Serial Verb Constructions in Hong Kong Sign Language

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Definition of SVCs and Topological Properties

- ‘A serial of verbs’ or ‘a serial verb construction’ has often been defined as ‘…a type of construction in which two or more verbs are strung together without an overt connective morpheme’ (Ndimele, 1996: 127)

General Properties:

a.) Consist of more than one word and are single predicates with no marker of coordination and subordination.

b.) Denote a single event rather than a serial of related actions.

c.) Be Mono-clausal.

d.) Denote single tense aspect and polarity value.

e.) Share structural and semantic argument(s), either subject or object, or both.
SVCs in Sign Languages

• Supalla (1990), Tang (2006), and Benedicto et al (2008) present a picture that simultaneous aspects of a referent event can be represented in sign languages by a series of verbs of motion.

• The existence and nature of this sequential structure suggest that sign languages may also have tendencies toward serialization, similar to some spoken languages.
Research Goals:

• To find out the types of SVCs in HKSL, if any.

• To find out how SVCs in HKSL are represented.

• To find out if SVCs in HKSL conform to the general properties of SVCs in spoken languages.

• To investigate how SVCs in HKSL are presented in terms of event structure.
Data Collection


2. Spontaneous narrations with seven wordless movie clips ‘Canary Row and Tweety Bird’

3. An elicitation task with 28 animation clips

4. 9 free monologues with 9 designated topics
   • Four native deaf signers of HKSL
   • Data are transcribed with the software Elan.
Results (1)

- The eight types of SVCs are identified with respect to the verb types occurred in the series and are classified according to the criterion of argument sharing:
  - **Subject Sharing**
    - Motion-directional SVCs
    - Resultative SVCs (Agent/Experiencer)
    - Manner SVCs
  - **Object Sharing**
    - Resultative SVCs (Theme)
  - **Subject and Object Sharing**
    - Take-SVCs (Instrumental)
    - Take-SVCs (Theme)
    - Give-SVCs
    - Transitive-SVCs
Results (2)

• The data show that these SVCs share the same properties as those in spoken languages do.

• The SVCs in HKSL DO NOT contain any marker of coordination and subordination.

• The mono-clausal nature of these constructions is empirically evidenced by:
  - the manual negation marker NOT
  - the perfective marker FINISH
  - the temporal adverbials such as YESTERDAY, TODAY
  - the Q-morpheme which scope over the verb series in the sentence.
Results (3)

• Due to the modality, sign languages allow us to show the argument sharing through handshape and shared spatial locus, which is different from the spoken languages (conventionally interpreted).
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'Lit. There was a dirty and sticky water pipe. Sylvester climbed up along the water pipe.' (T&S(C): 10)
Types of SVCs: Motion Directional SVCs (2)

- Characteristics:
  a.) The manner verb of motion and the path classifier predicate constitute an uninterrupted sequence, where no noun or pronoun can intervene between the two verbs.

  b.) It is the manner verb of motion that describes how the subject acts, while the path predicate only presents the directional specification.

  c.) The sharing of subject argument can be observed via the body classifier of the manner of motion verb, and the semantic classifier of the path classifier predicate which are both coreferential to the subject.
Types of SVCs: Resultative SVCs (Theme) (1)

• Characteristics
1.) The Resultative SVCs involve a complex event: a causing event and a resulting state. The caused event is associated with a transitive classifier predicate, whereas the resulting state is associated with an intransitive classifier predicate.

2.) The shared property of the theme argument is revealed in signing space in two specific ways.
Types of SVCs: Resultative SVCs (Theme) (2)

1.) BOY NOT-KNOW walk+CL_SEM: boy //
    IX-Paint^i PAINT^i
    be-located-at_a+CL_SASS: a bucket of paint //
    BOY NOT-KNOW walk+CL_SEM: boy //
    \{ kick_a+CL_SEM: boy
    \{ CL_SASS: a bucket of paint_a

                           Head tilt right
            topple_a+CL_SASS: a bucket of paint

'Lit. The boy was walking instinctively...There was a bucket of paint. The boy was walking instinctively...The boy kicked the bucket of paint (as a result) the bucket of paint toppled.' (A:K:R3:04:31)
Types of SVCs: Resultative SVCs (Theme) (3)

Being a causative/transitive predicate, the Theme argument and the agentive argument will together form the first classifier predicate, and the non-dominant hand representing the Theme argument is retained in signing space and will enter as the second classifier predicate denoting the resulting state, as in (1).
Types of SVCs: Take-SVCs (Instrumental) (1)

1.) BOY CARROT
   be-located+CL_SASS: carrot
   KNIFE \textbf{TAKE}_a

\begin{align*}
\text{head nod} \quad \begin{cases} 
\text{CUT}+++ \\
\text{CL\_SASS}: \text{carrot}
\end{cases}
\end{align*}

'Lit. The boy took the knife (and) cut the carrot.' (A:K:00:01-00:05)

2.) (YELLOW-BIRD) (BINOCULARS)
   take\textsubscript{a}+CL\_HANDLE: binoculars
   look+CL\_HANDLE: binoculars

'Lit. Tweetie took the binoculars and looked (Sylvester) with the binoculars.'
(T&S:C:0021:0023 (2))
Types of SVCs: Take-SVCs (Instrumental) (2)

- Characteristics

1.) The Take-SVCs must involve two transitive predicates. The first verb must always be the TAKE verb, which can be a spatial verb TAKE, or a classifier predicate TAKE, and the second verb has to be a transitive classifier predicate.

2.) In the case of the first verb as the spatial verb TAKE, the sharing property of subject argument involves the signer’s body which represents the subject in the spatial verb TAKE, and also the HANDLE classifier associated with the second classifier predicate which represents the agentive argument.
Types of SVCs: Take-SVCs (Instrumental) (3)

3.) In the case of a classifier predicate TAKE in the first verb form, the property of subject sharing can be observed from the same HANDLE classifier predicates associated with both the first and second verb forms, which both involves agentive argument.

4.) Object sharing (Instrument) can only be observed when the Take-SVCs involve two identical HANDLE classifier predicates.
Types of SVCs: Give-SVCs (1)

1.) SISTER EGG-CAKE BUY \_0^{GIVE}_3 MOTHER

'Lit. The sister bought a birthday cake (and) gave (it) to mother.’ (A:C:23:36)
Types of SVCs: Give-SVCs (2)

- Characteristics

1.) The Give-SVCs often renders an interpretation of the transfer of possession.

2.) The GIVE verb is always the second verb, and the first verb is always transitive. Both verbs are lexical verbs, instead of classifier predicates.

3.) Due to the lexical nature of the two verbs, the properties of subject and object sharing cannot be spatially established in signing space, thus they can only be conventionally interpreted.
Types of SVCs: Give-SVCs (3)

2.) *SISTER EGG-CAKE BUY 0GIVE 0 MOTHER
   ‘Lit. The sister bought a birthday cake (and) gave (it) to mother.’

3.) *SISTEREGG-CAKE BUY Give+CL_HANDLE:egg-cake MOTHER
   ‘Lit. The sister bought a birthday cake (and) gave (it) to mother.’
Are all SVCs in HKSL as Single Events?

• To recall, SVCs are often regarded as single, macro events consisting of (typically) two subevents which are connected by causation or logical consequence.

• Li (1992) and Stewart (1998) regards it as iconicity.

→ But do all SVCs constitute one single event?
Event Structure: SVCs in HKSL

• Motion-directional SVCs and Resultative-SVCs (Theme) may constitute one single event, while Take-SVCs (Instrumental) and Give-SVCs may constitute multiple events.

• The dichotomy can be proved by the syntactic test of adverbial placement, where the adverb:
  • Should scope over the verb series in the sentence but cannot scope over the second verb in motion-directional SVCs and Resultative-SVCs (Theme), but can scope either verb in Take-SVCs (Instrumental) and Give-SVCs
Types of SVCs: Motion Directional SVCs (1)

*IX- water-pipe  STINKY WATER-PIPE
be-located-at\textsubscript{a}+CL\_SASS: water\_pipe//

SYLVESTER

CLIMB \textbf{QUICKLY} head nod
be-up-alonga+CL\_SEM: black cat
CL\_SASS: water\_pipe\textsubscript{a} //

'Lit. There was a dirty and sticky water pipe. Sylvester climbed up along the water pipe.'
Types of SVCs: Resultative SVCs (Theme) – Adverb Test

1.) * BOY NOT-KNOW
    walk+CL_SEM: boy //
    IX-Paint IX PAINT
    be-located-at +CL_SASS: bucket_of_paint //
    BOY NOT-KNOW
    walk+CL_SEM: boy //
    \{ kick +CL_SEM: boy
    \{ CL_SASS: bucket_of_paint \}
    --------------------------- Head tilt right
    QUICKLY topple +CL_SASS: bucket_of_paint

    'Lit. The boy was walking instinctively...There was a bucket of paint. The boy was walking instinctively...The boy kicked the bucket of paint (as a result) the bucket of paint toppled.'
Types of SVCs: Take-SVCs (Instrumental) – Adverb Test

1.) BOY CARROT
   be-located+CL_SASS: carrot
   KNIFE TAKEₐ
   QUICKLY \{ head nod \}
   CUT+++++ CL_SASS: carrot

   'Lit. The boy took the knife (and) cut the carrot.'

2.) (YELLOW-BIRD) (BINOCULARS)
   takea+CL_HANDLE: binoculars QUICKLY
   look+CL_HANDLE: binoculars

   'Lit. Tweetie took the binoculars and looked (Sylvester) with the binoculars.'
Types of SVCs: Give-SVCs – Adverb Test

SISTER  EGG-CAKE  BUY  SECRETLY  \_GIVE_3

MOTHER
'Lit. The sister bought a birthday cake (and) gave (it) to mother.'
Travis’ Phrase Structure on Malagasy and Tagalog (1)

- Based on the data from Malagasy and Tagalog, Travis proposes a phrase structure that encodes event structure in syntax.

- The event structure can be reflected in syntax, where an event can be an activity, an achievement, or an accomplishment.

• For a structure that denotes an accomplishment event, where two clausal functional projections, Event Phrase (EP) and AspP. EP provides an explicit boundary of a single event. AspP delimits the event (denotes telicinity and boundedness, endpoint of a complex event).

• To denote an accomplishment, the process is realized by V1, and the result is realized by V2.
Implications on Travis’ Phrase Structure on Malagasy and Tagalog (1)

• Attempt to see how to apply Travis’ analysis on the SVC data in HKSL.

• We will look into Motion-Directional SVCs, Resultative SVCs (Theme), Take-SVCs (Instrumental) and Give-SVCs.
Types of SVCs in HKSL:

• In terms of argument sharing:
  • One argument sharing
    • Motion-directional SVCs:
      \[\text{Subj1 V1 (Subj2) V2}\]
    • Resultative SVCs (Theme):
      \[\text{Subj1 V1 Obj1/Subj2 V2}\]
  • Two argument Sharing
    • Take-SVCs (Instrumental):
      \[\text{Subj1 V1 Obj1 (Subj1/Subj2) (Obj1/IObj2) V2 Obj2}\]
    • Give-SVCs:
      \[\text{Subj1 V1 Obj1 (Subj1/Subj2) V2 Obj1/Obj2 IObj2}\]
Event Structure: Motion-directional SVCs,

\[
\text{EP} \\
\text{E} \quad \text{VP1} \\
\text{Agent} \quad \text{V1'} \\
\text{V1} \quad \text{AspP} \\
\text{CLIMB} \quad \text{Asp} \quad \text{VP2} \\
\text{V2} \\
\text{up\_along + CL\_SEM: black-cat}
\]
Event Structure: Resultative SVCs (Theme)

```
EP
   /\  
  E  VP1
     /\  
Agent V1'  
  /\    
BOY V1 AspP
     /\  
kick + CL_SEM: boy Spec Asp'
                 /\  
Asp VP2
          /\  
Theme V2'  
        /\  
BUCKET OF PAINT V2
              /\  
topple + CL_SASS: bucket of paint
```
How does Travis’ analysis account for other SVCs in HKSL?
Event Structure: Take-SVCs (Instrumental)

*E*P
  └ Spec → E'*
    └ EP1 → EP2
      └ E1 → VP1
          └ Agent → V1'
              └ BOY → V1
                  └ TAKEa → KNIFE
        └ EP2 → VP1''
          └ Agent → V1'''
              └ BOY → V1''
                  └ CUT → BREAD

Event Structure: Give-SVCs

*E*P

Spec  E*' 

EP1    EP2

E1     VP1  EP2     VP1''

Agent  V1'        Agent  V1''

| SISTER | V1 | Inst  | SISTER | V1" | Theme |

| BUY     | CAKE |       | 0GIVE3 | MOTHER |
Results (1)

Recall that Travis’ analysis:
- One argument Sharing:
  • **BUT** Two arguments are shared in Take-SVCs (Instrumental) and Give-SVCs
- A Complementation Structure:
  • **BUT** Take-SVCs (Instrumental) and Give-SVCs are adjunction structure → evidenced from headedness of verbs
- Status of V2: Intransitive verb denoting a result
  • **BUT** the second verb of Take-SVCs (Instrumental) and Give-SVCs is transitive verb denoting an achievement
Conclusion:

• Travis’ event structure can account for accomplishments in which a transitive V1 (denoting process) subcategorizes an intransitive V2 (denoting result)

• Require further investigation on other types of SVCs.
Selected References:
Selected References:
Thank You!