Against the Complex Predicate Analysis of Secondary Predication

This paper presents an argument against the complex predicate analysis of the two types of secondary predication—depictive and resultative—put forth by Cormack and Smith (1999) and Rothstein (2003, 2004) (see also Neeleman and van de Koot 2002 and Pylkkänen 2002).

The complex predicate analysis differs from the traditional approach to secondary predication in the following two key assumptions: i) the depictive and resultative constructions are not to be distinguished in terms of their syntactic structures; ii) in resultative and object-oriented depictive constructions, the secondary predicate does not form a constituent with its predication subject. The examples (1)a-b, cited from Rothstein (2004), show the relevant structures of resultative and object-oriented depictive sentences respectively under the complex predicate analysis.

Such a theory, although its uniform treatment of the two types of secondary predication is appealing, is not free of problems which arise from wider cross-linguistic observations. The following two phenomena, one in English and the other in Japanese, present an empirical issue to assumption i) of the complex predicate analysis. First, English has the verbal participle *-ing*, that appears in depictive sentences, but this form is not allowed as a resultative predicate, as shown in examples (2) and (3). Second, in Japanese, the nominal predicates in depictive and resultative constructions are marked by two different particles, which are in complementary distribution: in a depictive sentence like (4), the predicate is marked by *de*, not *ni*, whereas the resultative predicate as in (5) is marked by *ni*, not *de*. The grammatical contrast between the depictives and resultatives, as in the data (2)-(3) in English and (4)-(5) in Japanese, cannot be explained under the complex predicate analysis, as mentioned by assumption i): that the syntactic structures of the two types of constructions are non-distinct. Furthermore, the observation of secondary predicates in Romance languages raises a theoretical problem to assumption ii). These languages exhibit an overt agreement between a secondary predicate and its subject, as illustrated in the French depictive sentence (6) (cf. Legendre 1997). If the operation Agree/feature checking involves the Head-XP relation, as is generally assumed in the minimalist framework (cf. Chomsky 2000), then such an operation would not been undergone between the secondary predicate and its subject, the two non-constituent elements in the configuration (1)a-b. Therefore, to correctly account for the agreement phenomenon in Romance, either one of the two assumptions—ii) of the complex predicate analysis or the independently well-motivated minimalist assumption—should be dropped.

One way to avoid these problems is to return to the conventional analysis, which posits two distinct structures for resultative and depictive constructions. Assuming, on the one hand, the "small clause" analysis for resultative constructions (cf. Bowers 1997, Hoekstra 1988), and on the other, the "adjunct" analysis for depictives (cf. Legendre 1997, Speas 1990), I propose structure (7) for an English resultative sentence and (8) for a depictive. One point in my proposal that crucially differs from previous theories is that the adjoined depictive constituent is a TP (see Tenny 1994, Rothstein 2004, Wechsler 2005, and others, for discussions of the difference in aspectual structures between depictives and resultatives). Under this proposal, the three issues discussed above disappear. First, the occurrence of English depictive predicates with the participle *-ing* is expected, on the general assumption that the suffix *-ing* is some functional head related to tense. In contrast, the resultative predicates, without such a tense projection, do not appear with *-ing*, as shown in (3). Second, the complementary distribution of *de* and *ni*, the two particles that mark secondary predicates in Japanese, also receives an explanation, under the current proposal coupled with two assumptions: i) the *de* is the phonological contracted form of two syntactic items—*ni* and *te*; and ii) *ni* is the head of PredP (cf. Bowers 1993), which takes an NP complement and *te* is a T (see Nakatani 2004), which takes the PredP as its complement. Historical evidence and the grammaticality of the "*ni-te*" sequence replacing the *de* in depictive sentences support my assumption i). Under this analysis, the depictive sentence (4) is assigned the structure (9). As this structure shows, the occurrence of *de* with a depictive nominal predicate is expected: it is first selected by Pred *ni,* and this PredP is then selected by *te*, the T. This structure thus gives rise to the sequence *ni-te*, phonologically realized as *de*. The resultative predicate, by contrast, appears as a bare PredP, a *ni*P,

since it does not occur with a tense projection.   Thus, the nominal predicate is marked by *ni*, as indicated in structure (10).   Third, the current proposal offers a standard configuration for Spec head agreement.   As shown in structure (11) assigned to the French example (6), the direct object DP, *la viande* 'the meat,' transmits its gender and number features to the PRO in the Spec of PredP, which, in turn, agrees with the functional head, Pred.

Based on this discussion, I conclude that the "two distinct syntax" analysis for secondary predication provided in this paper has higher benefits than the complex predicate analysis, in that the former, not the latter, captures in a principled way the cross-linguistic data presented above.   One important implication of this conclusion concerns the mechanism of predication.   Under the general theory of predication since Williams (1980), a predicate is, by definition, saturated by a single subject. However, in the structures of secondary predication assumed by the complex predicate analysis, the two predicates—primary and secondary—are combined into one, but, importantly, there are two distinct "subjects" of this combined predicate.   In contrast, my proposal maintains the subject-predicate relation as one-to-one, avoiding an *ad hoc* non-constituent predication relation.

Data

(1) a. Mary   [[drank   the coffee$_i$ hot$_i$]$_{V'}$]$_{VP}$ "depictive"

    b. John   [[painted the house$_i$ red$_i$]$_{V'}$]$_{VP}$ "resultative"   (Rothstein 2004: 61)

(2)   She likes to drink tea boiling hot.   "depictive"   (Rothstein 1983: 149)

(3)   *I cried my eyes sparkling.   "resultative"   (Fabb 1984: 106)

(4)   John-ga   sakana-o   [nama*-ni/-de]   tabe-ta   "depictive"
       John-NOM   fish-ACC   raw-NI/-DE   eat-past
       'John ate the fish raw.'

(5)   John-ga   kabe-o   aka-ni/*-de   nut-ta   "resultative"
       John-NOM   wall-ACC   red-NI/-DE   paint-past
       'John painted the wall red.'

(6)   Pierre   mange   la viande   crue   "depictive"
            eat-3s   the meat   raw-fem.sg.
       'Pierre eats the meat raw.'   (Legendre 1997: 45)

(7)   [$_{vP}$ John [$_{VP}$ [$_{VP}$ eat the fish$_i$] [$_{Adjunct\ TP}$ T [$_{PredP}$ PRO$_i$ [$_{Pred'}$ Pred raw]]]]]   "depictive"

(8)   [$_{vP}$ John [$_{VP}$ paint [$_{PredP}$ the wall [$_{Pred'}$ Pred red]]]]   "resultative"

(9)   [$_{vP}$ John-ga   [$_{VP}$ sakana$_i$-o [$_{Adjunct\ TP}$ [$_{PredP}$ PRO$_i$ [$_{Pred'}$ nama-ni]]-te]   tabe]]-ta "depictive"
       John-NOM   fish-ACC   raw-NI/-TE   eat-past

(10)   [$_{vP}$John-ga   [$_{VP}$ [$_{PredP}$ kabe-o   [$_{Pred'}$ aka-ni]] nut]]-ta   "resultative"
       John-NOM   wall-ACC   red-NI paint-past

(11)   [$_{vP}$ Pierre [$_{VP}$ [$_{VP}$ mange la viande$_i$] [$_{Adjunct\ TP}$ T [$_{PredP}$ PRO$_i$ [$_{Pred'}$ Pred crue]]]]]   "depictive"

Selected references

Bowers, J. (1997). A Binary analysis of resultatives. In R. C. Blight & M. Moosally (eds.). *Texas Linguistics Forum 38: the syntax and semantics of predication.* 43-58.

Chomsky, N. (2000). "Minimalist inquiries: The framework". In *Step by Step – Essays in Minimalist Syntax in Honor of Howard Lasnik*, R. Martin, D. Michaels and J. Uriagereka (eds), 89 - 156. Cambridge MA: MIT Press.

Cormack, A. and N. Smith. (1999). Why are depictives different from resultatives? In *Working Papers in Linguistics 11*: 251-284, Phonetics and Linguistics, University College London.

Fabb, N. A. J. (1984). Syntactic Affixation. MIT PhD. dissertation.

Hoekstra, T. (1988). Small Clause Results, *Lingua* 74,

Legendre, G. (1997). Secondary Predication and Functional Projections in French. *Natural Language and Linguistic Theory 15*: 1-45.

Nakatani, K. (2004). Predicate concatenation: A study of the V-*te*-V predicate in Japanese. Doctoral dissertation, Harvard University, Cambridge, Mass.

Neeleman, A. and H. van de Koot. (2002). Bare Resultatives. *Journal of Comparative Germanic Linguistics, 6 (1)*, 1-52.

Pylkkänen. L (2002). Introducing Arguments, PhD dissertation, MIT.

Rothstein, S. (2004). *Structuring Events: A Study in the Semantics of Lexical Aspect.* Blackwell: Oxford.