# **C-7**

# A micro-parametric approach to the cross-linguistic variations in resultative constructions

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Many studies focus on the cross-linguistic variation of resultative constructions from a parametric view (Washio 1999). They investigate why resultatives are available in some languages, but not fully productive in others. Few studies focus on resultatives constructions from a micro-parametric approach which illustrates the differences in the possible range of the resultative constructions available across languages (Son & Svenonius 2008). I follow Son and Svenonius's (2008) analysis in claiming that the variation in resultatives is better explained by differences in the properties of individual lexical items and there exists a language-specific null morpheme or morphemes to lexicalize Res and Pred.

#### 1 Introduction

### Resultative constructions

Strong resultatives refer to resultatives in which the meaning of the verb and the meaning of the adjective are completely independent of each other. It is impossible to predict from the semantics of the verb what kind of state the patient comes to be in as a result of the action named by the verb (Washio 1997). <u>Transitive/intransitive distinction do not coincide with the strong/weak distinction</u>. In (1a), *the metal* is the subcategorized object of the verb *hammer*; in (1b), the *pavement* is the unsubcategorized object of the verb *run*. (1a) and (1b) both belong to strong resultatives.

- (1) a. John hammered the metal flat.
  - b. The joggers ran the pavement thin.

In weak resultatives, the adjective is not completely independent of the verb; rather, it is further specifying (or even modifying) the notion that is already contained in the verb (Washio 1997).

### (2) Mary dyed the dress pink.

Son and Svenonius (2008) revealed the differences in the possible range of the resultative constructions available across languages. In Japanese, resultatives are possible only when the verbs lexically specify a change of state. In Korean and English, resultatives are possible with verbs that do not lexically specify a change of state and verbs that lexically do.

- (3) Japanese (Washio 1997; Snyder 2001)
  - a. Taro-ga pan kiji-o usu-ku nobashita.

Taro-NOM bread dough-ACC thin-KU spread.PAST

'Taro spread the dough thin'

b. \*Taro-ga kinzoku-o usu-ku tataita.

Taro-NOM metal-ACC thin-KU pound.PAST

'Taro pounded the metal thin'

- (4) Korean (Son and Svenonius 2008)
  - a. Inho-ka kkangthong-ul napcakha-key twutulki-ess-ta.

Inho-NOM can-ACC flat-KEY pound-PAST-DC

'Inho pounded the can flat'

b. Yenghi-ka sikthak-ul kkaykkusha-key takk-ass-ta.

Yenghi-NOM table-ACC clean-KEY wipe-PAST - DC

'Yenghi wiped the table clean'

## > Analyze resultative constructions from a macro-parametric approach

Snyder (1995; 2001) argues that complex predicate constructions in English depend on a single, parametric property of the grammar, namely the compounding parameter that makes morphological/syntactic compounding possible in a given language. Snyder (2001) proposes a Compounding parameter which is stated as:

(5) Compounding Parameter (Snyder 2001): The grammar {disallows\*, allows} formation of endocentric compounds during the syntactic derivation [\*unmarked value].

There is a strong correlation between the availability of complex predicates and the availability of N-N compounding.

Beck and Snyder (2001) argue that languages that allow adjectival resultatives also allow directed motion with goal
 PP (or telic Path PP).

## > Analyze resultative constructions from a micro-parametric approach

Son (2007) and Son & Svenonius (2008) argued, unlike Snyder (2001), that there is no necessary correlation between directed motion (i.e., goal PP) constructions and the availability of resultative.

(6) Fragmentation of parameter

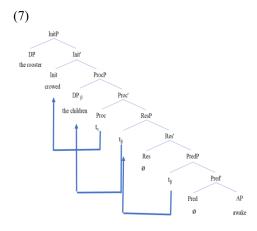
	No DMMC	DMMC Directed manner of motion constructions
No Resultatives	Spanish, Hindi	Hebrew, Indonesian, Javanese, Malayalam, Kannada
Resultatives	Japanese, Korean	English, German

When individual languages are investigated in detail, the variation in resultatives is not just a matter of whether a language allows N-N compounds or not (Snyder 2001). Following a micro-parametric trend (e.g., Borer 1984, 2005), Son and Svenonius (2008) argued that the variation in resultatives across languages is better explained in the specifications of individual lexical items.

## 2. The framework by Son & Svenonius (2008)

• Son & Svenonius (2008) locate cross-linguistic variations in the specifications of vocabulary items.

- Following Borer (2005a, b) and Ramchand (2008), Son & Svenonius (2008) assume that the semantic structure of the clause is provided by a fine-grained functional structure. Each node in the functional structure must be licensed by the insertion of an appropriate vocabulary item ('Exhaustive Lexicalization' in Fabregas 2007).
- A single vocabulary item or morpheme may 'span' more than one functional head is based on the 'nanosyntax' framework developed by Starke (2005). Nanosyntax is an approach to syntax where terminal nodes of syntactic parse trees may be reduced to units smaller than a morpheme. Morphemes and words are composed by several terminals. Morphemes have their own sub-morphemic structures and terminals represent sub-morphemic information. Morphemes are able to lexicalize multiple syntactic tree terminals.



Son & Svenonius's (2008) represent the notion of causation, affectedness, and state in Ramchand's (2008) semantic model and assume that an agentive activity verb can lexicalize both Init and Proc as shown in (7), and there exist a language-specific null morpheme or morphemes to lexicalize Res and Pred.

### 3. The Lexical entries that license Pred and Res in Chinese

The resultative meaning in Chinese is realized by a resultative V-V compound in which the two verbs are adjacent to each other. There is a causal relation between the event represented by the first verb of such a compound and the event/state represented by the second verb (Li 1990, Cheng and Huang 1994, Huang et al. 2010). The following sentences come from Cheng and Huang (1994).

(8) a. wo qi-lei-le liang-pi ma.

I ride-tired-asp two-cl horse

'I rode and make two horses tired.'

b. ta ku-shi-le shoupa.

he cry-wet-asp handkerchief

'He cried the handkerchief wet.'

Besides being able to be used as stative predicates, <u>adjectival items can also be used as dynamic predicates</u> (Sybesma 1997, Liu 2010, Zhang 2006). (9) come from Basciano (2011). (11a) and (12a) come from Sybesma (1997: 230).

(9) a. Hua hong le / mei hong (10) a.?? hua hong / \*mei hong le flower red PFV not red flower red not red le

'The flower got red/did not get red.'

b. Shui re le.

water hot PFV

'The water got hot.'

'The water got hot.'

'The water got hot.'

'The water got hot'.

The adjectival predicate hong 'red' can be used to denote the meaning get red; re 'hot' means got hot.

(11) a. ta neng gao.

he can tall

'He can become tall.'

b. ta neng gao (\*le).

(12) a. ta hui pang.

he can fat

'He can become fat.'

b. ta hui pang (\*le).

Moreover, Basciano argues that these items can be considered as roots endowed with [proc, Adj]/ [proc, res, Adj] features. In Chinese resultative compounds, the result is a lexical root able to express change of state and V<sub>2</sub> itself is able to lexicalize *res*.

However, as shown in (10), the adjective predicate by itself cannot be used as a dynamic predicate. They can be used as dynamic predicates only with the help of *le*. In order to express the dynamic event, *le* must co-occur with *hong* 'red', and *re* 'hot'. The reason *mei* in (9a) cannot co-occur with *le* is that *mei* 'has not' and *le* 'has become' are contradictory in meaning. Likewise, the reason that *le* cannot follow *tall* and *fat* in (11b) and (12b) is that *le* cannot co-occur with *neng/hui* 'can'. *Le* 'has become' are contradictory with *hui/neng* 'can' which suggests possibility. Therefore, I argue against Basciano's claim that *le* is not the cause of rendering a stative predicate into a dynamic one.

The perfective aspect '-le' indicates that a situation is viewed in its entirety or as a whole (Comrie, 1976). The perfective '-le' is characterized by three semantic features (Jian, 2019):

(13) A. The first type '-Le' views a situation as a single whole, or 'complete' and 'unanalysable'

Zhe ben xiaoshuo wo du-wan le.

'I finished reading this novel.'

B. The second type '-Le' indicates the actualization of a situation

Yeye qu sanbu le.

'Grandpa went to take a walk.'

C. The third type '-Le' entails a dynamic 'change'

Xia le ji tian yu, jintian tian qing le.

'After raining a few days, it became clear today.'

Le in (9) is a change of state marker as in (13c). It signals a change of state and the new state will continue for some time. Le of this type converts a state predicate into an achievement predicate. Le in (8) is also the same as (13c). It is le which enables the stative predicate to express the change of state meaning. Without the occurrence of le after the V-V compounds, the sentences become less natural than before.

(14) a. wo qi-lei-\*(le) liang-pi ma. (cf. (8a)) b. ta ku-shi-\*(le) shoupa. (cf. (8b))

Contrary to what Basciano claims, I propose that the second predicate *lei* 'tired' in (8a) and *shi* 'wet' in (8b) in Chinese resultatives cannot function as dynamic predicate on its own and that *le* lexicalizes the Pred head.

### 4. The null Res head in Chinese resultatives

(15) Ramchand (2008) [InitP Agenti Initv [ProcP Undergoerj Proc tv[ResP < Resulteej > Res( $\varnothing$ ) AP ]]](hammer) [InitP Agenti Initv [ProcP Undergoerj Proc tv [ResP < Resulteej > Resv AP ]]] (break)

Son & Svenonius [Init<sub>P</sub> Agent<sub>i</sub> Init<sub>v</sub> [Proc<sub>P</sub> Undergoer<sub>j</sub> Proc<sub>tv</sub> [Res<sub>P</sub><Resultee<sub>j</sub>> Res( $\varnothing$ ) [Pred<sub>P</sub><Resultee<sub>j</sub>> Pred( $\varnothing$ ) AP ]]]] (2008) (crow)

Basciano (2011) English strong resultatives [ $_{InitP}$  Agent<sub>i</sub> Init<sub>v</sub> [ $_{ProcP}$  Undergoer<sub>j</sub> Proc  $_{tv}$ [ $_{ResP}$  <Resultee<sub>j</sub> > Res( $\varnothing$ ) AP ]]]

Chinese strong resultatives [ $_{InitP}$  Agent<sub>i</sub> Init<sub>v</sub> [ $_{ProcP}$  <Undergoer<sub>i</sub> $\ge$  Proc  $_{tv}$ [ $_{ResP}$  Resultee<sub>j</sub> Res(AP) XP ]]]

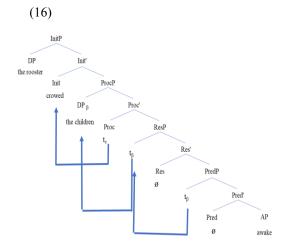
My analysis [ $_{InitP}$  Agent<sub>i</sub> Init<sub>v</sub> [ $_{ProcP}$  <Undergoer<sub>i</sub> $\ge$  Proc  $_{tv}$  [ $_{ResP}$  <Resultee<sub>j</sub> $\ge$  Res( $\varnothing$ ) [ $_{PredP}$  AP Pred(le) Resultee<sub>j</sub>]]]]]

Son & Svenonius/ den Dikken (2006)

There is no PredP in Ramchand's (2008) and Basciano's (2011) analyses of resultatives, whereas there is such a phrase head in Son & Svenonius's (2008) analysis of resultatives. There exists a null Res head in Ramchand (2008) analysis of English resultatives; however, the V<sub>2</sub> itself can occupy the Res head in Basciano's (2011) analysis of Chinese resultatives.

I adopt Son & Svenonius (2008)'s analysis and claim that there is a PredP below ResP.

There is a difference between Chinese and English in terms of where a resultee generates. I propose that in English, the resultee generates in [Spec, Pred] and the AP generates at the complement position of the Pred head, whereas in Chinese, AP generates at [Spec, Pred] and the subject of Pred (= a Theme argument) occurs at the complement of the Pred head, using assumptions made in den Dikken (2006: 13).



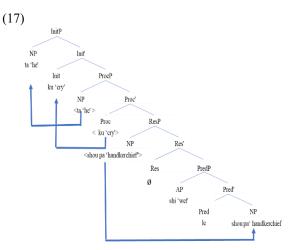


Table 1 The different patterns of lexicalization in the resultative constructions in various languages

	The	the pattern of lexicalization					
	languages	example	Init	Procs	Res	Pred	
	dealt with						
Ramchand	English	(1) action V	V	V	Ø		
(2008)		(2) accomplishment V	V	V	V		
Son &	Cross-	(1) Spanish	V	V	V	V	
Svenonius	linguistics	(2) Japanese	V	V	V	-ku	
(2008)		(3) English	V	V	Ø	Ø	
Basciano	English vs	(1) English	V	V	Ø		
(2011)	Chinese	(2) Chinese	$V_1$	$V_1$	$V_2$		
My analysis	English vs	(1) English	V	V	Ø	Ø	
	Chinese	(2) action verb in Chinese	$V_1$	$V_1$	Ø	le	
		(3) accomplishment verb in Chinese	$V_1$	$V_1$	Ø	le	

(18) Ta ting jian le shengyin.

(19) Ta xiang qi lai le yi jian shi.

He listen meet le noise

He think rise come le a cl thing

'He recognized the noise.'

'He recalled one thing.'

(20)  $[InitP He_i Init (listen_v)]_{ProcP} < He_i > Proc < listen_{tv} > [ResP < noise_j > Res(\emptyset)]_{PredP meet Pred(le) noise_i]]]]$ 

 $[InitPeriod He_i Init (think)] = Proce_{ProcPeriod He_iPeriod He$ 

In (18), the functional head Init and Proc are lexicalized by the same morpheme *listen*, and the specifier position of the Pred head is lexicalized by *meet*; whereas in (19) the Init head and the Proc head are lexicalized by the separate morphemes *think* and *rise*, and the specifier position of the Pred head is lexicalized by *come*.

## Conclusion

Resultative constructions have different forms of realization across languages. The cross-linguistic variation should be located in the specifications of vocabulary item. There are differences within a single language about what lexical entries can lexicalize Pred and Res. In Chinese resultatives, le converts a state predicate into an achievement predicate and lexicalizes the Pred head. The AP generates at the specifier position of the Pred head. Moreover, subject of Pred (= a Theme argument) occurs at the complement of the Pred head. In Chinese, as in English, there is a null lexical item  $\varnothing$  that lexicalizes the Res head, contra Basciano (2011).

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