

Microparameters of Cross-Linguistic Variation: Directed Motion and Resultatives

Minjeong Son and Peter Svenonius

CASTL, University of Tromsø

1. Introduction

It has been proposed that there is a parameter distinguishing languages like English, which have resultatives (e.g., *hammer the metal flat*) and directed motion readings with manner verbs (e.g., *float under the bridge*) from languages like Spanish, which have neither. The goal of this paper is twofold: First, we argue, in agreement with some previous work, that the parameter breaks down into several subcases as finer-grained distinctions of each construction are identified, and that the previous macro-parametric analyses of these two constructions cannot explain the right degree of variation.¹ Second, we provide an alternative analysis of directed manner of motion constructions (hereafter, DMMC) and resultative constructions cross-linguistically, which locates variation across languages in the specifications of vocabulary items, defending a micro-parametric approach to language variation.

1.1. The Typology of Directed Motion Expressions and the Parameter in Question

Talmy (1975, 1985, 2000) proposes a model of cross-linguistic variation in which an event of motion is analyzed into a set of semantic components such as Figure, Motion, Path, Ground, and Manner/Cause, and languages vary depending on how these semantic components are packaged into linguistic expressions.

The basic contrast is exemplified in (1) and (2). In the former, English is said to be “satellite-framed” with respect to paths of motion, because the path is expressed in a PP, a “satellite” to the predicate.

- (1) a. John ran to the store.
b. The bottle floated into the cave.

Spanish and Korean, on the other hand, are classified as “verb-framed” languages (along with Semitic and Polynesian languages), in which motion is often conflated with path in the verb (see Son 2006, 2007; Zubizarreta & Oh 2007 and references there) (LOC = locative, NOM = nominative, DC = declarative).

- (2) a. La botella entró a la cueva (flotando).
the bottle moved.in LOC the cave floating
'The bottle floated into the cave' (Lit. 'The bottle went into the cave floating') *Spanish*
- b. Mary-ka cip-ey (ttwi-e) tul-e-ka-(a)ss-ta.
Mary-NOM house-LOC run-LINKER in-LINKER-go-PAST-DC
'Mary ran into the house' (Lit. 'Mary went into the house running') *Korean*

Manner of motion verbs cannot by themselves license directed motion interpretations with goal PPs in these languages, as seen below.

- (3) a. Juan {??corrió/*anduvó/*gateó} a la tienda.
Juan ran / walked / crawled LOC the store
'John ran/walked/crawled to the store' *Spanish*
- b. *Mary-ka cip-ey {ttwi/kel}-ess-ta.
Mary-NOM house-LOC run/walk-PAST-DC
'Mary ran/walk to the house' *Korean*

¹Thanks to our informants, including Antonio Fábregas and Luisa Martí (Spanish), Ponnu Liz Malieckal, Mythili Menon, and Anila Varghese (Malayalam), and all the Javanese speakers recruited by Thomas J. Connors.

In Talmy's work, the distinction between path-framed (English-type) and verb-framed (Spanish-type) is often characterized as a tendency, not an absolute dichotomy between two different language groups. A number of researchers, however, have analyzed Talmy's typological distinction as a parameter. The following section briefly reviews one previous parametric analysis of DMMC and adjectival resultatives.

1.2. Parametric Analyses of the Typology of DMMC

One of the approaches to the typology of DMMC (in connection with resultatives) is rooted in the compounding parameter proposed by Snyder (1995, 2001).

Snyder discusses various kinds of complex predicate formations including resultatives (*beat the metal flat*), particle constructions (*lift the box up*), and double object constructions (*give a present to Mary*). He argues that these depend on a single, parametric property of the grammar, namely a compounding parameter that makes compounding possible in a given language. The compounding parameter is stated as:

- (4) Compounding Parameter (Snyder 2001:328): The grammar {disallows*, allows} formation of endocentric compounds during the syntactic derivation [*unmarked value].

Building on Snyder (1995, 2001), Beck & Snyder (2001) extend this correlation to DMMC. They propose a Principle R, which is dependent on (4), in that only a language with a positive (marked) setting for (4) can have a positive setting for Principle R. A positive setting for Principle R is necessary for a language to allow resultatives and DMMC. A language with the unmarked setting fails to have either, and a language with the marked setting has both.

As far as Germanic and Romance languages are concerned, the cross-linguistic correlation between resultatives and DMMC appears to hold nicely. For example, English (as well as German) allows both DMMC (e.g., (1)) and adjectival resultatives, as in (5). Spanish, which does not allow DMMC (e.g., (3a)), also disallows adjectival resultatives, as in (6), as observed by Beck and Snyder.

- (5) a. John drank the teapot dry.
 b. John pounded the meat flat. *English*
- (6) a. *John golpeó la carne plana.
John pounded the meat flat
 'John pounded the meat flat'
- b. *John frotó la mesa limpia.
John wiped the table clean
 'John wiped the table clean' *Spanish*

In the following section, however, we demonstrate that as more languages are investigated in greater detail, counterexamples emerge in each direction; languages with no resultatives may allow DMMC, and vice versa.

2. The Cross-Linguistic Correlation Revisited

Close examination of individual languages reveals that there is no necessary correlation between the availability of resultatives and that of DMMC in a given language; detailed investigation of directed motion expressions in Indonesian/Javanese, Hebrew and Malayalam shows that manner verbs in these languages are readily combinable with goal PPs.² However, they strictly disallow adjectival resultative phrases (§2.1). Korean and Japanese do not allow DMMC of the English-type. Nonetheless, these two languages exhibit adjectival resultative constructions (§2.2), as also noted in Snyder (1995, 2001) and Beck & Snyder (2001).

²For reasons of space we present only a small sample of the evidence we have amassed. See Son (2007) for additional data and observations.

2.1. Languages with DMMC but no Resultatives

2.1.1. Indonesian and Javanese

Snyder (2001) reports, based on data from Javanese, that Austronesian languages are unmarked for the compounding parameter and Principle R.

The following examples (from our fieldwork) confirm the fact that Javanese disallows adjectival resultatives, given that result-denoting adjectives must be preceded by the clausal adverbial *sampek* ‘until.’

- (7) a. Mary ngelap mejo *(sampek) resik.
Mary wipe table until clean
 ‘Mary wiped the table until it became clean’
 b. Mary nyacah daging *(sampek) ajur.
Mary beat meat until flat
 ‘Mary beat the meat until it became flat’ *Javanese*

However, our own investigation of both Indonesian and Javanese reveals that both languages allow DMMC, contrary to Snyder (2001), as illustrated below with Javanese examples.

- (8) Javanese (Semarang dialect): manner V + LocP is ambiguous between Loc and Dir
 a. Tika {mlaku/mlayu/mbrangkang} ning ngisor jembatan.
Tika walk/run/crawl LOC bottom bridge
 ‘Tika walked/ran/crawled under the bridge’ (Loc and Dir)
 b. Mary {mlaku/mlayu/mbrangkang} ning ngarep omah.
Mary walk/run/crawl LOC front house
 ‘Mary walked/ran/crawled {in/to the} front of the house’ (Loc and Dir)

As seen in (8), the combination of manner verbs and goal PPs is easily available in Javanese. Sentences with manner verbs occurring with locative PPs are ambiguous between locational and directed motion readings. This is reminiscent of the ambiguity we often find in English examples such as those given below.

- (9) a. Mary ran under the bridge. (Loc and Dir)
 b. John walked behind the tree. (Loc and Dir)

Thus, Indonesian and Javanese show patterns more similar to satellite-framed languages than to verb-framed languages concerning directed motion constructions. Nonetheless, they disallow adjective resultatives, contrary to the prediction made by Snyder’s parametric analysis.

2.1.2. Malayalam

Malayalam is another language that presents a counterexample to the DMMC-resultative correlation. As seen below, it allows manner verbs to combine with goal PPs for directed motion interpretations (GEN = genitive, DIR = directional).

- (10) a. Mary office-il-ekkə {naṭann-u/oṭṭ-i}.
Mary office-LOC-DIR walk-PAST/run-PAST
 ‘Mary walked/ran to the office’
 b. avaḷ paala.tt-iṅṅe aṭiy-il-ekkə naṭann-u.
she bridge-GEN under-LOC-DIR walk-PAST
 ‘She walked under the bridge (and stopped there)’ (Dir: telic path) *Malayalam*

However, adjectival resultatives are not found. Instead, result states can be encoded in main predicates with manner being expressed as an adjunct, as in (11b) (ADV = adverbial).

- (11) a. *Hari table vritti tuda-ccu.
Hari table clean wipe-PAST
 ‘Hari wiped the table clean’
 b. Hari table tuda-ccə vritti aak-i.
Hari table wipe-ADV clean make-PAST
 ‘Hari made the table clean by wiping it’

Malayalam

2.2. Languages with Resultatives but no DMMC: Korean and Japanese

As shown in (2b) and (3b) above, Korean is a verb-framed language in Talmy’s sense, along with Spanish; it does not allow DMMC (contrary to what has been reported in Beck & Snyder 2001).

Japanese is also classified as a verb-framed language as the combination of manner verbs and goal PPs is ungrammatical.

- (12) *Taro-ga ie-(no naka)-ni hashit-ta.
Taro-NOM house-GEN inside-LOC run-PAST
 ‘Taro ran (in)to the house’

Japanese

However, both Korean and Japanese allow adjectival resultatives, as in (13) and (14), as also reported in Snyder (2001) and Beck & Snyder (2001)³ (ACC = accusative, KEY = Korean predicative affix *-key*, analyzed in §4 below; NI = Japanese predicative affix *-ni*, analyzed in §4 below).

- (13) Korean
 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 sikhak-ul kkaykkusha-key takk-ass-ta.
Yenghi-NOM table-ACC clean-KEY wipe-PAST DC
 ‘Yenghi wiped the table clean’
- (14) Japanese (Washio 1997)
 a. John-ga teeburu-o kirei-ni huita.
John-NOM table-ACC clean-NI wipe.PAST
 ‘John wiped the table clean’
 b. John-ga kinzoku-o taira-ni nobasita.
John-NOM metal-ACC flat-NI flatten.PAST
 ‘John flattened the metal’

We conclude that there is no necessary correlation between the availability of adjectival resultatives and that of DMMC in a given language, as counterexamples in each direction are found.

This is summarized in the table in (15) below.

- (15) Fragmentation of the Parameter

	No DMMC	DMMC
No Resultatives	Spanish, Hindi	Hebrew, Indonesian, Javanese, Malayalam, Kannada
Resultatives	Japanese, Korean	English, German

Detailed investigation of each construction suggests that the four-way distinction summarized above is still too coarse-grained, and further fragmentation of the parameter is needed as different types of resultatives and DMMC are identified. We turn to the discussion of finer-grained categorization of each construction in the next section.

³See also Kim (1993), Kim & Maling (1997), Wechsler & Noh (2001), Kim (2007), and den Dikken & Shim (2007) for discussion of Korean resultatives.

3. Further Fragmentation of the Parameter

3.1. Different Kinds of Resultatives

Detailed examination of resultative constructions in individual languages reveals that variation in resultatives is not just a matter of whether a language allows resultatives or not. Rather, there are at least three different situations. In Japanese, as reported by Washio (1997), resultatives are possible when the verb lexically specifies a change of state in the object, as with ‘spread,’ but not when it does not, as with ‘pound’ (KU = Japanese predicative affix *-ku*, analyzed in §4 below).

(16) Japanese (Washio 1997; Snyder 2001; Takamine 2007) (see also (14))

- 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’

Spanish, in contrast, does not form resultatives in either case.

(17) Spanish (see also (6a))

- *Juan extendió la masa fina.
Juan spread the dough thin
 ‘Juan spread the dough thin’

Korean and English have an additional possibility that Japanese does not have, in being able to form resultatives with verbs that do not lexically specify a change of state.

- (18) a. Inho-ka kumsok-ul yalp-key twutulki-ess-ta.
Inho-NOM metal-ACC thin-KEY pound-PAST-DC
 ‘Inho pounded the metal thin’
- b. John pounded the metal flat.

Korean

3.2. Different Kinds of DMMC

The same kind of fragmentation is observed in the DMMC. In this case, Korean is among the most restrictive languages, rejecting DMMC even with verbs like ‘run’ and ‘walk’ (see examples in (2b) and (3b)). Malayalam represents a less strict situation, in which canonical verbs of motion like those meaning ‘run’ and ‘walk’ do allow DMMC (see examples in (10)). However, in Malayalam, an activity verb which does not imply any change of location, such as ‘dance’ or ‘limp’ does not appear in DMMC, as indicated in (19) (INSTR = instrumental).

- (19) kutṭi paalatt-iṅṅe aṭiy-il-ekkaḥ nriṭṭam vaccu-koṅṅa *(poy-i).
child bridge-GEN under-LOC-DIR dance keep-INSTR go-PAST
 ‘The child went under the bridge dancing’

Malayalam

In this respect, Malayalam is more restrictive than English, in which any verb which refers to some kind of bodily movement can be used in DMMC.

- (20) English
- a. John danced into the kitchen.
- b. Mary limped off the stage.

We have seen thus far that detailed examination of each construction across languages suggests that the DMMC-resultative correlation breaks down and the parameter in question is fragmented into several subcases. Thus, the previous parameter analyses of the typology of DMMC and resultatives cannot explain the right degree of variation attested across languages. In the following section, we provide an alternative analysis, which locates cross-linguistic variation in the specifications of vocabulary items,

especially ‘functional’ ones such as prepositions and affixes. We argue that this micro-parametric approach provides the right degree of flexibility to capture the patterns we have observed in the previous sections.

4. Nanosyntax and Exhaustive Lexicalization

Our analysis of the cross-linguistic patterns of DMMC and resultatives is outlined here. Following such works as Borer (2005a,b) and Ramchand (2008), we assume that the semantic structure of the clause is provided by a fine-grained functional structure, which we take to be universal. Each node in the functional structure must be licensed by the insertion of an appropriate vocabulary item (this requirement is called ‘Exhaustive Lexicalization’ in Fábregas 2007). Importantly, a single vocabulary item or morpheme may ‘span’ more than one functional head (the term ‘spanning’ is from Williams 2003; our assumptions concerning spanning as an explanatory device are based in part on the ‘nanosyntax’ framework developed by Michal Starke in lectures in Tromsø, in particular in 2005–6).

4.1. The analysis of resultatives

A semantic representation for a typical resultative construction includes a notion of causation, of affectedness, and of a state which is brought about. These elements are present, for example, in Jackendoff’s (1990) LCS (lexical-conceptual structure) displayed in (21).

- (21) Jackendoff’s (1990, 233) LCS for *The rooster crowed the children awake*
- $$\left[\begin{array}{l} \text{CAUSE } ([\alpha], [\text{INCH } [\text{BE } ([\beta], [\text{AT } [\text{AWAKE}]])]]) \\ \text{AFF}^- ([\text{ROOSTER}]^\alpha, [\text{CHILDREN}]^\beta) \\ [\text{BY } \left[\begin{array}{l} \text{CROW } ([\gamma]) \\ \text{AFF}^- ([\alpha]^\gamma, [\beta]) \end{array} \right]] \end{array} \right]$$

Following in essence Ramchand (2008), we represent these meaning components directly in a syntactic tree like the one in (22) (showing only the verb phrase; tense and other material would be merged above this structure).

- (22)
-
- ```

graph TD
 InitP --> DP1[DP]
 InitP --> Init_prime[Init']
 DP1 --- the_rooster["the rooster"]
 Init_prime --> Init[Init]
 Init_prime --> ProcP
 Init --- crowed["crowed"]
 ProcP --> DP_beta[DP_beta]
 ProcP --> Proc_prime[Proc']
 DP_beta --- the_children["the children"]
 Proc_prime --> Proc[Proc]
 Proc_prime --> ResP
 Proc --- tv["tv"]
 ResP --> Res[Res]
 ResP --> Res_prime[Res']
 Res --- t_beta["t_beta"]
 Res_prime --> Res_prime_2[Res']
 Res_prime_2 --> Res_prime_2_2[Res']
 Res_prime_2 --> PredP
 Res_prime_2 --- t_beta_2["t_beta"]
 PredP --> Pred_prime[Pred']
 PredP --- t_beta_3["t_beta"]
 Pred_prime --> Pred[Pred]
 Pred_prime --> AP[AP]
 AP --- awake["awake"]

```

Here, *Init[iation]* corresponds to Jackendoff’s CAUSE, the *Proc[ess]* component contributes roughly the meaning handled by Jackendoff’s AFF[ECT]<sup>-</sup>, and *Res[ult]* and *Pred[ication]* here together cover the same ground as Jackendoff’s INCH[OATIVE], BE, and AT. See Ramchand (2008) for the details of the semantic model. Movement allows a single argument to occupy more than one position (Ramchand & Svenonius 2002), represented in (22) by traces, indicated in Jackendoff’s representation through coindexation.

By representing the meaning directly in the syntactic structure, we are able to be fully explicit about the mapping principles we assume. We assume that an agentive activity verb like *crow* can lexicalize both Init and Proc, hence we represent it as moving from the one position to the other (cf. Larson 1988; Hale & Keyser 2002; Ramchand 2008). We furthermore posit a language-specific null morpheme or morphemes to lexicalize Res and Pred. Such null morphemes are not defaults and must be acquired on the basis of positive evidence.

We have observed that there are at least three different situations for resultatives, namely: [i] the most restrictive (e.g. Spanish, Hindi, Indonesian), in which manner verbs never combine directly with adjectives to form resultative constructions, [ii] a less restrictive type, in which resultative adjectives are possible only with verbs which already carry some implications of change of meaning (such as Japanese), and [iii], the least restrictive type, in which resultative constructions can be formed even with verbs that do not by themselves imply any change of state (e.g. Korean, English, German).

However, even in the most restrictive languages, there is usually a light verb or functional verb which allows resultative adjectives, as illustrated for Spanish in (23) (glossing *a* with a  $\kappa$  for ‘kase’).

- (23) a. La lluvia hizo peligroso el camino.  
           *the rain made dangerous the road*  
           ‘The rain made the road dangerous’  
       b. Juan volvió loca a María.  
           *Juan turned crazy  $\kappa$  Maria*  
           ‘Juan drove Maria crazy’

*Spanish*

We assume that the basic semantic representation for resultatives given in (22) underlies the Spanish examples in (23) above. The parts of the structure labeled Res and Pred are licensed by a small set of verbs such as *hacer* ‘make’ and *volver* ‘turn.’

Thus, the three kinds of languages we have just outlined can be characterized in terms of what lexical entries there are in the language to license Pred and Res. The difference between a restrictive language like Spanish and a less restrictive one like Japanese is that in Japanese, there are morphemes available to license Pred (these appear as affixes *-ni* and *-ku* on the adjectives in (14) and (16) above). Therefore any verb that licenses Res can be used in Japanese to create a resultative construction — we assume that verbs which specify a result state carry a feature reflecting this fact, i.e. Res, crosslinguistically (including verbs like *clean*, *clear*; *break*, as opposed to non-resultative verbs like *pound*, *hammer*, or *crow*, cf. Levin & Rappaport Hovav 1991, 2007 inter alia).

In Korean, there is a morpheme which can lexicalize both Res and Pred (*-key* in (13) and (18a)). This allows Korean to form resultative constructions involving verbs which do not independently lexicalize Res. English, we assume, has a null counterpart to Korean *-key*.

Thus, we capture the observed variation by positing two functional heads between the process component (always lexicalized by a verb) and the state component (lexicalized by the adjective). The patterns we have discussed are summarized in (24).

|      |                 |                           |                                      |           |
|------|-----------------|---------------------------|--------------------------------------|-----------|
| (24) |                 | PROC   RES   PRED         | A                                    |           |
|      | <b>Spanish</b>  | <i>hacer</i><br>‘make’    | <i>peligroso</i><br>‘dangerous’      | cf. (23)  |
|      |                 | PROC   RES   PRED         | A                                    |           |
|      | <b>Japanese</b> | <i>nobasu</i><br>‘spread’ | <i>-ku</i><br><i>usu</i><br>‘thin’   | cf. (16)  |
|      |                 | PROC   RES   PRED         | A                                    |           |
|      | <b>Korean</b>   | <i>twutul</i><br>‘pound’  | <i>-key</i><br><i>yalp</i><br>‘thin’ | cf. (18a) |
|      |                 | PROC   RES   PRED         | A                                    |           |
|      | <b>English</b>  | <i>pound</i>              | $\emptyset$<br><i>flat</i>           | cf. (18b) |

#### 4.2. Directed motion constructions

As we have observed, a similar situation holds for directed manner of motion. As with resultatives, there are at least three general situations. The most restrictive is observed in Japanese and Korean, in which directed motion is generally expressed using a verb with a meaning like ‘go’ or ‘come,’ and cannot be expressed in a clause with a manner of motion verb as the main verb. Less restrictive are languages like Malayalam, in which a small set of manner of motion verbs allow path complements to have a directed manner of motion reading. Finally, there are the least restrictive languages, including English, in which a wide range of manner verbs can be used in directed motion constructions.

Just as with resultatives, we posit two functional heads between the Process (always lexicalized by the verb) and the location (headed by a category which we call Place, often lexicalized by an adposition; cf. Svenonius to appear and references there). These two heads are *Dir[ectional]* and *Path*. *Dir* dominates *Path* which dominates *Place*, much as *Res* dominates *Pred* which dominates *A* in (22). We assume furthermore that it is typical cross-linguistically for a range of canonical motion verbs to lexicalize *Dir*; these verbs might include such concepts as ‘run,’ ‘walk,’ ‘fly,’ and so on (cf. Romanova 2006 on Russian). If a language has a morpheme to license *Path*, then all such motion verbs will appear in directed motion constructions. This is the situation in Malayalam. If a language has no such morpheme, then only verbs which specifically license *Path* will appear in manner of motion constructions. These will be verbs which are thought of as lexically selecting a path phrase, especially ‘go’ and ‘come.’ This is the situation in Korean. The third possibility is that a language has a way of licensing the *Dir* and *Path* heads without a verb specified for that purpose. In English, for example, there is a collection of overt *Path* heads, including *to*, and (we posit) a null *Dir* head. The result is that English can express directed motion even without specifically motional verbs, as in *limp into the kitchen*. We can summarize the situation as in (25).

|      |                  |                     |        |           |               |                    |               |          |
|------|------------------|---------------------|--------|-----------|---------------|--------------------|---------------|----------|
| (25) |                  | PROC                | DIR    | PATH      | PLACE         | DP                 |               |          |
|      | <b>Korean</b>    | ⏟<br><i>ka</i>      |        |           | <i>-ey</i>    | <i>cip</i>         | cf. (2b)      |          |
|      |                  |                     | ‘go’   |           | LOC           | ‘house’            |               |          |
|      |                  | PROC                | DIR    | PATH      | PLACE         | DP                 |               |          |
|      | <b>Malayalam</b> | ⏟<br><i>naṭann-</i> |        |           | <i>-ekkə</i>  | <i>-il</i>         | <i>office</i> | cf. (10) |
|      |                  |                     | ‘walk’ | ‘to’      | LOC           | ‘office’           |               |          |
|      |                  | PROC                | DIR    | PATH      | PLACE         | DP                 |               |          |
|      | <b>English</b>   | <i>dance</i>        | ∅      | <i>to</i> | <i>behind</i> | <i>the curtain</i> | cf. (20)      |          |

### 5. Conclusion

We have argued against the idea that there is a single, language-wide parameter governing the distribution of both adjectival resultatives and directed manner of motion constructions. We have shown that there are languages with resultatives but which cannot add directional PPs to manner of motion verbs (as in Korean), as well as languages with directed manner of motion which do not allow adjectival resultatives (as in Indonesian). We have furthermore argued that both directed motion and resultatives fall into smaller subclasses. Finally, we outlined a solution, which builds on a general theory of parametric variation that it is confined to the lexical content of lexical items.

The solution proposed here is relevant to a greater state of affairs, we think. Quite generally, language-wide parameters that have been proposed over the last three decades have, upon closer examination, turned out not to neatly partition the world’s languages into two sets (e.g. VO and OV, ergative and accusative, configurational and non-configurational, head-marking and dependent-marking, and so on). Instead, each parameter, under closer examination, turns out to fragment into smaller parts. Borer (1984) proposed that lexical variation be limited to the specifications of lexical items. However, lexical items vary quite dramatically, it seems, and there are thousands of them. The question that arises is, what are the limits on variation? We have developed an analysis of one example of cross-linguistic variation which follows that Borerian line of thinking, but at the same time, due to a universal base of underlying syntactico-semantic categories, may still provide an explanatory limit on the bounds of variation.

## References

- Beck, Sigrid & William Snyder (2001). Complex predicates and goal PP's: Evidence for a semantic parameter. Do, Anna H.-J., Laura Domínguez & Aimee Johansen (eds.), *Proceedings of the 25th Annual Boston University Conference on Language Development*, Cascadilla Press, Somerville, MA, vol. 1, pp. 114–122.
- Borer, Hagit (1984). *Parametric Syntax*. Foris, Dordrecht.
- Borer, Hagit (2005a). *In Name Only (Structuring Sense, vol. I)*. Oxford University Press, Oxford.
- Borer, Hagit (2005b). *The Normal Course of Events (Structuring Sense, vol. II)*. Oxford University Press, Oxford.
- den Dikken, Marcel & Ji Young Shim (2007). The tense of resultatives: The case of Korean. Ms. CUNY; presented at NELS 38 and JK 17.
- Fábregas, Antonio (2007). An exhaustive lexicalization account of directional complements. Bašić, Monika, Marina Pantcheva, Minjeong Son & Peter Svenonius (eds.), *Tromsø Working Papers on Language and Linguistics: Nordlyd 34.2*, Special issue on Space, Motion, and Result, University of Tromsø, Tromsø, pp. 165–199. Available at <http://www.ub.uit.no/baser/nordlyd/>.
- Hale, Ken & Samuel Jay Keyser (2002). *Prolegomenon to a Theory of Argument Structure*. No. 39 in Linguistic Inquiry Monographs, MIT Press, Cambridge, MA.
- Jackendoff, Ray (1990). *Semantic Structures*. No. 18 in Current Studies in Linguistics, MIT Press, Cambridge, MA.
- Kim, Jong-Bok (1993). Syntax and semantics of Korean resultative constructions. Kuno, Susumu, Ik-Hwan Lee, John Whitman, Joan Maling, Young-Se Kang & Young-Joo Kim (eds.), *Harvard Studies in Korean Linguistics V*, Dept. of Linguistics, Harvard University, Cambridge, MA, pp. 471–482.
- Kim, Soowon & Joan Maling (1997). A cross-linguistic perspective on resultative formation. Blight, Ralph & Michelle Moosally (eds.), *Texas Linguistic Forum 38: The Syntax and Semantics of Predication*, University of Texas Department of Linguistics, Austin, Texas, pp. 189–204.
- Kim, Young-Taek (2007). A contrastive study of resultative constructions in Korean and Japanese: From the perspective of historical and cognitive linguistics. McGloin, Naomi Hanaoka & Junko Mori (eds.), *Japanese/Korean Linguistics 15*, CSLI, Stanford, pp. 381–392.
- Larson, Richard K. (1988). On the double object construction. *Linguistic Inquiry* 19:3, pp. 335–391.
- Levin, Beth & Malka Rappaport Hovav (1991). Wiping the slate clean: A lexical semantic exploration. *Cognition: International Journal of Cognitive Science* 41:1-3, pp. 123–51.
- Levin, Beth & Malka Rappaport Hovav (2007). Reflections on the complementarity of manner and result. Ms. Stanford University and the Hebrew University of Jerusalem.
- Ramchand, Gillian (2008). *Verb Meaning and the Lexicon*. Cambridge University Press, Cambridge.
- Ramchand, Gillian & Peter Svenonius (2002). The lexical syntax and lexical semantics of the verb-particle construction. Mikkelsen, Line & Christopher Potts (eds.), *Proceedings of WCCFL 21*, Cascadilla Press, Somerville, MA, pp. 387–400.
- Romanova, Eugenia (2006). *Constructing Perfectivity in Russian*. Ph.D. thesis, University of Tromsø, Tromsø. Available at <http://hdl.handle.net/10037/904>.
- Snyder, William (1995). *Language Acquisition and Language Variation: The Role of Morphology*. Ph.D. thesis, MIT.
- Snyder, William (2001). On the nature of syntactic variation: Evidence from complex predicates and complex word-formation. *Language* 77, pp. 324–342.
- Son, Minjeong (2006). Directed motion and non-predicative Path P in Korean. Svenonius, Peter (ed.), *Nordlyd, Tromsø Working Papers in Language & Linguistics: 33.2, Special Issue on Adpositions*, University of Tromsø, Tromsø, pp. 176–199. Available at <http://www.ub.uit.no/baser/nordlyd/>.
- Son, Minjeong (2007). Directionality and resultativity: The cross-linguistic correlation revisited. Bašić, Monika, Marina Pantcheva, Minjeong Son & Peter Svenonius (eds.), *Tromsø Working Papers on Language and Linguistics: Nordlyd 34.2*, Special issue on Space, Motion, and Result, University of Tromsø, Tromsø, pp. 126–164. CASTL, Tromsø. Available at <http://www.ub.uit.no/baser/nordlyd/>.
- Svenonius, Peter (to appear). Spatial prepositions in English. Cinque, Guglielmo & Luigi Rizzi (eds.), *Cartography of Syntactic Structures, vol. 6*, Oxford University Press, Oxford.
- Takamine, Kaori (2007). Resultative predicates in Japanese. Bašić, Monika, Marina Pantcheva, Minjeong Son & Peter Svenonius (eds.), *Tromsø Working Papers on Language and Linguistics: Nordlyd 34.2*, University of Tromsø, Tromsø, pp. 102–125. CASTL, Tromsø. Available at <http://www.ub.uit.no/baser/nordlyd/>.
- Talmy, Leonard (1975). Semantics and syntax of motion. Kimball, John P. (ed.), *Syntax and Semantics*, Academic Press, New York, vol. 4 of *Syntax and Semantics*, pp. 181–238.
- Talmy, Leonard (1985). Lexicalization patterns: Semantic structure in lexical forms. Shopen, Timothy (ed.), *Language Typology and Syntactic Description, III: Grammatical Categories and the Lexicon*, Cambridge University Press, Cambridge, pp. 57–149.
- Talmy, Leonard (2000). *Toward a Cognitive Semantics*. MIT Press, Cambridge, MA.
- Washio, Ryuichi (1997). Resultatives, compositionality and language variation. *Journal of East Asian Linguistics* 6, pp. 1–49.
- Wechsler, Stephen & Bokyoung Noh (2001). On resultative predicates and clauses: Parallels between Korean and English. *Language Sciences* 23, pp. 391–423.
- Williams, Edwin (2003). *Representation Theory*. MIT Press, Cambridge, MA.
- Zubizarreta, Maria Luisa & Eunjeong Oh (2007). *On the Syntactic Composition of Manner and Motion*. Linguistic Inquiry Monographs, MIT Press, Cambridge, MA.

# Proceedings of the 27th West Coast Conference on Formal Linguistics

edited by Natasha Abner  
and Jason Bishop

Cascadilla Proceedings Project Somerville, MA 2008

## Copyright information

Proceedings of the 27th West Coast Conference on Formal Linguistics  
© 2008 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-428-7 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper.  
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

## Ordering information

Orders for the library binding edition are handled by Cascadilla Press.  
To place an order, go to [www.lingref.com](http://www.lingref.com) or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA  
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: [sales@cascadilla.com](mailto:sales@cascadilla.com)

## Web access and citation information

This entire proceedings can also be viewed on the web at [www.lingref.com](http://www.lingref.com). Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Son, Minjeong and Peter Svenonius. 2008. Microparameters of Cross-Linguistic Variation: Directed Motion and Resultatives. In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, ed. Natasha Abner and Jason Bishop, 388-396. Somerville, MA: Cascadilla Proceedings Project.

or:

Son, Minjeong and Peter Svenonius. 2008. Microparameters of Cross-Linguistic Variation: Directed Motion and Resultatives. In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, ed. Natasha Abner and Jason Bishop, 388-396. Somerville, MA: Cascadilla Proceedings Project. [www.lingref.com](http://www.lingref.com), document #1854.