Theoretical Issues in Sign Language Research (TISLR) 10 30 September 2010 – 2 October 2010

Serial Verb Constructions in Hong Kong Sign Language

Prudence Lau Sin Yee

Department of Linguistics and Modern Languages

The Chinese University of Hong Kong



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

- 1. Spontaneous narrations with a wordless picture book 'The frog story' (Mayer 1969)
- 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).



Results (4)

	Types of SVCs	Form of 1 st Verb	Form of 2 nd Verb	Argument Sharing
1.	Motion-Directional SVCs	Manner of verbs of motion	Path Classifier Predicate	Underlying Subject
2.	Resultative-SVCs (Agent/Experiencer)	Transitive Classifier Predicate	Intransitive Classifier Predicate	Underlying Subject
3.	Manner-SVCs	Manner of Existence/Posture/Moti on	Intransitive Lexical Verb/Intransitive Classifier Predicate	Underlying Subject
4.	Resultative-SVCs (Theme)	Transitive Classifier Predicate	Intransitive Classifier Predicate	Underlying Direct Object
5.	Take-SVCs (Instrumental)	Take Verb	Transitive Classifier Predicate	Underlying Subject and Direct Object
6.	Take-SVCs (Theme)	Take Verb	Transitive Classifier Predicate	Underlying Subject and Direct Object
7.	Give-SVCs	Transitive Lexical Verb	Give Verb	Underlying Subject and Direct Object
8.	Transitive-SVCs	Transitive Classifier Predicate/Transitive Lexical Verb	Transitive Classifier Predicate/Transitive Lexical Verb	Underlying Subject and Direct Object

Types of SVCs: Motion Directional SVCs (1)

IX- water-pipe STINKY WATER-PIPE be-located-at_a+CL_SASS: water_pipe//

SYLVESTER

'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-Painti PAINTi
  be-located-at<sub>a</sub>+CL_SASS: a bucket of paint//
  BOY NOT-KNOW
  walk+CL_SEM: boy //
   kick<sub>a</sub>+CL_SEM: boy
     CL_SASS: a bucket of paint,
                       Head tilt right
   topplea+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)

BOY CARROT be-located+CL_SASS: carrot KNIFE TAKE_a

head nod

CUT++++

CL_SASS: carrot



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

2.) (YELLOW-BIRD) (BINOCULARS)

takea+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 ₀GIVE₃ 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 ₀GIVE₀ MOTHER

'Lit. The sister bought a birthday cake (and) gave (it) to mother.'

3.) *SISTEREGG-CAKE

Give+CL_HANDLE:egg-cake

'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_a+CL_SASS: water_pipe//

SYLVESTER

CLIMB

QUICKLY

head nod

```
be-up-alonga+CL_SEM: black cat
CL_SASS: water_pipea //
```

'Lit. There was a dirty and sticky water pipe. Sylvester climbed up along the water pipe.'

Types of SVCs: Resultative SVCs (Theme) – Adverb Test

```
NOT-KNOW
1.) * BOY
  walk+CL_SEM: boy//
  IX-Painti
                   PAINTi
  be-located-at<sub>a</sub>+CL_SASS: bucket_of_paint//
                   NOT-KNOW
  BOY
  walk+CL_SEM: boy //
   ∫ kick<sub>a</sub>+CL_SEM: boy
   CL SASS: bucket_of_painta
                               Head tilt right
```

QUICKLY topplea+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 TAKE_a

QUICKLY

CUT+++++

'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 OGIVE3

MOTHER

'Lit. The sister bought a birthday cake (and) gave (it) to mother.'

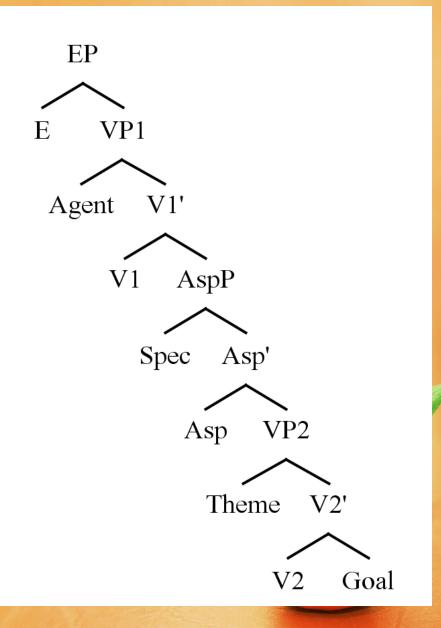


Travis' Phrase Structure on Malagasy and Tagalog (1)

- 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.

Travis (1991, 1994, 2000)'s Phrase Structure on Malagasy and Tagalog(1)

- 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 telicity and boundedness, endpoint of a complex event).
- To denote an accomplishment, the process is realized by V1, and the result is realized by V2.



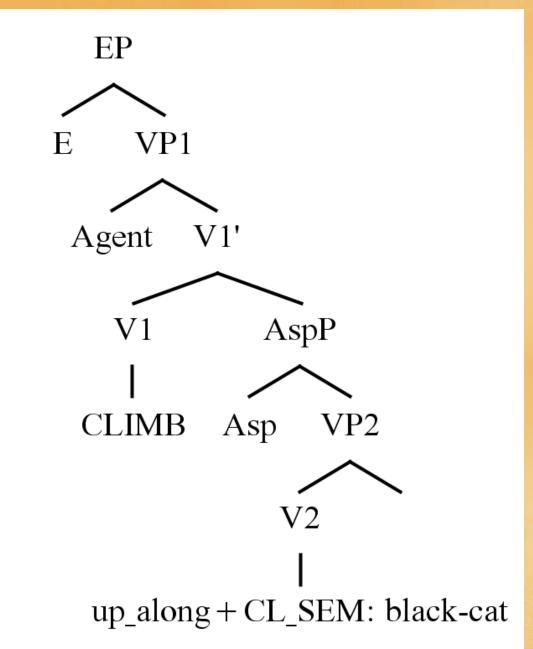
Implications on Travis' Phrase Structure on Malagasy and Tagalog (1)

- 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:

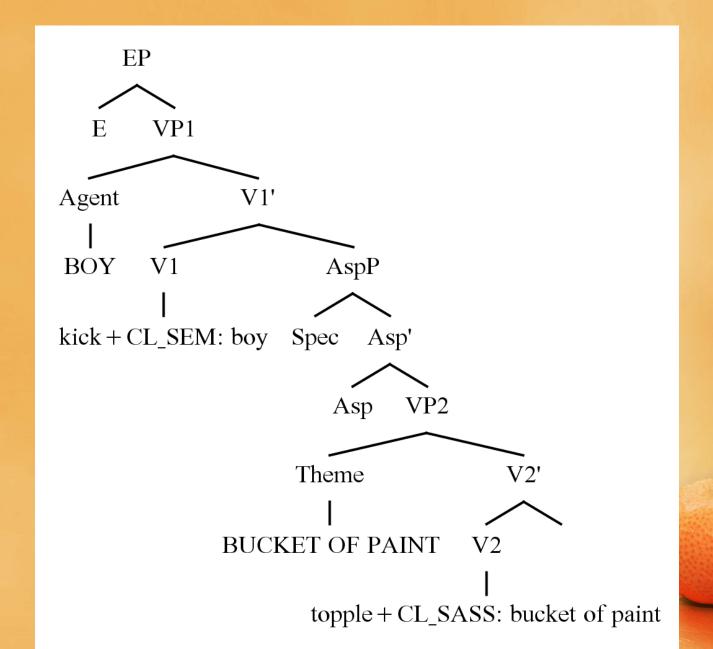
- In terms of argument sharing:
 - One argument sharing
 - Motion-directional SVCs: [Subj1 V1 (Subj2) V2]
 - Resultative SVCs (Theme):
 [Subj1 V1 Obj1/Subj2 V2]
 - Two argument Sharing
 - Take-SVCs (Instrumental):
 [Subj1 V1 Obj1 (Subj1/Subj2) (Obj1/IObj2) V2 Obj2]
 - Give-SVCs:
 [Subj1 V1 Obj1 (Subj1/Subj2) V2 Obj1/Obj2 IObj2]

Event Structure: Motion-directional SVCs,





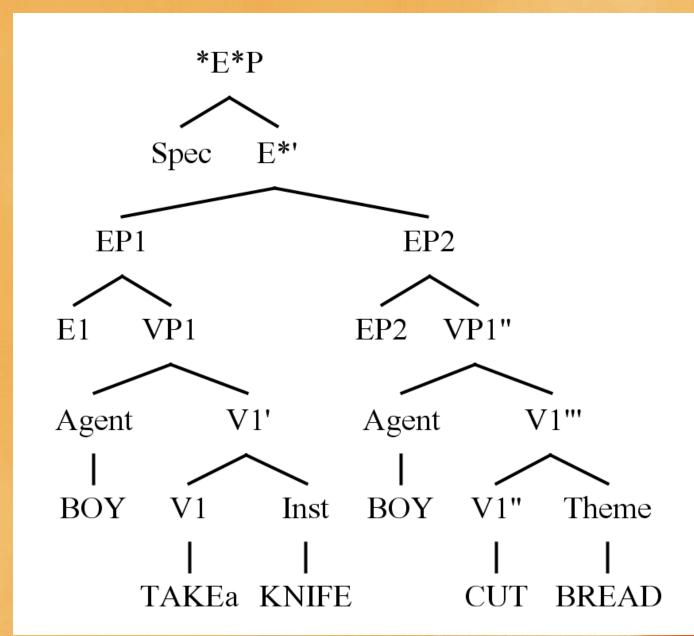
Event Structure: Resultative SVCs (Theme)



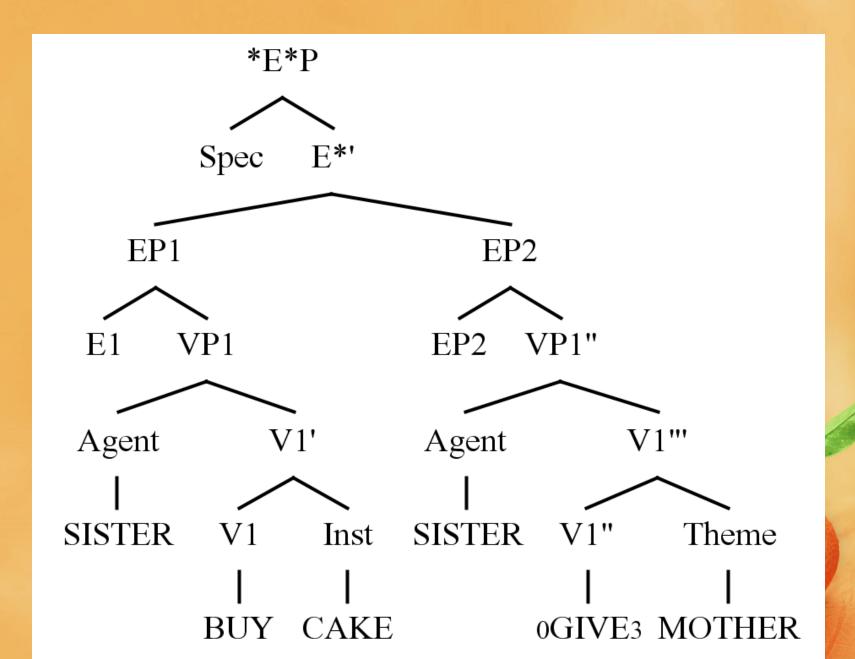
How does Travis' analysis account for other SVCs in HKSL?



Event Structure: Take-SVCs (Instrumental)



Event Structure: Give-SVCs



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.

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Thank You!

