpreted to scope over the manner predicate only.  

(cf. Hohaus 2016)

(21) Context:

Peter bought a new table from the shop. At home, he realized that the table had some marks on it. Before he returned the table to shop, he tried to clean it first. He took a cloth and wiped the table, but the table didn’t get any cleaner. Therefore, he got himself some cleansing agent and put it on the cloth. He wiped the table again and now it became clean.

*Sā toe solo fa’a-mamā e Malìa le laulau.*

PST again wipe CAUS-clean ERG Mary ART table.ABS

‘Mary cleaned the table by wiping it.’

➔ Samoan RSVCs are derived via adjunction.
## Samoan RSVCs

### 4.4 Verbal *means* construction

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<tr>
<td>Semantic composition</td>
<td>Modification</td>
</tr>
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</table>

(22) VoiceP

```
VoiceP
  Malia Voice'
  Voice
  v1P
  v2P
  v2'
  v3P
  vwipe+\(v_1\) table_i
  fa‘a-
  vclean+\(v_3\) table_i
```
Conclusion

5.1 Two types of RSVCs

- A comparison of the two types of RSVCs shows that RSVCs can neither be treated as a uniform syntactic and semantic phenomenon (Baker & Stewart 2001, Collins 1997, Larson 1991) nor be analyzed as a special type of resultatives (cf. equipollent-framed languages; Slobin 2004).

<table>
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<th>Samoan RSVCs</th>
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</tr>
<tr>
<td>predicate</td>
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<td></td>
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<tr>
<td>Syntactic</td>
<td>Complementation</td>
<td>Adjunction</td>
</tr>
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<td>composition</td>
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Conclusion

5.2 A categorial split

- Although differing in their lexical category, RSVCs exhibit the same split in the resultative domain as non-serializing languages with respect to the morphosyntactic and semantic composition of the manner and result predicates.

<table>
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<tr>
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<th>Mandarin RVC</th>
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Conclusion

5.3 Towards a typology of resultatives

- This indicates that non-serializing languages, such as English and Romance, and serializing languages, such as Mandarin and Samoan, do not vary fundamentally in their underlying syntactic and semantic composition.

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<td></td>
<td>Lao (Cole 2016)</td>
<td>Japanese (Tomioka 2007)</td>
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<tr>
<td></td>
<td>Édò (Stewart 2001)</td>
<td>Korean (Ko &amp; Sohn 2017)</td>
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<td></td>
<td>Ewe (Collins 1997)</td>
<td>Uyghur (Sugar 2019)</td>
</tr>
</tbody>
</table>

→ Talmy’s typology holds also in serializing languages!
Fa’afetai lava! Xiexie! Thank you!

Language consultants:
Luafata Simanu-Klutz, Ropeti Ale, Fa’afetai Lava; Jianrong Yu.

Feedback and discussion:
Artemis Alexiadou, Enoch Aboh, Margit Bowler, Joel Bradshaw, Berit Gehrke, Emily Hanink, Vera Hohaus, Itamar Kastner, Andrew Koontz-Garboden, Fabienne Martin, John Mayer, Despina Oikonomou, Florian Schäfer, Ryan Walter Smith, Giorgos Spathas, Tonjes Veenstra, Malte Zimmermann as well as the audiences at APLL12, AFLA26 and the linguistic colloquia at the universities of Hawai‘i, Leipzig & Potsdam.

Financial support:
German Academic Exchange Service (DAAD), AL 554/8-1, DFG Gottfried Wilhelm Leibniz Preis 2014 awarded to Artemis Alexiadou & ERC Consolidator Grant ERC-2017-COG 769192 awarded to Andrew Koontz-Garboden
References (I)


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References (IV)


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