

The Tense of Resultatives — The Case of Korean

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1 Introduction¹

1.1 *The syntax of secondary predication*

The syntax of secondary predication has been a hotly debated issue throughout the history of generative syntax. Chomsky (1957) started things off by postulating an analysis for sentences like *Jim considers Susana smart* and *Jim looked the number up* in which [*consider smart*] and [*look up*] are constituents in D-structure that under certain circumstances remain intact (as in *Jim looked up the number*) but which most of the time are broken up via rightward movement of the nonverbal portion. This proposal (cf. (1a)), in the guise of a complex-verb analysis wherein the verb and the secondary predicate form a complex V⁰ (as in (1a')), continues at least through Neeleman (1994), for whom all epistemic and resultative secondary predication constructions involve a complex predicate structure underlyingly. Johnson (1991) buys into the complex-verb analysis for verb-particle constructions; but other secondary predicates are taken to project a small clause in the complement of the verb. The small-clause analysis, represented by Stowell (1981, 1983), Hoekstra (1984, 1988) and a significant amount of work in their wake, comes in a number of forms in the literature. On one proposal (due to Stowell 1981, 1983), a small clause is a projection of the lexical head of the predicate, with the subject of the small clause originating inside the projection of the predicate head (cf. (1b)). 'Larsonian' analyses (Larson 1988, Bowers 1993, Hale & Keyser 1993), while not normally grouped together with Stowell's proposal, do in a general sense instantiate the small-clause approach: like Stowell, they represent the secondary predicate and its subject as forming a constituent; they differ from Stowell in insisting that the head of the 'small clause' (or 'inner VP') always be a *verb*, with this verb mediating the predication relationship between its predicative complement and the latter's subject in SpecVP (cf. (1c)). A variation on this theme (represented most radically by Den Dikken 2006) is the proposal in (1d), which shares with the 'Larsonian' analysis the idea that the relationship between a secondary predicate and its subject is mediated by a head but denies that this mediating head is a lexical category: instead, the syntactic relationship of predication is established by a *functional* 'relator' ('R' in (1d)). What all three approaches in (1b–d) share is the central insight that the secondary predicate and its subject form a *constituent* of some sort — an insight denied by the complex-verb approaches adopting (1a), and also by 'flat', ternary-branching analyses of the type in (1e) (see Williams 1980, 1983, Carrier & Randall 1992). Carrier & Randall (1992) explicitly push (1e) for all resultative secondary predication constructions, and consider the possibility of carrying their ternary-branching analysis over to *consider*-type secondary predication constructions, concluding that nothing would preclude such an extension. Similarly, Williams (1980, 1983) assigns flat, ternary-branching structures to all secondary predication constructions. But Williams (1994) presents a rather more complex picture — one that effectively ends up embracing, alongside the ternary-branching Predication proposal of his earlier work, the complex-verb analysis for some cases (in particular, resultatives with unmodified predicates in verb-adjacent position, as in *the wiping clean of the table*), a 'true small clause structure' (Williams 1994:104) for resultatives whose secondary predicate is modified (as in *Jim wiped the table very clean*), and some sort of (unspecified) 'clausal complement structure' (p. 103) for epistemic secondary predication constructions like *Jim considers Susana smart*. Finally, Déchaine (1993) and Barbiers (1995) represent two different instantiations of (1f), which takes the secondary predicate to be an adjunct to the projection combining V and DP.

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- (1) a. [_{V'} [_{V'} V Pred] DP] (going back to Harris, Chomsky 1957, 1965, pre X' theory)
 a'. [_{V'} [_{V^o} V Pred] DP] (DiSciullo & Williams 1987, Williams 1994, Neeleman 1994)
 b. [_{V'} V [_{XP} DP [_{X'} Pred]]] (Stowell 1981, 1983 etc.; Williams 1994)
 c. [_{V'} [_e] [_{VP} DP [_{V'} V Pred]]] (Larson 1988, Bowers 1993, Hale & Keyser 1993)
 d. [_{V'} V [_{RP} DP [R Pred]]] (Den Dikken 2006)
 e. [_{V'} V DP_i Pred_i] (Williams 1980, 1983, 1994; Carrier & Randall 1992)
 f. [_{V'} (Pred) [_{V'} V DP] (Pred)] (Déchaine 1993, Barbiers 1995)
 f'. [_{V'} ([_{RP} NP=*ec*_i [R Pred]]) [_{V'} V DP_i] ([_{RP} NP=*ec*_i [R Pred]])]

In this paper, we will not be concerned with analyses of the type in (1a,a') or ternary-branching structures *à la* (1e), neither of which is compatible with the central hypothesis, argued for in detail in Den Dikken (2006), that a predicate should form a constituent with its subject in order for a predication relationship between the two to be establishable.² Of the three incarnations of the small-clause hypothesis, (1b) is incompatible with Den Dikken's (2006) argument to the effect that predication relationships are systematically mediated by a head: in (1b) there is no head between the predicate and its subject; in (1c) and (1d) there is. Den Dikken's (2006) arguments against 'Larsonian' approaches *à la* (1c), which will not be reproduced here, lead us to assume (1d) as the representation of a small clause. The structures in (1f) can be reconciled with the hypothesis that all predication relationships involve constituency of predicate and subject and mediation by a head if the secondary predicate in (1f) is introduced by a relator head and, at some point in the derivation, has a local subject in the specifier position of that relator head. For Barbiers (1995), this latter condition is met at S-structure, via movement of DP into the specifier position of the predicate (or, in line with current assumptions, the specifier position of the relator head introducing the predicate. Barbiers's analysis is both conceptually and technically a deviation from standard minimalist practice — it presupposes a major conceptual shift in what motivates movement, and necessitates a complication of the definition of c-command that departs from the minimalist norm. Though we do not wish to thereby close the door on pursuing a Barbiers-style analysis, we will put forth an alternative way to meet the structural criteria for predication laid down in Den Dikken (2006) given an analysis of the type in (1f): base-generation of a null subject inside the adjoined constituent, coindexed with the verb's object, as in (1f').

With (1f') thus fleshed out, and with the spectrum of analyses of secondary predication now reduced to (1d) and (1f'), it becomes apparent that secondary predication constructions can in principle be represented in terms of either *complementation* (as in (1d)) or *adjunction* (as in (1f')). This conclusion is, of course, by no means new or earth-shattering: the well-known distinction between *resultative* and *depictive* secondary predication, for instance, is commonly represented in terms of this structural dichotomy, with depictives occupying an adjunction position to the projection of the verb and resultatives sitting in the verb's complement position. For resultatives, support for the view that they are inside the minimal V' in English-type languages can be derived from the fact that resultatives are impossible to strand under VP-topicalization, VP-ellipsis or *do so* replacement, and relatively easy to extract from islands, as shown in (2). With resultatives thus comfortably inside the minimal V', the fact that depictives (even object depictives) must be further removed from the verb (as shown in (3) for English (VO) and (4) for Dutch (OV)) readily translates into the hypothesis that all depictives are structurally higher than the minimal V', which makes them excellent candidates for an analysis along the lines of (1f').³

2 Carrier & Randall's (1992) two arguments in favor of their ternary-branching analysis, based on selection, are at best as strong as other selection-based arguments (which are generally weak by themselves); their four arguments against small-clause approaches are all misguided, for reasons discussed at length in Den Dikken & Hoekstra (1994), to which we refer the interested reader.

3 On (3), see Den Dikken (1987), where the mirror-image case of Dutch is also discussed in detail. Perhaps surprisingly, depictives are not strandable under topicalization of a projection of the verb in English (cf. subject-depictive *eat the meat <nude> though Jim did <*nude>*, and object-depictive *eat the meat <raw> though Jim did <*raw>*; Déchaine 1993 and references cited

- (2) a. Jim hammered the metal flat
 b. [hammer the metal <flat>], Jim did <*flat>
 c. ?how flat do you wonder whether Jim hammered the metal?
- (3) a. you can [[iron those pants smoother_{resultative}] wet_{depictive}]
 b. you can [[mow the grass shorter_{resultative}] dry_{depictive}]
- (4) a. je kunt die broek_i [nat_{depictive} [t_i gladder_{resultative} strijken]] (Dutch)
 you can those pants wet smoother iron
 b. je kunt het gras_i [droog_{depictive} [t_i korter_{resultative} maaien]]
 you can the grass dry shorter mow

1.2 The syntax of resultatives — Two types of languages

For resultatives, complementation analyses have always constituted the overwhelming majority for languages of the Indo-European type.⁴ This is not surprising: not only is there evidence of the type in (2)–(4) that in English-type languages, resultatives are systematically base-generated within the minimal V', there is also cogent evidence for this conclusion in light of the fact that resultatives, in these languages, are consistently predicated of the 'object', never of the external argument of the verb. This is a generalization that is sometimes referred to as 'Simpson's Law', after Simpson (1983a), who first established its correctness for languages such as English.⁵ Thus, (2a) means that the metal got flat as a result of Jim's hammering; though it may very well be true that Jim got tired as a result of hammering the metal, one cannot express this proposition as *Jim hammered the metal tired* in English: to the extent that this sentence supports a resultative interpretation at all,⁶ it can only be a statement about metal fatigue resulting from Jim's hammering.

Interestingly, Simpson (1983b) herself notes that the generalization that resultatives can only be predicated of the 'object', not of the verb's external argument, in fact does not hold for all languages: it does not hold, for instance, of Warlpiri, whose resultatives Simpson dedicates a significant amount of discussion to.

there). We do not consider this to reflect something profound about the locus of depictives in Universal Grammar, however: as Den Dikken (1987) points out, in a language as closely related to English as Dutch, stranding depictive secondary predicates *is* possible (while stranding resultatives remains impossible).

4 Barbiers (1995) is an exception. Déchaine (1993), while applying her particular version of (1f) to Indo-European languages as well, presents non-Indo-European facts as a major motive for adopting her particular perspective on secondary predication.

5 There are examples (see e.g. Rappaport Hovav & Levin 2001, Goldberg & Jackendoff 2004) which on the surface appear to challenge 'Simpson's Law' for English — thus, see (ia–d). We submit that upon closer scrutiny, none of these actually counter-exemplify 'Simpson's Law'. For (ia), it is dubious that *the star* is represented as the 'direct object' (or subject of the resultative small clause), in light of the auxiliary-selection facts of Dutch: Dutch (ia') shows that this seemingly transitive construction delivers *zijn* 'be' as the auxiliary of the perfect, a property otherwise shared only by unaccusative verbs. It is likely that *the star* in (ia) is syntactically projected as a non-argument; the same is plausible for *Highway 5* in (ib) (cf. *drive along Highway 5*; see also Goldberg & Jackendoff's 2004:554 'by way of' rendition of the interpretation of sentences like (ib)). In both cases, the verb is arguably unaccusative, with the surface subject serving as the deep subject of the resultative secondary predicate — if so, (ia,b) observe 'Simpson's Law'. (ic) is probably best analyzed as involving a complex verb *dance mazurkas* (note that passivization is impossible, and that *Jim danced the mazurkas across the room* resists a resultative reading). Finally, it seems to us that (id) has been wrongly classified as an exception to 'Simpson's Law': it is readily compatible with a 'Simpson's Law' abiding predication relation between *to its source* and *the leak*, with world knowledge supplying the information that Jim's successful tracking also leads *him* to the source of the leak.

- (i) a. the wise men followed the star out of Bethlehem
 a'. de wijze mannen zijn de ster gevolgd vanuit Betlehem
 the wise men are the star followed of-out Bethlehem
 b. Jim drove Highway 5 from San Diego to San Francisco
 c. Jim danced mazurkas across the room
 d. Jim tracked the leak to its source

6 Of course it readily supports a depictive interpretation, paraphrasable as 'Jim hammered the metal while he was tired'.

- (5) a. puluku-rlu kapu-lu marna nga-rni kuntukuntu-karda⁷ (Warlpiri)
 bullocks-ERG FUT-3PL grass(ABS) eat-NPST fat-TRSL
 ‘the bullocks will eat themselves fat on the grass’
 b. karli ka jarnti-rni mata-karda
 boomerang(ABS) PRES trim-NPST tired-TRSL
 ‘he is making the boomerang and gets tired’

Simpson presents an analysis for Warlpiri resultatives that represents them as adjuncts to the projection of the verb. Structurally, therefore, resultatives in Warlpiri are essentially on a par with depictives, for which we know from languages such as English as well that they are readily predicable of internal and external arguments alike. We will not have the opportunity here to review Simpson’s analysis of Warlpiri resultatives in any detail. But assuming its overall correctness, we are led to the conclusion that the question of whether resultative small clauses are merged as complements or adjuncts is answered differently in different languages: English plainly does not allow the merger of resultatives as adjuncts, hence does not allow predication relationships between resultatives and external arguments of verbs; Warlpiri, on the other hand, does allow these things.

1.3 *The goals and structure of this paper*

In this paper, we will bring a detailed comparison of resultatives in English and Korean to bear on the question of how resultative small clauses are merged. We will show that Korean presents a variety of evidence supporting the conclusion that there are languages in which resultatives are merged as adjuncts, and, more microscopically, that subject-controlled resultatives are merged in a higher structural position than object-controlled resultatives. Toward the end of the discussion, we will address the typological question of what makes languages differ when it comes to the way they structurally represent resultatives — as complements or as adjuncts. We will show that tense plays a central role in this: Korean (and probably Warlpiri as well) provides its resultative secondary predicates with a local T-node that licenses them as adjuncts; English, by contrast, does not provide a local T licensing the resultative, hence must merge resultatives in the complement of the verb to enable inclusion in the selecting verb’s T-chain (Guéron & Hoekstra 1995).

2 Resultatives in English-type languages

A body of arguments advanced by Hoekstra (1988) and others has established that English resultatives of the type in (6a–c) involve a small-clause complementation structure of the type in (1d), repeated below as (7).

- (6) a. Jim cried his throat hoarse
 b. Jim ate his belly full/his family out of house and home
 c. Jim painted the floor white
 (7) [_V V [_{RP} DP [R Pred]]]

This structure directly encodes the predication relationship between the resultative secondary predicate and the postverbal noun phrase, and in addition explains a number of key facts about English-type resultative constructions.

7 We would like to point out that the fact that (5a,b) disobey ‘Simpson’s Law’ has nothing to do with the fact that Warlpiri marks its resultatives with translative case (TRSL): in other languages which mark their resultatives with translative case (such as Finnish and Hungarian), ‘Simpson’s Law’ *is* in effect, so there is no correlation between the use of translative case and the lifting of ‘Simpson’s Law’. We thank Alec Marantz for raising this point. (Note also that the English rendition of (5a), which does observe ‘Simpson’s Law’, is at best an approximation of the meaning of (5a): what (5a) literally says is ‘the bullocks ate the grass fat’.

One of these is (a) the fact that English-type resultatives are subject to ‘Simpson’s Law’ — that is, (6c) says that the floor, not Jim, ended up white as a result of the painting event. A second important fact about English-type resultatives directly accounted for by (7) is (b) the fact that the postverbal noun phrase is demonstrably not the internal argument of the verb — thus, in (6b), although *eat* is transitive, Jim’s belly or family is obviously not what is being eaten; and though the most salient reading of (6c) would have it that Jim’s paint brush is targeting the floor directly, there is also a reading for (6b) (more easily obtained in languages like Dutch) on which the floor gets all white by accident, for instance as a result of Jim’s clumsily painting the ceiling and dripping white paint all over the floor (see esp. Hoekstra 1988). And thirdly, there is (c) the fact that selectional restrictions normally imposed by a verb on its direct object are suspended in resultatives. This is particularly clear from the Dutch example in (6d) (discussed by Hoekstra 1988):

- (6) d. Jim sloeg het kopje [#](stuk) (Dutch)
 Jim hit the cup broken
 ‘Jim hit the cup to pieces’

The Dutch verb *slaan* ‘hit’ (past tense *sloeg*) only selects animate direct objects (like English *slug*), so (6d) is awkward without *stuk* ‘broken’ unless the cup is thought of as a sentient entity. But (6d) is perfectly fine with *stuk* included, which follows from the analysis in (7): once *stuk* is present, the verb’s complement is no longer the DP *het kopje* ‘the cup’ but instead the small clause [*het kopje stuk*] ‘the cup broken’; since *het kopje* ‘the cup’ is no longer the direct object of the verb *sloeg* in the resultative construction, no selectional restrictions imposed by the verb on its object–DP could apply to *het kopje* here. These kinds of considerations amply support the small-clause complementation analysis in (7) for English-type resultative constructions.

3 Resultatives in Korean

Korean has counterparts to English (6a) and (6b) — but only with *nominative* case on ‘throat/belly’: (8a,b). In (8b) an accusative object of the verb *mek* ‘eat’ (*pap-ul*) can freely be added. This confirms that the nominative subject of the secondary predicate is not the verb’s internal argument. In (8c,c’), the Korean renditions of English (6c) *John painted the floor white*, *patak* ‘the floor’ is either accusative or nominative — but importantly, the two versions are not semantically equivalent (*pace* Hong 2005): (8c) can only mean that Jim’s paint brush was directly targeting the floor; to express a reading in which the floor accidentally gets covered with white paint as a result of Jim’s painting, say, the ceiling, Korean resorts to (8c’), with nominative case.

- (8) a. Jim-i mok-i swi-key⁸ wul-ess-ta (Korean)
 Jim-NOM throat-NOM become.hoarse-KEY cry-PAST-DECL
 a’. *Jim-i mok-ul swi-key wul-ess-ta
 Jim-NOM throat-ACC become.hoarse-KEY cry-PAST-DECL
 b. Jim-i (pap-ul) pay-ka theci-key mek-ess-ta
 Jim-NOM rice-ACC belly-NOM explode-KEY eat-PAST-DECL
 b’. *Jim-i pay-lul theci-key mek-ess-ta
 Jim-NOM belly-ACC explode-KEY eat-PAST-DECL
 c. Jim-i patak-ul hayah-key chilha-ess-ta
 Jim-NOM floor-ACC white-KEY paint-PAST-DECL
 c’. Jim-i patak-i hayah-key chilha-ess-ta
 Jim-NOM floor-NOM white-KEY paint-PAST-DECL

8 For the most part, we will be glossing over the obligatory suffix *-key*. But we will return to it toward the end of section 8.

The particular distribution of case and interpretation seen in (8c,c') suggests that *patak-ul* 'the floor-ACC' in (8c) is the thematic object of the verb. Apparently, unlike in English-type languages, a verb in Korean cannot select a resultative small-clausal complement with an accusative ECM-subject.⁹ Such a ban on resultative SC-complementation will correctly rule out a reading for (8c) in which the floor is not itself the entity to which Jim's painting activity was directed.

The unavailability of small-clause complementation in resultatives in Korean will also rule out a Korean rendition of English (6a) in which *mok* 'his throat' is accusative-marked: accusative *mok* in (8a') can neither serve as the internal argument of the verb (because the verb is unergative) nor as the ECM-subject of the verb's small-clause complement (since the verb cannot select a small clause in Korean resultatives).

The ban on SC-complementation in Korean resultative constructions also accounts for the fact that Korean has no direct rendition of Dutch (6d), as seen in (8d).

- (8) d. #Jim-i khep-ul kkay-ci-key ttayli-ess-ta
 Jim-NOM cup-ACC break-INCH-KEY hit-PAST-DECL

Korean *ttayli* 'hit' desires an animate object, like Dutch *slaan* 'hit'. But unlike Dutch (6d), where *stuk* 'broken' lifts this selectional restriction, Korean (8d) remains infelicitous with *kkay* included. This follows straightforwardly if a SC-complementation analysis is unavailable for Korean (8d): accusative *khep* 'the cup' in (8d) is then necessarily construed as the internal argument of the verb, which makes (8d) inevitably flout the selectional requirements imposed by the verb on its object, *regardless* of the presence of the secondary predicate.

9 Whether Korean has ECM (or 'Subject to Object Raising (SOR)') at all is a question that appears debatable. Note, for instance, that Korean has no counterpart to English ECM-constructions like *Jim proved the theorem false*: (i) can only mean that Jim proved the theorem wrongly/in the wrong way.

- (i) Jim-i ilon-ul thulli-key cungmyengha-ess-ta
 Jim-NOM theorem-ACC wrong-KEY prove-PAST-DECL
 'Jim proved the theorem wrongly/in the wrong way / *wrong'

Yoon (2007) addresses the syntax of apparent equivalents of English ECM infinitives under verbs like *consider* — see (ii). One thing to note about such Korean examples is that they involve an embedded *finite* clause (cf. esp. (iib)). The availability of nominative Case on the embedded subject is thus not unexpected. The fact that the subject of the embedded predication can also show up in the accusative is less straightforward. One possible analysis would be in terms of prolepsis — the Korean counterpart to English sentences like *I think of Jim, that he_i's smart*. What would go along with such an analysis is the fact that idiom chunks serving as the subject of the embedded predication are not eligible for accusative Case (cf. (iii) and English **I think of headway, that it, should be made* or **I think of the shit, that it, will hit the fan* vs. *I consider headway to have to be made* and *I expect the shit to hit the fan*). Yoon argues that this is compatible with an SOR analysis — in particular, one that restricts SOR to so-called 'major subjects', which idiom chunks cannot be. But it seems to us that the jury is still out on the question of whether (ii) with accusative should receive an analysis in terms of SOR or, instead, should be analyzed in terms of prolepsis (which is clearly a logical option). In section 6.4, below, we will pick up on one specific argument provided by Yoon in favor of an SOR account of (ii) with accusative: the argument based on 'case stacking'. We will show that on this point, at least, (ii) and resultative constructions diverge.

- (ii) a. Jim-un tolkolay-ka/lul yengliha-ta-ko sayngkakha-n-ta
 Jim-TOP dolphin-NOM/ACC intelligent-DECL-COMP think-PRES-DECL
 'Jim thinks dolphins to be intelligent'
 b. Jim-un Susana-ka/lul yeppu-ess-ta-ko sayngkakha-n-ta
 Jim-TOP Susana-NOM/ACC pretty-PAST-DECL-COMP think-PRES-DECL
 'Jim thinks Susana was pretty'
 (iii) Jim-un cakun kochwu-ka/#lul mayp-ta-ko sayngkakha-n-ta
 Jim-TOP small pepper-NOM/ACC spicy-DECL-COMP think-PRES-DECL
 'Jim considers size/height not to be a measure of toughness' (idiom)

4 Questions and answers

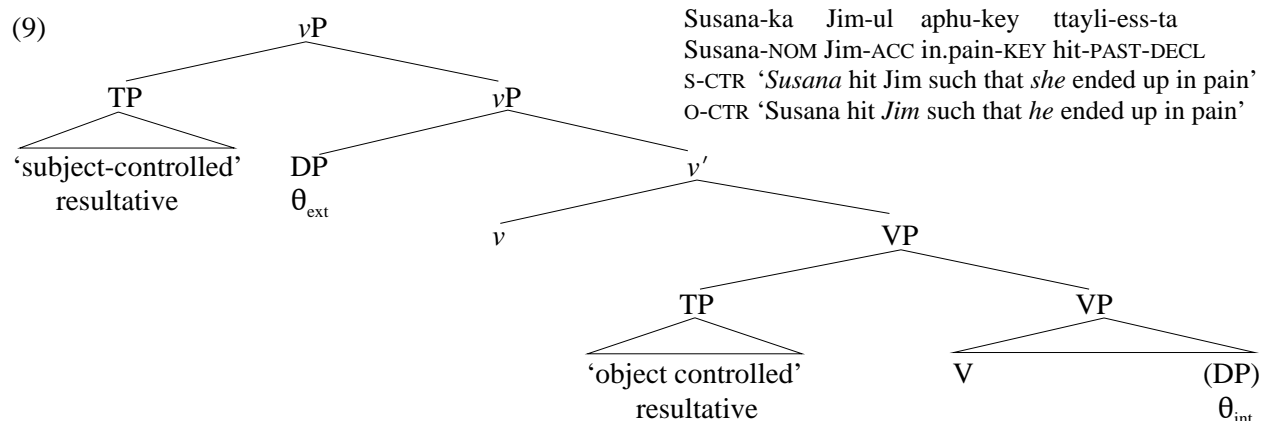
4.1 Questions

With these conclusions in place, several questions arise, which will be the focus of the rest of this paper:

- (a) what is the analysis of intransitive resultatives of the type in (8a) and transitive resultatives like (8b)?
- (b) what is the analysis of transitive resultatives of the type in (8c)?
- (c) what is the analysis of transitive resultatives of the type in (8c')?
- (d) why does Korean disallow small-clause complementation in resultatives?
- (e) why does English disallow the structures Korean assigns to its resultatives?

4.2 Answers

Our answers to these questions cluster around the structural proposal in (9): Korean resultative secondary predicates project *clausal*, TP-level constituents that are *adjoined* to some projection of the verb. The subject of the adjoined TP may be overt (in which case it is nominative, its Case being checked against T) or null (*pro*). The null subject is identified by a local controller, with locality determined in terms of minimal c-command: the controller is the verb's external argument if the resultative TP is adjoined to *v*P, but the object (which can raise to *v*P 'tucking in' below the external argument in Korean) if TP is adjoined to the root-VP.



4.3 Where to look for evidence for the proposal: Roadmap beyond this point

Evidence that both 'subject-controlled' and 'object-controlled' resultatives are adjuncts comes from Korean *do so* replacement and recursion; VP-topicalization provides evidence for the difference in structural height of 'subject-controlled' and 'object-controlled' resultatives. These diagnostics will be presented in section 5. After a discussion of the evidence for a null subject in Korean resultative constructions (both 'subject-controlled' and 'object controlled' ones) in section 6, evidence for the presence of tense in the extended projection of Korean resultative secondary predicates will be provided in section 7. Korean differs from English in this respect, which, as we argue in section 8, provides the answers to questions (d) and (e): Korean can license resultative secondary predicates as adjuncts because it provides these predicates with a local T; English-type languages cannot so license resultatives, hence are compelled to project them as complements, thereby enabling incorporation of the resultative into the matrix verb's T-chain (Guéron & Hoekstra 1995); licensing resultative secondary predicates by a local T is the preferred option whenever it is available, which renders small-clause complementation unavailable in Korean.

5 On the adjunct status and the relative height of subject-controlled and object-controlled resultatives in Korean: VP-replacement, VP-topicalization, recursion

Korean has two ways of isolating the (extended) lexical projection of the verb, VP-replacement and VP-topicalization, and both can be fruitfully exploited to underpin the proposal in (9). We begin with VP-replacement — the closest counterpart in Korean to English *do so* replacement.

5.1 VP-replacement as a diagnostic for the adjunct status of resultative secondary predicates in Korean

Korean has a proform for predicates (including verbal ones), the form *kuleh* (glossed below as ‘PROFM’) — arguably a proform for the projection of the lexical head. Very much like English *do so*, this proform can replace either the minimal VP (created by merger of the verb and its internal argument; (10/11a)) or larger segments of a multi-segmental VP resulting from adjunction (10/11b), but replacement of *just* the verb is bad (10/11c):

- (10) a. Jim ate the rice slowly, and Susana *did so* quickly
 b. Jim ate the rice slowly, and Susana *did so*, too
 c. *Jim ate the rice slowly, and Susana *did so* the kimchi
- (11) a. Jim-i chenchenhi pap-lul mek-ess-ko Susana-nun ppalli *kuleh*-ess-ta
 Jim-NOM slowly rice-ACC eat-PST-CONJ Susana-TOP quickly PROFM-PAST-DECL
 ‘Jim ate the rice slowly, and Susana did so quickly’
 b. Jim-i chenchenhi pap-lul mek-ess-ko Susana-nun *kuleh*-ess-ta
 Jim-NOM slowly rice-ACC eat-PST-CONJ Susana-TOP PROFM-PAST-DECL
 ‘Jim ate the rice slowly, and Susana did so, too’
 c. ??*Jim-i chenchenhi pap-lul mek-ess-ko Susana-nun kimchi-lul *kuleh*-ess-ta
 Jim-NOM slowly rice-ACC eat-PST-CONJ Susana-TOP kimchi-ACC PROFM-PAST-DECL
 *‘Jim ate the rice slowly, and Susana did so the kimchi’

What interests us particularly, in the context of the proposal in (9), is that, *unlike* in English, it is possible in Korean to ‘strand’ resultative secondary predicates under VP-replacement — regardless of whether the resultative is subject-controlled or object-controlled. The examples in (12a) and (13) are grammatical.

- (12) a. Jim-i meli-lul nolah-key yemsaykha-ko Susana-nun ppalkah-key *kuleh*-ess-ta
 Jim-NOM hair-ACC yellow-KEY dye-CONJ Susana-TOP red-KEY PROFM-PAST-DECL
 *‘Jim dyed his hair yellow, and Susana did so red’
 b. ??*Jim-i meli-lul nolah-key yemsaykha-ko Susana-nun os-ul ppalkah-key
 Jim-NOM hair-ACC yellow-KEY dye-CONJ Susana-TOP clothes-ACC red-KEY
kuleh-ess-ta
 PROFM-PAST-DECL
 *‘Jim dyed his hair yellow, and Susana did so her clothes red’
- (13) a. Jim-i pwunmyenghi Susana-lul ttayli-ess-e: sasil
 Jim-NOM definitely Susana-ACC beat-PAST-DECL in.fact
 na-nun ku-ka aphu-key *kuleh*-ess-ta-ko sayngkakhay
 I-TOP he-NOM in.pain-KEY PROFM-PAST-DECL-COMP think
 O-CTR ‘Jim definitely has hit Susana: in fact, I think he has done so (so that she is) in pain’
 S-CTR ‘Jim definitely has hit Susana: in fact, I think he has done so (so that he is) in pain’¹⁰

10 The subject-controlled reading is not available for all speakers here — but this is not an effect of *kuleh*-replacement: such speakers report the same judgements for (16a), below; see fn. 13 for some discussion.

- b. Jim-i pwunmyenghi Susana-lul ttayli-ess-e: sasil
 Jim-NOM definitely Susana-ACC beat-PAST-DECL in.fact
 na-nun ku-ka sonmok-i aphu-key *kuleh*-ess-ta-ko sayngkakhay
 I-TOP he-NOM wrist-NOM in.pain-KEY PROFM-PAST-DECL-COMP think
 O-CTR ‘Jim definitely has hit Susana: in fact, I think he has done so (so that) her wrist (is) in pain’
 S-CTR ‘Jim definitely has hit Susana: in fact, I think he has done so (so that) his wrist (is) in pain’

This confirms strikingly that the Korean resultative is not in the minimal VP. As we know from (11c), *kuleh*-replacement cannot affect the verb by itself without also affecting the verb’s complement. So in order for a resultative secondary predicate to be ‘strandable’ under *kuleh*-replacement, it must be the case that the resultative is outside the minimal VP — or, put differently, it must be that the resultative in Korean is not in the verb’s complement. At the same time, the ungrammaticality (12b) shows that the notional subject of the resultative, *os-ul* ‘clothes-ACC’, is within the minimal VP. The combination of (12a) and (12b) thus tells us that the resultative secondary predicate *ppalkah-key* ‘red-KEY’, ‘strandable’ under VP-replacement, does not form a constituent with its accusative-marked notional subject, which is not ‘strandable’. This is in line with (9).

Note also that in (13b), where the resultative secondary predicate has a nominative subject (*sonmok-i* ‘wrist-NOM’), this DP is ‘stranded’ under *kuleh*-replacement along with the secondary predicate. This confirms that whenever the resultative secondary predicate has a local nominative subject, this subject is not in the complement of the verb; instead, it forms a constituent together with the resultative secondary predicate.

5.2 *VP-topicalization as a diagnostic for the relative height of subject-controlled and object-controlled resultatives in Korean*

The VP-replacement test administered in section 5.1 confirms that resultative secondary predicates are outside the minimal VP, *tout court* — it does not differentiate between subject-controlled and object-controlled resultatives, which behave exactly alike as far as *kuleh*-replacement is concerned. That there is nonetheless a structural difference between subject-controlled resultatives and object-controlled resultatives can be shown with the aid of VP-topicalization. In particular, what VP-topicalization shows is that subject-controlled resultatives are higher in the tree than object-controlled resultatives. The former can be stranded under VP-topicalization, as shown in (14b). By contrast, object-controlled resultatives cannot be so stranded (cf. (15b)).¹¹

- (14) a. Jim-i (pal-i) kkaykkusha-key mokyok-ul ha-ess-ta
 Jim-NOM feet-NOM clean-KEY bath-ACC do-PAST-DECL
 (lit.) ‘Jim took a bath (his feet) clean’
 b. [mokyok-ul ha-ki]-nun Jim-i (pal-i) kakkusha-key ha-ess-ta
 bath-ACC do-NM-TOP Jim-NOM feet-NOM clean-KEY do-PAST-DECL
- (15) a. Jim-i thakca-lul (pyomyen-i) panccaki-key takk-ess-ta
 Jim-NOM table-ACC surface-NOM twinkle-KEY wipe-PAST-DECL
 (lit.) ‘Jim wiped the table (its surface) shiny’
 b. ??*[thakca-lul takk-ki]-nun Jim-i (pyomyen-i) panccaki-key ha-ess-ta
 table-ACC wipe-NM-TOP Jim-NOM surface-NOM twinkle-KEY do-PAST-DECL

11 Just as in English (recall fn. 3), object-controlled resultatives behave in this respect like object depictives, which likewise cannot be stranded under VP-topicalization in Korean:

- (i) a. Jim-i kephi-lul cha-key masi-ess-ta
 Jim-NOM coffee-ACC cold-PRT drink-PAST-DECL
 ‘Jim drank the coffee cold’
 b. ??*[kephi-lul masi-ki]-nun Jim-i cha-key ha-ess-ta
 coffee-ACC drink-NM-TOP Jim-NOM cold-PRT do-PAST-DECL

The example in (16) is a particularly striking illustration of this difference between subject- and object-controlled resultatives in the area of VP-topicalization: while (16a) is ambiguous (the wrist that ends up in pain as a result of the hitting event is either Susana’s (the subject) or Jim’s (the object)), its VP-topicalization variant in (16b) only supports a subject-controlled interpretation.

- (16) a. Susana-ka Jim-ul sonmok-i aphu-key ttayli-ess-ta
 Susana-NOM Jim-ACC wrist-NOM in.pain-KEY hit-PAST-DECL
 (lit.) ‘Susana_i hit Jim_j the wrist_{i/j} in pain’
- b. [Jim-ul ttayli-ki]-nun Susana-ka sonmok-i aphu-key ha-ess-ta
 Jim-ACC hit-NM-TOP Susana-NOM wrist-NOM in.pain-KEY do-PAST-DECL
 (lit.) ‘hit Jim_j, Susana_i did the wrist_{i/*j} in pain’

On the assumption that VP-topicalization must minimally target the root–VP *integrally* (lower segments of multi-segment projections cannot move, though they *are* apparently eligible for replacement by *kuleh* or English *do so*), the tree in (9) accounts for these facts. The fact that topicalization of the VP of *ttayli* ‘hit’ pied-pipes the object, *Jim-ul*, but strands the resultative secondary predicate and its subject entails that there is no point in the derivation at which *Jim-ul* locally c-commands the null possessor of the subject of the resultative secondary predicate. In Korean, it is generally very difficult to obtain a coreference interpretation for an object and the possessor of a structurally higher noun phrase: thus, (17a,b) (two attempts at expressing English *his_i mother loves Jim_i* in Korean) are impossible, and even in the case of (17c), where the possessor is pro-dropped, a reading in which the mother in question is Jim’s (and not, say, the speaker’s) is possible only under contextual accommodation: Jim must have been mentioned in the previous discourse in order for this reading to materialize, which suggests that the pro-dropped possessor retrieves its reference from the preceding discourse, not from the following object, *Jim-ul*. With this in mind, when we then go back to (16b), we discover that it, too, becomes grammatical on a reading in which the possessor of the painful wrist is Jim if Jim is mentioned in the previous discourse, while it is impossible on that reading if (16b) is given out of context or *Jim-ul* represents new information. (The same is true, *mutatis mutandis*, for (15b), as expected.)

- (17) a. *[caki_i-uy emeni-kkeyse] Jim_i-ul sarangha-si-n-ta
 self-GEN mother-HON.NOM Jim-ACC love-HON-PRES-DECL
- b. ??[ku_i-ey emeni-kkeyse] Jim_i-ul sarangha-si-n-ta
 he-GEN mother-HON.NOM Jim-ACC love-HON-PRES-DECL
- c. #[pro_i emeni-kkeyse] Jim_i-ul sarangha-si-n-ta
 pro mother-HON.NOM Jim-ACC love-HON-PRES-DECL
 ‘#’: grammatical ONLY if the antecedent for *pro* is also mentioned in the previous discourse

5.3 Recursion

An additional indication that resultative secondary predicates in Korean are in adjunction positions, not complement positions, comes from recursion. Unlike in English, it is possible in Korean to add multiple resultative secondary predicates to a single object or subject, as in (18) and (19).

- (18) Jim-i patak-ul hayah-key panccaki-key chilha-ess-ta
 Jim-NOM floor-ACC white-KEY twinkle-KEY paint-PAST-DECL
 *‘Jim painted the floor white shiny’
- (19) Susana-ka Jim-ul sonmok-i aphu-key sonkalak-i pwuleci-key ttayli-ess-ta
 Susana-NOM Jim-ACC wrist-NOM in.pain-KEY fingers-NOM break-KEY hit-PAST-DECL
 (lit.) ‘Susana_i hit Jim_j the wrist_{i/j} in pain the fingers_{i/j} broken’

As the distribution of indices in the example in (19) shows, it is also possible to combine a subject-controlled and an object-controlled resultative in a single sentence in Korean. In such cases, the subject-controlled resultative is further removed from the verb (i.e., further to the left) than the object-controlled resultative — at least when both are in principle compatible with either a subject- or an object-controlled reading: in (19), the possessor of the wrist and that of the fingers can both be either the subject or the object of the verb, but if the possessor of the wrist is the object, then the possessor of the fingers cannot be the subject.¹²

The iterativity of resultative secondary predication and the combinability of subject- and object-controlled resultatives, in that order, supports the structural proposal in (9), which represents all resultative secondary predicates in adjunction positions and base-generates subject-controlled resultatives above object-controlled ones. In light of the evidence reviewed in this section, we thus take (9) to be strongly supported.

6 Evidence for a *pro* subject for the resultative secondary predicate: Simpson’s Law, selection, idioms, case-stacking, and honorification

In this section, we will bring a variety of evidence to bear on the claim that Korean resultative secondary predicates have a local subject that, if null, is controlled by an argument of the matrix verb.

6.1 *Simpson’s Law*

The subject-controlled resultatives in (14) are grammatical both with and without *pal-i* ‘feet-NOM’. The versions of (14) with a null subject of the resultative secondary predicate disobey ‘Simpson’s Law’, the generalization that, in English-type resultatives, the secondary predicate cannot be predicated of the matrix verb’s external argument. The analysis of Korean resultatives built on (9) correctly predicts that ‘Simpson’s Law’ is not in effect here: in the versions of (14) lacking *pal-i* ‘feet-NOM’, the resultative secondary predicate is not directly predicated of the verb’s external argument; instead, it is contained in a TP that has a local null-pronominal subject controlled by the matrix external argument.¹³

6.2 *Selectional restrictions*

For object-controlled resultatives, the analysis in (9) predicts that the accusative noun phrase should be construed as the verb’s internal argument, hence should be sensitive to the selectional restrictions imposed by the verb on its object. This is confirmed by the awkwardness of (8d): unlike in the case of Dutch (6d), where the resultative involves small-clause complementation, the presence of the resultative secondary predicate in Korean (8d) does not lift the selectional restrictions imposed by the verb.

12 In situations in which no semantic ambiguity arises, as in (i), the relative order of subject- and object-controlled resultatives is relatively free — the result, we presume, of a scrambling operation.

(i) Jim-i patak-ul <hayah-key> (sonmok-i) aphu-key <hayah-key> chilha-ess-ta
 Jim-NOM floor-ACC white-KEY wrist-NOM in.pain-KEY white-KEY paint-PAST-DECL
 (lit.) ‘Jim painted the floor white (his wrist) in pain’

13 There are circumstances, however, in which ‘Simpson’s Law’ effects do manifest themselves even in Korean resultatives: thus, for some speakers (though not for all), (16a) loses its subject-controlled reading when *sonmok-i* ‘wrist-NOM’ is omitted. We suspect that this variation is intimately tied up with speakers’ variable intuitions on what can control the null subject of free adjuncts like (the Korean counterpart of English) *while crying* in sentences like *Jim called Susana while crying*, and the more uniform intuitions on what can control the null possessor of the overt subject of such adjuncts in sentences like *Jim called Susana while pro’s mother (was) crying*. We do not at this point have a clear picture of the empirical lie of the land in either of these two domains; but our suspicion, based on the intuitions of just a few speakers, is that there may very well be a connection between the resultative facts and the free-adjunct facts, with judgments varying on the cases in which the subject is completely null and judgments being more homogeneous on the cases in which only the possessor of the subject is dropped. In any event, no matter what the precise roots of the variation on (16a) with *sonmok-i* ‘wrist-NOM’ omitted, the key point throughout is that Korean resultatives can fail to obey ‘Simpson’s Law’, as predicted by (9).

6.3 *Idioms*

That the accusative-marked NP in (8b) is not the ECM-subject of the verb’s small-clausal complement (as in English (6b)) but rather the verb’s internal argument controlling the null subject of the resultative secondary predicate is further confirmed by the fact that idioms consisting of a predicate and its subject cannot be used in resultative constructions in Korean, unlike in English. For English, the well-formedness of idiom-chunk subjects of resultatives is demonstrated by (20). Korean has an idiom that can be exploited to further confirm that the subject of an object-controlled resultative secondary predicate in a Korean resultative construction is in fact projected as the structural direct object of the verb. The idiom in question is rendered literally as ‘his liver went out of his stomach’, describing a person who has a lot of guts to do something. The unavailability of an idiomatic interpretation for Korean (21) follows from an analysis in which ‘Jim’s liver’ is the thematic complement of the matrix verb controlling the null subject of the secondary predicate ‘out of his stomach’: idiom chunks fail as controllers.

- (20) Susana pulled [the cat out of the bag]
 → *OK as an idiom*
- (21) Susana-ka Jim-uy kan-ul pay pakk-ey nao-key tangki-ess-ta
 Susana-NOM Jim-GEN liver-ACC stomach outside-LOC exit-KEY pull-PAST-DECL
 ‘Susana pulled Jim’s liver [pro out of his stomach]’
 → *literal only; CANNOT mean ‘Susana turned Jim into a person with lots of guts’*

With *nominative* case on *kan* ‘liver’, an idiomatic interpretation *can* be obtained — though not in (21): it is simply not plausible that Susana’s act of pulling some (unspecified) patient would *result* in either Susana or the patient becoming a person with lots of guts. So to show that *kan-i pay pakk-ey nao-key* qua resultative supports an idiomatic reading, we constructed (22). Of course the well-formedness of (22) is as expected: the idiom is a clausal constituent here. But the key point for our analysis is that (21) does *not* support an idiomatic reading. This argues against a small-clause complementation analysis for Korean.

- (22) pwumonim-i Jim-ul kan-i pay pakk-ey nao-key kilu-ess-ta
 parents-NOM Jim-ACC liver-NOM stomach outside-LOC exit-KEY raise-PAST-DECL
 ‘his parents raised Jim a bold person’
 → *OK as idiom*

6.4 *Case-stacking*

Yoon (2007) argues that Korean constructions that seemingly correspond closely to English ECM constructions with epistemic verbs, such as (23a) with accusative *tolkolay-lul* ‘dolphin-ACC’ (recall fn. 9, above), exhibit at least one striking property suggesting that the subject of the embedded finite clause raises into the object position of the matrix clause (‘Subject to Object Raising’). The property that Yoon advances in this connection is case-stacking. This cannot be brought to light with the example in (23a); but once we give the embedded clause a quirky-cased subject, as in (23b,c), we find that this subject can take on, in addition to its lexical case, an accusative morpheme as well, with the latter being external to the former.

- (23) a. Jim-un tolkolay-ka/lul yengliha-ta-ko sayngkakha-n-ta
 Jim-TOP dolphin-NOM/ACC intelligent-DECL-COMP think-PRES-DECL
 ‘Jim thinks dolphins to be intelligent’
- b. na-nun Jim-hanthey-(man-)ul mwuncey-ka iss-ta-ko mit-nun-ta
 I-TOP Jim-DAT-only-ACC problem-NOM exist-DECL-COMP believe-PRES-DECL
 ‘I believe that (only) Jim has a problem’

- c. na-nun yeki-pwuthe-lul nay ttang-ila-ko sayngkakha-n-ta
 I-TOP here-from-ACC my land-COP-COMP think-PRES-DECL
 ‘I consider from about here to be my property’

We are not perfectly convinced (in light of the fact that case-stacking sometimes occurs in simple clauses apparently involving no raising) that (23b,c) constitute an argument in favor of an SOR derivation for examples of the type in (23a) with accusative *tolkolay-lul* ‘dolphin-ACC’. But whether it ultimately is or is not an argument to this effect, what is important from our point of view is that Yoon’s observation does *not* carry over to resultative constructions: that is, case-stacking is impossible in resultative constructions, as the ill-formedness of (24b) (built on grammatical (24a)) illustrates:

- (24) a. nay tung-ey meng-i tul-ess-ta
 my back-LOC bruise-NOM enter-PAST-DECL
 ‘I got a bruise on my back’ (lit., ‘on my back entered a bruise’)
 b. *Jim-i nay tung-ey-ul meng-i tul-key¹⁴ ttayli-ess-ta
 Jim-NOM my back-LOC-ACC bruise-NOM enter-KEY beat-PAST-DECL
 intended: ‘Jim beat my back bruised’

If we accept Yoon’s claim that case-stacking effects result from movement, we can conclude from the ill-formedness of (24b) that there is no movement chain formed between the subject position of the resultative secondary predicate and the object position of the verb — in other words, the null subject of the resultative is not a trace but a null pronoun, *pro*.

6.5 Honorification

Honorification in object-controlled resultatives behaves similarly to honorification in established cases of object control in Korean (see (25a,b)), which further confirms the analysis: in both (25a) and (25b), the honorified object, *apeci-lul* ‘father-ACC’, is coindexed with the null *subject* of the embedded predicate; the subject-honorific particle *si* shows up on the embedded predicate in both cases, in what are to all intents and purposes garden variety cases of subject honorification.¹⁵

- (25) a. Jim-i apeci-lul siwuenha-si-key anmaha-ess-ta
 Jim-NOM father-ACC fresh-SUBHON-KEY massage-PAST-DECL
 ‘Jim massaged his father fresh’
 b. Jim-i apeci-lul ttena-si-key seltukha-ess-ta
 Jim-NOM father-ACC leave-SUBHON-KEY persuade-PAST-DECL
 ‘Jim persuaded his father to leave’

14 Note that the head of the resultative secondary predicate in this example is *verbal* — something that is entirely impossible in languages like English. This is not, however, the cause of the ill-formedness of (24b): Korean in fact allows verbal resultative secondary predicates, something we will return to in section 7.1, below.

15 There *are* differences between (25a) and (25b) (thus, (25a) but not (25b) accepts the object-honorific *-tuli* on the matrix verb, for reasons having to do with the benefactive nature of *-tuli*; and (25b) but not (25a) becomes impolite with subject-honorific *-si* dropped), but these do not affect our main point, which is that (25a,b) both allow *-si* on the embedded predicate. For completeness’ sake, let us note that it is also possible to use the honorific particle *-si* on the resultative secondary predicate in *subject*-controlled resultatives. In the example in (i), *-si* in fact shows up twice because *apeci-kkes* is itself the subject of the clause (hence honorified on the verb) and at the same time controls the null possessor of the nominative subject of the secondary predicate. This is as expected.

(i) apeci-kkese mok-i swi-si-key wul-si-ess-ta
 father-HON.NOM throat-NOM become.hoarse-SUBHON-KEY cry-SUBHON-PAST-DECL
 ‘father cried (so that) his throat became hoarse’

The grammaticality of (25a) casts serious doubt on a complex-predicate analysis of the Korean facts, which would analyze *siwuenha-si-key anmaha* ‘massage fresh’ in (25a) as a complex verb or V’ taking *apeci-lul* as its direct object (recall the structures in (1a,b), above). The problem with such an analysis is that Korean direct objects cannot be honorified with *si*, as shown in (26).¹⁶

- (26) Jim-i apeci-lul anmaha{-*si/tuli}-ess-ta
 Jim-NOM father-ACC massage-SUBHON/OBHON-PAST-DECL
 ‘Jim massaged his father’

Of course, the complex-verb analysis is further compromised by the fact that Korean (8c) and (8d) are impossible. The analysis based on (9) explains all the above properties of Korean object-controlled resultatives.

7 Evidence for tense associated with Korean resultative secondary predicates

Now that we have established on the basis of a variety of arguments the general structure of Korean resultative constructions (in particular, the idea that Korean resultative secondary predicates are in adjoined positions and take their own local subjects, controlled by either the matrix subject or the matrix direct object), we should proceed to the question of how the subject of a Korean resultative secondary predicate is licensed. Recall from the examples in (14a), (15a) and (16a) (repeated here in (27a–c)) that resultative secondary predicates in Korean allow *overt* subjects, and that those subjects are nominative.

- (27) a. Jim-i (pal-i) kkaykkusha-key mokyok-ul ha-ess-ta (= (14a))
 Jim-NOM feet-NOM clean-KEY bath-ACC do-PAST-DECL
 (lit.) ‘Jim took a bath (his feet) clean’
 b. Jim-i thakca-lul (pyomyen-i) kkaykkusha-key takk-ess-ta (= (15a))
 Jim-NOM table-ACC surface-NOM clean-KEY wipe-PAST-DECL
 ‘Jim wiped the table (its surface) clean’
 c. Susana-ka Jim-ul sonmok-i aphu-key ttayli-ess-ta (= (16a))
 Susana-NOM Jim-ACC wrist-NOM in.pain-KEY hit-PAST-DECL
 (lit.) ‘Susana_i hit Jim_j the wrist_{ij} in pain’

We thus need there to be a licenser of nominative Case inside the substructure dominating the resultative secondary predicate. The distribution of nominative Case in Korean is closely connected to that of tense (*pace* Yoon 1990). An immediate suspicion arising from the grammaticality of the examples in (27) with the nominative subjects *pal-i*, *pyomyen-i* and *sonmok-i* included, then, is that Korean resultative secondary predicates are associated with a local tense, licensing these overt nominative subjects, and also taking care of the formal licensing of the *pro*-subjects of the variants of (27) lacking these nominatives. That it is indeed the case that Korean resultative secondary predicates are associated with a local tense can be confirmed on the basis of three pieces of empirical evidence: (a) the fact that the secondary predicate can be verbal; (b) the fact that the secondary predicate can host the aspectual particle *-ci*, itself dependent on tense; and (c) the fact that a sentential negation can combine with the secondary predicate. We will go through these points in turn.

16 Direct objects *can* be honorified in Korean, but a different honorific particle (*-tuli*, stemming from a lexical verb meaning ‘give’ and therefore compatible only with objects that benefit from the event) is used for this purpose, attached directly to the verb selecting the honorified direct object. Note that in object-controlled resultatives like (25a), this object-honorific particle cannot show up on the resultative secondary predicate, as is illustrated in (i). This is expected from the point of view of our analysis.

(i) Jim-i apeci-lul siwuenha(-si/*tuli)-key anmaha-tuli-ess-ta
 Jim-NOM father-ACC fresh-SUBHON/OBHON-KEY massage-OBHON-PAST-DECL

7.1 *The resultative secondary predicate can be verbal*

Besides the differences between English and Korean resultatives already reviewed in the foregoing, one perhaps particularly striking distinction between English and Korean in the domain of resultative secondary predication constructions is the fact that the resultative predicate can be *verbal* in Korean, while it plainly cannot be in English:

- (28) a. *Jim pushed Susana trip(ped)
 b. Jim-i Susana-lul nemeci-key mil-ess-ta
 Jim-NOM Susana-ACC trip-KEY push-PAST-DECL
 ‘Jim pushed Susana (such that she) tripped’
- (29) a. *the dog bit the cat miss the mouse
 b. kay-ka koyangi-lul cwi-lul nohchi-key mwul-ess-ta
 dog-NOM cat-ACC mouse-ACC miss-KEY bite-PAST-DECL
 (lit.) ‘the dog bit the cat (so that it) missed the mouse’

Guéron & Hoekstra (1995:100) address the ungrammaticality of English (28a) against the background of their theory of T-chains.¹⁷ They argue that ‘[t]he absence of verbal predicates is at once explained ... if no T-chain is available for resultative complements, since verbs cannot then be licensed’ — the idea being that a verb must always be licensed by a local T-head. Guéron & Hoekstra (1995:80) formulate this latter idea in the form of a biuniqueness relationship between verbs and tense. We cannot go quite that far, though: it must be possible for tense to team up with things non-verbal, as in languages (such as Hungarian or Russian) in which present-tense adjectival or nominal predications are, and must be, copula-less (cf. Hungarian *János okos/orvos* (**van*) ‘János intelligent/doctor (*is)’, rendering English *János is intelligent/a doctor*). So it cannot be the case that for every tense there is a verb (see also Déchaine 1993 for an extended argument to this effect); but in the opposite direction, the relationship does seem to hold strictly: for every verb there must be a tense. The fact, then, that English resultative constructions disallow verbal predicates can be taken to lead to the conclusion that there is no tense local to the resultative secondary predicate in English resultatives.

Korean is different. It does allow verbal resultative secondary predicates, as shown in (28b) and (29b). In the latter example, this verbal resultative licenses its own accusative object, indicating that it is truly a verb (associated with a *v* Case-licensing the object). Viewed from the perspective of Guéron & Hoekstra’s (1995) account of the ill-formedness of English (28a) and (29a), the grammaticality of (28b) and (29b) entails that there *is* a tense-node local to the resultative secondary predicate in Korean resultative constructions. The presence of this local tense-node is further supported by two additional properties of Korean resultatives.

7.2 *The resultative secondary predicate can host aspect*

Korean resultatives (both subject-controlled and object-controlled) can feature the inchoative affix *-ci* on the resultative secondary predicate, as shown in (30).

17 In the same passage, Guéron & Hoekstra also claim that English does not allow nouns as resultative secondary predicates, and provide a rationale for that claim. But neither the rationale provided (couched in terms of the stage-level/individual-level distinction: if there was indeed a categorical ban on individual-level secondary predicates in resultatives, things like *to shoot someone dead* should be impossible, which of course they are not) nor the empirical claim seems to be entirely correct: sentences like *they anointed/crowned him king* and *they brought him up a Catholic* are grammatical and seem resultative. Note that Dutch does not allow nominal resultative secondary predicates to appear by themselves: in Dutch *ze kroonden hem tot koning* ‘they crowned him to king’ and *ze leidden hem op tot ingenieur* ‘they brought him up to engineer’, there is a preposition, *tot* ‘to’, present in front of the nominal; still, it is the nominal that functions as the predicate of the pronoun *hem* ‘him’ (note that bare singular count nouns are only allowed as predicate nominals in Dutch), with *tot* serving the purpose of relating the nominal predicate to its subject.

- (30) a. Jim-i (pal-i) kkaykkusha-ci-key mokyok-ul ha-ess-ta
 Jim-NOM foot-NOM clean-INCH-KEY bath-ACC do-PAST-DECL
 ‘Jim_i took a bath (such that/until) {he_i/his_i feet} got clean’
 b. Jim-i thakca-lul kkaykkusha-ci-key takk-ess-ta
 Jim-NOM table-ACC clean-INCH-KEY wipe-PAST-DECL
 ‘Jim wiped the table (such that/until it) got clean’

The presence of *-ci* is interesting, signaling as it does the presence of a projection for aspect immediately outside the lexical projection of the resultative secondary predicate. Aspect is well known to have a close relationship with tense. Guéron & Hoekstra (1995:92) actually identify tense and aspect, referring to the latter as dependent tense. They say that aspect ‘is a tensed form not directly bound by a T-operator’ — that is, its T-node is not ‘deictically interpreted via a T-operator which directly links it to a referential domain’ but instead ‘dependent, relating the event of its verbal base to a nondeictic anchor’. The presence of aspectual *-ci* in (30) thus signals the presence of a T-node local to the resultative secondary predicate — not a deictic tense but a dependent tense (dependent on the matrix tense). Viewed this way, the fact that *-ci* is allowed to surface on the resultative secondary predicate directly supports the postulation of a TP associated with the resultative secondary predicate in Korean.

7.3 *The resultative secondary predicate can host sentential negation*

We can bolster the case for a TP by observing that Korean resultatives (again, both subject-controlled and object-controlled) allow negation on the resultative secondary predicate (which whenever negation is present must be equipped with the aspectual *-ci* discussed in section 7.2), and by inspecting the interpretation of the negation hosted by the resultative secondary predicate.

This negation allows two different scopes: it either scopes directly over the secondary predicate alone, or it scopes higher, including aspectual *-ci*.¹⁸ For an object-control example such as (31), the two readings can be distinguished clearly: on the narrow-scope reading, Jim wiped the table (which may have been perfectly clean before) in such a way that it/its top ended up not-clean, i.e., dirty (for instance because of the fact that the cloth he used to wipe the table was dirty); on the wide-scope reading, Jim wiped the table (which was dirty before) but it/its top did not get (fully) clean. Similarly, for the subject-control case in (32), the narrow-scope reading says that Jim took a bath but he/his feet ended up dirty (for instance because there was dirt at the foot-end of the bath), while the wide-scope reading has it that Jim took a bath but he/his feet did not end up (fully) clean. Thus, narrow scope represents a change from clean to not-clean, while the wide-scope reading involves an unsuccessful attempt at a change from dirty to clean.

- (31) a. Jim-i thakca-lul kkaykkusha-ci anh-key takk-ess-ta
 Jim-NOM table-ACC clean-INCH NEG-KEY wipe-PAST-DECL
 b. Jim-i thakca-lul pyomyen-i kkaykkusha-ci anh-key takk-ess-ta
 Jim-NOM table-ACC surface-NOM clean-INCH NEG-KEY wipe-PAST-DECL
 (i) ‘Jim wiped the table such that it/its surface got unclean/dirty’ [pro (top) INCH NOT clean]
 (ii) ‘Jim wiped the table but it/its surface did not get (fully) clean’ [pro (top) NOT INCH clean]

18 As Dongsik Lim (p.c.) points out, the status of *-ci* in Korean long-form negation constructions as an aspectual particle is debatable. The particle *-ci* seems to be semantically empty in many cases in which it co-occurs with negation. Thus, in (ia) there is no sense of inchoativity; by contrast, (ib), featuring an additional token of *-ci*, unequivocally delivers the inchoative interpretation. For us, what matters is not whether it is *-ci* or some null morpheme that denotes inchoativity in (31)–(32), but rather that the negation on the resultative secondary predicate has variable scope *vis-à-vis* the semantics of inchoativity that is clearly present in (31)–(32).

- (i) a. thakca-ka kkaykkusha-ci anh-ess-ta b. thakca-ka kkaykkusha-ci-ci anh-ess-ta
 table-NOM clean-INCH NEG-PAST-DECL table-NOM clean-INCH-INCH NEG-PAST-DECL
 ‘the table was not clean’ ‘the table did not get clean’

- (32) a. Jim-i mokyok-ul kkaykkusha-ci anh-key ha-ess-ta
 Jim-NOM bath-ACC clean-INCH NEG-KEY do-PAST-DECL
 b. Jim-i mokyok-ul pal-i kkaykkusha-ci anh-key ha-ess-ta
 Jim-NOM bath-ACC feet-NOM clean-INCH NEG-KEY do-PAST-DECL
 (i) ‘Jim took a bath such that he/his feet got unclean/dirty’ [pro (feet) INCH NOT clean]
 (ii) ‘Jim took a bath but he/his feet did not get (fully) clean’ [pro (feet) NOT INCH clean]

Both scopal readings for the negative particle are confined to the resultative. Neither includes the event of wiping or bathing: it is possible, in both cases, to add a negation to the verb independently (as shown for (31) in (33), felicitous as a reply to the question *did Jim wipe the table such that it got unclean/it didn’t get (fully) clean?*); and even though it clearly has wide scope *vis-à-vis* INCH in the (ii)-readings, negation still cannot scope over the first conjunct in (34) (i.e., (34.iii) is not a possible reading for this sentence).

- (33) Jim-i thakca-lul (pyomyen-i) kkaykkusha-ci anh-key anh-takk-ess-ta
 Jim-NOM table-ACC surface-NOM clean-INCH NEG-KEY NEG-wipe-PAST-DECL
 (i) ‘Jim did not wipe the table such that it/its surface got unclean/dirty’
 (ii) ‘Jim did not wipe the table so it/its surface did not get (fully) clean’
 (34) Jim-i tahkca-lul pyomyen-i peski-eci-key kuliko kkaykkusha-ci anh-key takk-ess-ta
 Jim-NOM table-ACC surface-NOM strip-INCH-KEY and clean-INCH NEG-KEY wipe-PAST-DECL
 (i) ‘Jim wiped the table such that its surface got stripped and unclean/dirty’
 (ii) ‘Jim wiped the table such that its surface got stripped but did not get (fully) clean’
 (iii) *‘Jim wiped the table such that its surface did not get stripped and clean’

While the (i)-readings can plausibly be characterized as constituent-negation readings (‘not-clean’), the (ii)-readings clearly involve non-constituent negation, in a way that is impossible in English-type languages. We analyze the (ii)-readings as featuring a clausal negation. The clausal negation in the (ii)-readings has scope over the INCH+resultative combination; but it does not scope higher. The clausal domain over which negation takes scope in the (ii)-readings cannot be the matrix clause: instead, it must be the clausal constituent headed by the resultative secondary predicate. Assuming with Zanuttini (1996) that all clausal negation is dependent on a local T-node, and observing that the scope of the negation in the (ii)-readings is confined to the INCH+resultative, we conclude that the extended projection of the resultative secondary predicate in Korean resultatives includes a T-node. This T licenses nominative subjects, subject to pro-drop whenever they are recoverable from context — both for subject-controlled and object-controlled resultatives.

8 Where English and Korean resultatives are different

8.1 The key difference between English and Korean resultatives: The Tense of resultatives

The previous sections have sought to establish the conclusion that Korean differs from English in its structural representation of resultatives in that Korean allows resultative secondary predicates as adjuncts (either to the root-VP or to *v*P) thanks to the fact that it provides these predicates with a local T that can license them within the confines of the adjoined TP. English-type languages do not make a local T available to license the secondary predicate — recall, in particular, that English resultatives do not allow verbal secondary predicates.

As a result, English-type languages do not allow bare resultatives as adjuncts, and are compelled instead to project resultative secondary predicates in the complement of the verb, where the resultative secondary predicate can be integrated into the matrix verb’s T-chain (as in Guéron & Hoekstra 1995:101 — ‘the state denoted by [the resultative small clause] is integrated into [the matrix verb’s] event structure by identifying the final slice of the activity with the state denoted by [the resultative small clause]’).

Korean could in principle resort to complementation as well, but does not do so because it does not have to: (i) it can make a local T available to license the secondary predicate, and (ii) locally licensing the resultative secondary predicate by T is more economical than the formation of a complex T-chain. This analysis of the differences between English- and Korean-type resultatives thus confirms Guéron & Hoekstra’s (1995) major insight that tense plays a central role in the licensing of resultative secondary predicates.

8.2 *The adjunct/complement distinction redux*

So far we have shown on the basis of empirical evidence that Korean resultatives *can* be adjuncts, and we have made a theoretical case for the conclusion that, because they *can* be adjuncts, they *will* be merged as adjuncts. We would now like to go on to show that in the case of three out of the four attested types of resultative constructions, we can strengthen our empirical case for adjunct status by making the stronger claim that Korean resultatives are *always* adjuncts (i.e., they cannot be merged as complements).¹⁹

The four attested cases were presented in section 3: (i) intransitive resultatives (*Jim cried his throat hoarse* – (8a)), which in Korean have a nominative subject for the resultative secondary predicate; (ii) transitive resultatives with a nominative subject for the resultative secondary predicate (which is not interpreted as the object of the transitive verb) and an implicit object of the transitive verb (*Jim ate his belly full* – (8b) without *pal-ul*); (iii) transitive resultatives with a nominative subject for the resultative secondary predicate and an overt accusative object of the transitive verb (*Jim ate rice his belly full* – (8b) with *pap-ul* included); and (iv) transitive resultatives with an accusative ‘subject’ of the resultative secondary predicate, necessarily interpreted as the direct object of the transitive verb (*Jim painted the floor white* – (8c)).

For (iii) one must agree that the accusative object is the verb’s complement, so the resultative cannot be base-generated as the verb’s complement in this case.²⁰ For (iv), one must also agree that the accusative object is the verb’s complement: it is thematically interpreted as the verb’s internal argument, necessarily so (recall the discussion in section 3, and also the observation, made in section 6.3, that the accusative-marked object cannot form an idiom together with the resultative secondary predicate: (21), above). For (ii), the feasibility of a complementation depends on whether the implicit internal argument of the verb is syntactically represented as a *pro*. One thing is clear: it certainly *can* be, as (35) (based on our earlier example (26)) shows.

- (35) Jim-i (apeci-lul) tung-i siwuenha-key anmaha-tuli-ess-ta
 Jim-NOM father-ACC back-NOM fresh-KEY massage-OBHON-PAST-DECL
 (lit.) ‘Jim massaged (his father) his back fresh’

(35) is grammatical with *apeci-lul* pro-dropped (provided that the referent of the object is recoverable from context); the fact that, when dropped, the object is structurally represented in the form of an object *pro* is clear from the fact that the object can be honorific-marked on the verb even when not physically present. Unfortunately, even when the object is a highly respected person, object honorification is never obligatory in Korean. So we cannot exploit the distribution of object honorification to show that there is *always* an internal argument of the verb structurally present in type-(ii) resultatives. The causative construction in (36) may supply a more conclusive diagnostic: despite the fact that the causativized verb in (36) has no physically present accusative object, speakers strongly prefer dative case-morphology on the causee, which generally manifests itself only in *transitive* causative constructions. This leads us to the conclusion that even in the absence of a physical accusative object, there is still an object structurally present — and this, in turn, leads to the conclusion that the resultative in (ii)-type resultative constructions must be structurally represented as an adjunct.

19 Thanks to Chris Collins for discussion regarding our claim that Korean resultative secondary predicates *must* be adjuncts.

20 In general, we reject Larsonian analyses, for reasons discussed in Den Dikken (1995), with specific reference to particles and triadic constructions, and in Den Dikken (2006), more generally. So we will not consider the possibility of a VP-shell approach for any of the resultative constructions under discussion.

- (36) Susana-ka Jim-eykey/*?lul tung-i siwuenha-key anmaha-tuli-key ha-ess-ta
 Susana-NOM Jim-DAT/ACC back-NOM fresh-KEY massage-OBHON-KEY do-PAST-DECL
 ‘Susana made Jim massage (some unspecified patient) his back fresh’

This then leaves us with (*i*) as the only potential candidate for low attachment. If robust evidence can be found to the effect that the structure of (*i*) in Korean is (or at least can be) significantly different from that of (*ii*)–(*iv*), one may have to admit the possibility of low attachment for the resultative there. But in the absence of clear evidence that in (*i*) (and *only* in (*i*)-type resultatives) we could be dealing with complementation (evidence that we have not come across so far), and in the presence of clear evidence, for *all* types of Korean resultatives (including (*i*)-type cases), that the projection dominating the resultative secondary predicate can be merged as an adjunct (recall section 5), the null hypothesis must be that Korean resultatives of all attested types behave on a par, and are different, as a block, from English-type bare resultatives — though arguably similar to *until*-resultatives of the type discussed in the next subsection.

8.3 *The unbearable bareness of English resultatives, and the not-so-bareness of their Korean colleagues*

Korean resultative secondary predicates are systematically marked with the suffix *-key*, which is very difficult to gloss. There is no consensus in the literature on what the nature of this *-key* might be: many have called it an ‘adverbiative’ or ‘adverbializing’ element (cf. *i.a.* Ihm *et al.* 2001:138, Martin 1992:610ff., Park 1994); some have called it a complementizer (cf. *i.a.* Cho & Sells 1995, Park 1994, Kang 2001); Sells (1998) simply calls it a ‘marker’; and Jang (1997) calls it a ‘predicativizer’, explicitly arguing against *-key* forms being adverbial, and classifying them as secondary predicates instead. We agree that *-key* is a marker of secondary predicates, and tentatively consider the possibility that it might be adpositional, of category P.²¹ If it is, it is interesting to consider the possibility that Korean resultatives may correspond to English (37b), not (37a).²²

- (37) a. Jim pounded the metal (*it was) flat
 b. Jim pounded the metal *until* (it was) flat

The English construction in (37b) has several of the earmarks of the Korean resultative construction: thus, it resists idioms (while (20) *Jim pulled the cat out of the bag* has an idiomatic reading, *Jim pulled the cat until it got out of the bag* does not), and it (marginally) allows stranding under *do so*-replacement ([?]*Jim did so until flat* is much easier to get than **Jim did so flat* is on a resultative interpretation). Could it be, then, that the Korean examples discussed in this paper correspond to English (37b)?

It very well could. As a matter of fact, if English has anything like a close counterpart to Korean resultatives with *-key*, then it is doubtless the *until*-resultative in (37b). It is likely that both versions of (37b) (i.e., the one with *it was* included and the one without it) involve a fully clausal structure in the complement of *until* — elliptical in the case of *until flat*. The theory in fact forces the copulaless version of (37b) to have a T-node embedded under *until*: otherwise the resultative secondary predicate would not be licensable (since the adjunct status of the *until*-PP prevents the resultative from being incorporated into the matrix T-chain). It thus seems highly likely that (37b) is structurally very much like Korean *-key* resultatives.

21 What might, at first sight, seem to support an adpositional approach to *-key* is the apparent fact that the Korean dative postposition *-eykey* features *-key* as an integral part. But Chungmin Lee (p.c.) tells us that historically *-key* and *-eykey* are unrelated.

Peter Sells (p.c.) reminds us that the Korean causative construction features *-key* as well (see (36) for illustration; Park 1994 discusses *-key* causatives at length), and confirms that causative *-key* constructions respond to the diagnostics we have exploited in this paper in precisely the same way as resultative *-key* constructions. In light of our conclusion, based on this battery of diagnostics, that resultative *-key* constructions involve an adjunction structure, we are thus led to hypothesize that causative *-key* constructions likewise involve adjunction, not complementation. We plan to develop the analysis of Korean causatives in detail in future work.

22 Thanks to Chris Collins for drawing our attention to English *until*-resultatives and their possible parallel with Korean.

The fact that English *until*-resultatives allow a fully clausal structure immediately above the secondary predicate further supports the appeal we have made to the distribution of T in the licensing of adjunct resultatives. And conversely, the absence of any evidence for a local T-node in English *bare* resultatives of the type in (37a) (see the ungrammaticality of *it was* in (37a)) suggests that such bare resultatives are not merged as adjuncts — precisely as we have claimed. The complement status of bare resultatives is supported by the familiar evidence reviewed above (including ‘Simpson’s Law’, idioms, intransitive resultatives with accusative embedded subjects of the type *Jim cried his throat hoarse*, and the complete ban on stranding of bare resultative secondary predicates under VP-replacement or topicalisation). There is no escaping the conclusion, then, that English-type *bare* resultatives are always complements. *Until*-resultatives, by contrast, are arguably adjuncts — and similar in this respect to Korean *-key* resultatives.

8.4 *Getting the resultative interpretation for secondary predicates in adjunction positions*

If, as we have argued, Korean-type resultatives are adjuncts that have their own local T-node, they cannot be integrated into the matrix verb’s T-chain. So how do we obtain the desired interpretation for Korean resultatives, which, like that of English resultatives, must identify the endpoint of the activity denoted by the verb with the resultant state denoted by the resultative small clause? The answer must be, it seems to us, that Korean obtains this interpretation indirectly, in a way that is similar to what is going on in English constructions with *until* (recall (37b)) or *so/such that* — e.g., (38):

- (38) a. Jim painted the table {until/so that/such that} it/its surface got white
 b. Jim painted the floor {until/so that/such that} he/his right arm got tired

These English constructions resemble Korean resultatives in more than one way. First of all, they represent tense and aspect (*got*) locally to the resultative secondary predicate. Secondly, they give the resultative secondary predicate a local subject. Thirdly, that subject may be controlled integrally or may have its possessor controlled, in each case either by the object of the matrix verb or by the subject. And finally, the *until* or *so/such that* phrases in (38) can all be ‘stranded’ under VP-replacement (*Jim did so {until/so that/such that} it/its surface got white* and *Jim did so {until/so that/such that} he/his arm got tired*), unlike bare resultatives (**Jim did so white*), which indicates (uncontroversially) that these phrases are adjuncts, not complements.

In English (38), the clause in adjunct position is itself non-stative; in the variants with *so/such that*, it would be awkward, in fact, to replace *got* with *was*. It seems that the adjunct clause in (38) is *itself* the resultative construction, and that the matrix clause is not rendered resultative by the addition of the adjunct clause. This impression is strongly confirmed by the fact that the matrix clause can be a pure activity, as in (39a). Korean resultatives turn out to behave like English in this respect, as (39b) shows.

- (39) a. Jim cried for hours {until/so that/such that} he/his throat got hoarse
 b. Jim-i mok-i swi-key sey sikan-tongan wul-ess-ta
 Jim-NOM throat-NOM become.hoarse-KEY three hour-while cry-PAST-DECL
 ‘Jim cried three hours so that his throat got hoarse’

In this respect, the constructions in (38) are strikingly different from bare resultatives of the English type, which resist the addition of ‘in *x* amount of time’ frame adverbials: (40) is awkward (except if interpreted iteratively — which, given our extra-linguistic knowledge of crying oneself/one’s throat hoarse, is rather hard to imagine).

- (40) #Jim cried himself/his throat hoarse for hours

This further confirms the insight that English-type resultatives involve one single T-chain, whereas *so/such that*-constructions feature two separate (but connected) T-chains, with the one in the *so/such that*-clause being anaphoric to that of the matrix clause.

Looking at things from this perspective, what we are led to conclude is that Korean sentences of the type discussed in this paper are really only *approximations* of the bare resultative constructions that English-type languages have. Like the Romance languages, Korean does not make English-type bare resultatives by projecting a result state in the complement of a lexical verb with a manner component in its semantics. But Korean manages to mimic English quite closely on the surface (though not when one looks beneath the surface) thanks to the fact that it can project a local T outside its result-state-denoting small clause and attach the TP to a projection of the matrix verb as an adjunct.

References

- Barbiers, S. 1995. *The Syntax of Interpretation*. Doctoral dissertation, University of Leiden/HIL.
- Bowers, J. 1993. The syntax of predication. *Linguistic Inquiry* 24, 591-656.
- Carrier, J. & J. Randall. 1992. The argument structure and syntactic structure of resultatives. *Linguistic Inquiry* 23, 173-234.
- Cho, Y. Y. & Sells, P. 1995. A lexical account of inflectional suffixes in Korean. *Journal of East Asian Linguistics* 4, 1179-174.
- Chomsky, N. 1957. *Syntactic Structures*. The Hague: Mouton
- Chomsky, N. 1965. *Aspects of the Theory of Syntax*. Cambridge: The MIT Press.
- Déchaine, R-M. 1993. *Predicates across Categories: Towards a Category-Neutral Syntax*. Doctoral dissertation, University of Massachusetts, Amherst
- DiSciullo, A.M. & E. Williams. 1987. *On the Definition of Word*. Cambridge: MIT Press.
- Dikken, M. den. 1987. Secundaire predicatie en de analyse van small clauses. *GLOT* 10, 1-28.
- Dikken, M. den. 1995. *Particles: On the Syntax of Verb-Particle, Triadic and Causative Constructions*. Oxford: OUP.
- Dikken, M. den. 2006. *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge: MIT Press.
- Goldberg, A.E. & R. Jackendoff. 2004. The resultative as a family of constructions. *Language* 80, 532-568.
- Guéron, J. & T. Hoekstra. 1995. The temporal interpretation of predication. In A. Cardinaletti & M. T. Guasti (eds), *Small Clauses*, 77-107. San Diego: Academic Press.
- Hale, K. & S.J. Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In K. Hale & S.J. Keyser (eds), *The View from Building 20*, 53-104. Cambridge: MIT Press.
- Hoekstra, T. 1984. *Transitivity: Grammatical Relations in Government-Binding Theory*. Dordrecht: Foris.
- Hoekstra, T. 1988. Small clause results. *Lingua* 12, 101-139.
- Hong, S-M. 2005. *Exceptional Case-marking and Resultative Constructions*. Doctoral dissertation, University of Maryland at College Park.
- Ihm, H.B., K.P. Hong & S.I. Chang. 2001. *Korean Grammar for International Learners*. Seoul: Yonsei University Press.
- Jang, Y. 1997. On the so-called adjunct predicates in Korean. In R. Blight & M. Moosally (eds), *Texas Linguistic Forum* 38, 149-160.
- Kang, E. 2001. The *-key* constructions in Korean: Predicate head or complementizer. *Harvard Studies in Korean Linguistics* 9, 433-442.
- Larson, R. 1988. On the double object construction. *Linguistic Inquiry* 19, 335-391.
- Lee, M. 2006. Transitive-based resultative patterns and a case alternation. *Harvard Studies in Korean Linguistics* 11, 631-641.

- Martin, S. 1992. *A Reference Grammar of Korean*. Charles E. Tuttle.
- Neeleman, A. 1994. *Complex Predicates*. Doctoral dissertation, Utrecht University.
- Park, J. 1994. *Morphological Causatives in Korean: Problems in Grammatical Polysemy and Constructional Relations*. Seoul: Taehaksa.
- Rappaport Hovav, M. & B. Levin. 2001. An event structure account of English resultatives. *Language* 77, 766-797.
- Sells, P. 1988. Structural relationships within complex predicates. In Park, B-S. & J.H-S. Yoon (eds), *Selected Papers from the 11th Meeting of the International Circle of Korean Linguistics*, 115-147.
- Simpson, J. 1983a. Resultatives. In L. Levin & M. Rappaport (eds.) *Papers in Lexical-Functional Grammar*, 143-157. Bloomington: Indiana University Linguistics Club.
- Simpson, J. 1983b. *Aspects of Warlpiri Morphology and Syntax*. Doctoral dissertation, MIT.
- Stowell, T. 1981. *Origins of Phrase Structure*. Doctoral dissertation, MIT.
- Stowell, T. 1983. Subjects across categories. *The Linguistic Review* 2, 285-312.
- Yoon, J. H-S. 2007. Raising of major arguments in Korean and Japanese. *Natural Language and Linguistics Theory* 25, 615-653.
- Yoon, J-Y. 1990. *Korean Syntax and Generalized X-Bar Theory*. Doctoral dissertation, University of Texas at Austin.
- Williams, E. 1980. Predication. *Linguistic Inquiry* 11, 208-38.
- Williams, E. 1983. Against small clauses. *Linguistic Inquiry* 14, 287-308.
- Williams, E. 1994. *Thematic Structure in Syntax*. Cambridge, MA: The MIT Press.
- Zanuttini, R. 1996. On the relevance of tense for sentential negation. In A. Belletti & L. Rizzi (eds), *Parameters and Functional Heads*, 181-207. Oxford: OUP.

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