Against the complex predicate analysis of secondary predication

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This paper provides an empirical argument against the complex predicate analysis of the two types of secondary predication – depictive and resultative – put forth by Cormack & Smith (1999) and Rothstein (2003, 2004). The data coming from various languages present challenges to major assumptions on the syntactic structures of depictives and resultatives adopted by the complex predicate analysis. The issues disappear under the traditional approach to secondary predication, along with the novel argument that depictive secondary predicates are TP adjuncts. Finally, I show that the proposal makes a correct prediction on negated secondary predication in English and Japanese small clause constructions.

1. Introduction

Secondary predication is commonly classified into the two types of constructions — depictives and resultatives — illustrated in (1) and (2) respectively.

(1) **Depictives**
   a. John left the room *angry*. ‘subject-oriented’
   b. John ate the fish *raw*. ‘object-oriented’

(2) **Resultatives**
   John hammered *the metal flat*. 
A depictive predicate as in examples (1a-b) describes a state pertaining to an argument of the main predicate, whereas a resultative predicate as in sentence (2) describes the state of an argument resulting from the action determined by the main verb. In the analyses of these constructions, there are roughly two competing views. The first one is the traditional approach, under which a depictive predicate is analyzed as an adjunct (cf. Roberts 1988, Rothstein 1983, Williams 1980) and a resultative predicate as forming a small clause type constituent with a direct object of the sentence (cf. Bowers 1993, Hoekstra 1988, 1992). Under this approach, the two types of secondary predication are assigned two distinct syntactic structures (see also Zhang 2001 for the analysis of Chinese secondary predication). By contrast, the other approach, the complex predicate analysis, provides a more uniform treatment of these constructions: it combines the primary and the secondary predicates into one and forms a complex predicate.\footnote{See Embick (2004), Larson (1988), Neeleman & van de Koot (2002), Synder (2001), and others for various arguments in favor of the complex predicate analysis.}

One proponent of this analysis, Rothstein (2003, 2004), assigns structures (3) and (4) to the two types of secondary predication.

(3) **Depictives**
   a. John [\( VP [v \text{ drove the car} \text{ drunk}] \)] ‘subject-oriented’
   b. Mary [\( VP [v \text{ drank the coffee hot}] \)] ‘object-oriented’

(Rothstein 2003, 2004)

(4) **Resultatives**
   John [\( VP [v \text{ painted the house red}] \)]

(Rothstein 2003, 2004)

Similarly, Cormack & Smith (1999) propose structures (5) and (6), using a conjunction null operator which combines the primary and the secondary predicates into a complex one.

(5) **Depictives**
   a. John \( [sp[$ \text{[angry]}] [VP left the room]] \) ‘subject-oriented’
   b. Lucy drinks both tea and coffee \( [v [\$ \text{ cold}] [v t]] \) ‘object-oriented’

(Cormack & Smith 1999)

(6) **Resultatives**
   Harry painted both his car and his van \( [v [\$ \text{ red}] [v t]] \)

(Cormack & Smith 1999)

The complex predicate analysis proposed by these authors differs from the traditional approach to secondary predication in the following two key assumptions.
(7) The object-oriented depictive and resultative constructions are not to be distinguished in terms of their syntactic structures.

(8) The secondary predicate does not form a constituent with its predication subject.

As the data show, Rothstein’s structures (3b) and (4), as well as Cormack & Smith’s (5b) and (6), are syntactically non-distinct. Also, we observe that in neither Rothstein’s nor Cormack & Smith’s structures, do the secondary predicate and its predication subject of which it is predicated form a constituent.

The goal of this paper is to challenge these two assumptions of the complex predicate analysis, and to propose an alternative analysis of secondary predication.

The paper is organized as follows. Section 2 presents the four sets of data coming from various languages that are problematic with the two key assumptions adopted by the complex predicate analysis. In consideration of these problems, an alternative analysis for depictive and resultative constructions is then provided in section 3. Section 4 applies this proposal to the cross-linguistic phenomena discussed in section 2. In section 4, the analysis of Shim & Den Dikken (2007) of Korean resultative constructions, which appears to conflict with my proposal, is also discussed. Section 5 shows that my proposal of secondary predication makes a correct prediction on two types of phenomena, the one from English and the other from Japanese. Section 6 concludes the discussion.

2. Problems

2.1. Problems with assumption (7)

The complex predicate analysis, although its simpler syntactic configurations assigned to the two types of secondary predication is appealing, is not free of problems which arise from wider cross-linguistic observations. The following three sets of data, the one from English and the other two from Japanese, present empirical issues to assumption (7) of the complex predicate analysis.

First, English has the verbal participle -ing that appears in depictive sentences as illustrated in (9) and (10).

(9) Depictive ‘subject-oriented’
    John decided to leave, thinking the party was over.
    (Williams 1975:249)

(10) Depictive ‘object-oriented’
    a. She likes to drink tea, boiling hot.
    b. We found John at last, sleeping in the library.
    (Rothstein 1983:149)
In contrast, the *-ing form is not allowed to occur in resultative predicates, as shown in examples (11).

\[(\text{11}) \quad \text{Resultative} \]
\[\text{a. *I cried my eyes sparkling.} \quad \text{(Fabb 1984:106)} \]
\[\text{b. *I cooked it disgusting.} \quad \text{(Kratzer 2005:33)} \]

These sentences are ungrammatical, although it is semantically possible, for instance, to express the meaning that my eyes became sparkling as a result of crying and likewise, the interpretation that I cooked something which became disgusting.

Such a contrast in grammaticality between depictives and resultatives is difficult to explain, if we assume that the syntactic structures of object-oriented depictives and resultatives are non-distinct.

Second, a similar problem arises with the Japanese data. The nominal secondary predicates in Japanese are marked by two different particles, *de* and *ni*, and they are in complementary distribution. In a depictive sentence like (12), the predicate is marked by *de*, not *ni*, whereas the resultative predicate as in (13) is marked by *ni*, not *de*.

\[(\text{12}) \quad \text{Depictive} \]
\[\text{John-ga sakana-o \[ nama*-ni /-de \] tabe-ta.} \quad \text{John-NOM fish-ACC raw -NI/-DE eat-PAST} \]
\[\text{‘John ate the fish raw.’} \]

\[(\text{13}) \quad \text{Resultative} \]
\[\text{John-ga kabe-o \[ makka-ni /*-de \] nut-ta.} \quad \text{John-NOM wall-ACC very red-NI/-DE paint-PAST} \]
\[\text{‘John painted the wall very red.’} \]

This morphological variation suggests that the two types of secondary predication represent different syntactic structures.

The difference between depictives and resultatives is further confirmed by the third set of data, again from Japanese, which involves quantifier floating. (14) and (15) show examples of the two types of secondary predication that contain a numeral quantifier (NQ), *ni-dai ‘2-CL,’ which is associated with the direct object, *kuruma-o ‘car-ACC.’

\[(\text{14}) \quad \text{Depictive} \]
\[\text{John-ga kuruma-o ni-dai sinpin-de kat-ta.} \quad \text{John-NOM car-ACC two-CL new-DE buy-PAST} \]
\[\text{‘John bought two cars new.’} \]
(15) **Resultative**

John-ga  kuruma-o  ni-dai  makka-ni  nut-ta.
John-NOM  car-ACC  two-CL  very red-NI  paint-PAST
‘John painted two cars very red.’

In these examples the NQ and its associated NP are adjacent to each other, and the sentences are both grammatical. However, when the NQ in (14)-(15) gets ‘floated’ out of their canonical position, that is, when the NQ is not adjacent to its associated NP, the contrast emerges, as shown in examples (16) and (17).

(16) **Depictive**

John-ga  kuruma-o  sinpin-de  ni-dai  kat-ta.
‘John bought two cars new.’

(17) **Resultative**

*John-ga  kuruma-o  makka-ni  ni-dai  nut-ta.
John-NOM  car-ACC  very red-NI  two-CL  paint-PAST
‘John painted two cars very red.’

(Takezawa 1993:63)

The depictive sentence (16) remains acceptable, while the resultative counterpart is deviant as observed by Takezawa (1993). This contrast suggests that object-oriented depictive and resultative constructions have distinct syntactic statuses.

All these data show that object-oriented depictive and resultative constructions differ in their syntactic structures, thereby presenting a challenge to one of the key assumptions of the complex predicate analysis, namely (7): the object-oriented depictive and resultative constructions are not to be distinguished in terms of their syntactic structures.

### 2.2. Problem with assumption (8)

The second key assumption of the complex predicate analysis (8), i.e., that the secondary predicate and its predication subject do not form a constituent, raises a problem with the agreement phenomenon observed, for example, in Romance languages. Romance languages exhibit overt agreement in number and gender between the secondary predicate and its subject, as illustrated in examples (18) from French and (19a-b) from Italian.²

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² There is a cross-linguistic variation in terms of agreement between the secondary predicate and its subject. German, for example, does not exhibit agreement in the secondary predicate constructions, even if it shows agreement in attributive use. This is illustrated in examples (i)-(ii), which I owe to an anonymous reviewer.
In the minimalist framework, one major proposal as to what configuration leads to agreement is a Spec-head relation (Chomsky 1995, Koopman 2006) as depicted in (20).³

(20) Spec-head relation
If XP agrees with Y, YP has merged with XP in the course of the derivation.

³ An alternative approach to the mechanism of agreement is pursued by Chomsky (2000). He proposes that the operation Agree establishes between the agreement bearing head and a triggering phrase that is in the local domain of the head, where ‘the local domain’ is defined in terms of ‘closest c-command’ (ibid.:122). Cormack & Smith’s (1999) model still remains problematic under this proposal. The target NP is not in the local domain of the agreement bearing head of the secondary predicate. Further, the ternary structure of Rothstein’s (2003, 2004) may not conflict with Agree since the matching NP is in the local domain of the secondary predicate, while this structure is not compatible with another minimalist assumption: syntactic structures are built by the binary operation, Merge (Chomsky 1995, 2000).
On this assumption, the configuration under the complex predicate analysis has difficulty to account for the agreement attested in Romance languages. In the structures proposed by Rothstein (2003, 2004) and Cormack & Smith (1999), the secondary predicate does not form a constituent with its subject, and therefore, the head of the secondary predicate phrase, corresponding to Y in (20) cannot enter into a Spec-head relation with its agreement target NP.⁴

Therefore, given the fact that the secondary predicate and its predication subject undergo agreement in languages like Romance, we may have to drop either one of the two assumptions — the one of the complex predicate analysis (8) or the independently motivated minimalist assumption (20).

In this section, I presented a number of problems faced with the two major assumptions, (7) and (8), adopted by the complex predicate analysis. Section 3 provides an alternative account of secondary predication to circumvent these shortcomings.

3. Proposal

3.1. The “distinct syntax” analysis

In consideration of the cross-linguistic data presented in the previous section, I propose to return to the conventional analysis, which posits two distinct structures for the two types of secondary predication: the “adjunct” analysis for depictive constructions on the one hand, and the “small clause” analysis for resultatives, on the other. My proposal of the syntactic structures of depictive and resultative constructions is given in (21) and (22), respectively.⁵

(21) Depictive

a. John ate the fish raw.

b.  

\[
\begin{array}{c}
\text{John} \\
pP \\
\text{v} \\
\text{v'} \\
\text{VP} \\
\text{eat} \\
\text{the fish} \\
\text{TP} \\
\text{PredP} \\
\text{PRO} \\
\text{Pred} \\
\text{raw}
\end{array}
\]

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⁴ In the present paper, I do not distinguish between NP and DP.

⁵ I assume here that PRO is controlled by the local antecedent, where locality is defined based on the notion of “closest c-command” (Chomsky 2000).
(22) Resultative
   a. John painted the wall red.
   b. 

   One point in this proposal that crucially differs from earlier theories is that the adjoined
   depictive constituent is TP. Here, the depictive predicate phrase as in (21), which I assume to
   be a small clause of the type PredP (cf. Bowers 1993), is selected by a local tense head, and this
   TP is adjoined to the matrix VP. In the structure of resultatives, such a T-node is not present,
   and the PredP is directly selected by the matrix V, as is assumed by Hoekstra (1988, 1992)
   among others.

   A major motivation for this account comes from the observation of the temporal properties
   of the two types of secondary predication. The subsequent subsection is dedicated to this topic.

   3.2. Temporal properties of secondary predication

   Recent works on secondary predication have revealed that depictive and resultative

   In a discussion on depictive constructions, Rothstein argues that these constructions contain
   the temporal dependency constraint between the matrix and the secondary events: the two
   events must go on simultaneously, their run times must coincide. As an example that clearly
   delineates this constraint, she cites example (23).

   (23) John drove the car drunk for an hour.

   (Rothstein 2004:68)

   The sentence asserts that the events of John’s driving the car and of his being drunk took place
   at the same time, and the two events lasted for an hour each. Thus, for this sentence to be true,
   the secondary event, namely John’s being drunk, as well as the matrix event, must have a
   duration of the same one hour.

In contrast, a shared view on resultative constructions is that they are telic: that is, they describe events with a definite endpoint, and at this endpoint, the state denoted by a resultative predicate is attained (see Cormack & Smith 1999, Rothstein 2003, 2004, Wechsler 1997, 2005, and others). The sentence in (24), a run-of-the-mill example of this construction, entails that as the hammering event progresses, the metal becomes flatter and flatter, and finally it attains flatness, at which point the event ends.

(24) John hammered the metal flat.

In other words, the state described by a resultative predicate is associated with an incremental process, and thus its temporal property is unspecified at the starting point of the matrix event. This characteristic of resultatives is confirmed by, for example, the fact that John is hammering the metal flat does not entail that John hammered the metal flat (Wechsler 2005:258). These observations indicate that resultative constructions do not have the same aspectual properties as depictives. While the event denoted by a depictive predicate has its own run time, the resultative event does not have such a duration. A well-known test with adverbials, for an hour and in an hour, shows this difference in aspectual property between the two types of secondary predicates.

(25) He painted the car a brilliant red in an hour/*for an hour.

(Tenny 1994:153)

The resultative sentence (25) is not compatible with an expression of duration, as opposed to the depictive example (23). One way to syntactically represent this variation in temporal properties between the two types of secondary predication is to introduce a tense projection for depictives, and not for resultatives, so that only the former can indicate their temporal duration. This idea provides the basis of the presence of TP in depictive phrases as proposed in structure (21), which departs from the conventional adjunct analysis of depictives. Let us formulate this claim as (26).

The resultative sentence that occurs with a durative adverbial like the example (25) becomes more acceptable in a context where the accomplishment event denoted by the verb is not culminated, as in example (i) provided by a reviewer.

(i) He painted the car red for an hour and then decided to paint it blue.

Another instantiation of this effect is the contrast between the sentences (iia) and (iib), cited from Rothstein (2003). Only the latter, which contains an indefinite NP, yields an atelic reading of the event, thereby allowing the adverbial for an hour.

(ii) a. John sang 3 babies asleep *for hours/in an hour last night.
    b. John sang babies asleep for hours/*in an hour last night.

(ibid.:81)

Thanks to the reviewer for calling my attention to this point.
The event denoted by a depictive secondary predicate has its temporal duration, and this semantic property is syntactically represented by the T that heads a depictive phrase.

In this section, an alternative proposal of secondary predication to the complex predicate analysis has been presented. Based on this proposal, I will provide an explanation of the data from the various languages discussed earlier.

4. Accounts for the cross-linguistic data

4.1. English: -ing participle

In section 2, I presented four sets of data across languages that challenge the key assumptions adopted by the complex predicate analysis. These phenomena are captured in a principled way by my proposal. The account for each phenomenon is in order.

The first case that I discussed is the contrast in grammaticality between English depictive phrases and resultatives containing the verbal participle -ing. Examples are repeated as below.

(27) Depictive
    We found John at last, sleeping in the library. = (10b)

(28) Resultative
    *I cooked it disgusting. = (11b)

The occurrence of the participle -ing with depictive sentences as in (27) is expected, with the general assumption that the suffix -ing is some functional head related to tense and the further assumption that the head of adjunct tense projections is realized as -ing when it selects a verbal projection in English. The relevant structure of (27) under my proposal is shown in (29).

(29) Structure of (27)
    [vp [vp find John at last] [tp -ing [vp PRO, [vp sleep in the library]]]]

In contrast, the -ing participle does not occur with resultative predicates, since this type of secondary predicates lack a T-node. The ungrammaticality of sentences like (28) naturally follows from this account.

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8 See Kratzer (2005) for a different account of the constraint for the -ing participle in resultatives.
4.2. Japanese: de and ni

Second, the proposal also provides an account for the complementary distribution of *de* and *ni*, the two particles that mark secondary predicates in Japanese. As shown in examples (30) - (31), depictive predicates are followed by *de*, while resultatives end with *ni*, and not vice versa.

(30) Depictive

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John-ga    sakana-o [ nama*-ni /-de ] tabe-ta. = 0
John-NOM  fish-ACC  raw  -NI-/DE  eat-PAST
```

‘John ate the fish raw.’

(31) Resultative

```
John-ga    kabe-o      [ makka-ni /*-de ] nut-ta.  = 0
John-NOM  wall-ACC  very red-NI/ -DE paint-PAST
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‘John painted the wall very red.’

This morphological variation between the two constructions is explained by my proposal coupled with the assumption given in (32).

(32) The *de* that follows a nominal predicate is the phonologically contracted form of two lexical items — *ni*, a Pred, and *te*, a T.

Historical evidence supports this assumption. In Old Japanese, more specifically, before the mid-Heian period (9-10C), the particle *de* was not used; instead, the sequence *ni-te* was used (cf. Konoshima 1966, Hashimoto 1969). (33) is an example cited from the *Tale of Genji*, written in the Heian period, illustrating the use of *ni-te* in a depictive sentence.

(33) utiki-sugata-ni-te tati tamahe-ru  hito ari.
    informal-dress-NI-TE stand POLITE-pres person be
    ‘There was a lady standing in informal dress.’

(The Tale of Genji: Wakana)

This historical fact suggests that the particle *de* is lexically composed of *ni* and *te*. The data from Modern Japanese as in (34) confirms this view.

    Taro-NOM  naked-DE/ -NI-TE leave-PAST
    ‘Taro left naked.’
The sentence in (34a) is not totally unacceptable when \textit{de} is replaced by \textit{ni-te}, although stylistically it is slightly awkward. The acceptability increases, though in a more formal context, in an example like (34b). These data indicate that the \textit{de} contains \textit{ni} and \textit{te}. Then what are \textit{ni} and \textit{te}? We have seen that \textit{ni} marks an ending of resultative nominal predicates. Following Nishiyama (1999), I assume that the \textit{ni} is a Pred. Then, what is the other element that composes \textit{de}, namely \textit{te}? Nakatani (2003, 2004) argues that the \textit{te} is a T head (see also Tsujimura 1993). \textit{Te} appears, for example, in sentences like (35), functioning as an aspectual marker.

(35) a. watasi-wa gohan-o tabe-te ki-masi-ta.
     I-TOP meal-ACC eat-TE come-POLITE-PAST
     ‘I have already had a meal (before I came here).’
     (Nakatani 2004:18)

     b. tori-ga saezut-te i-ru.
     bird-NOM chirp-TE exist-PRES
     ‘The bird is chirping.’
     (ibid.:96)

In (35a), the \textit{te} refers to the perfective aspect of the event described by the VP ‘have a meal,’ inducing the sequential reading ‘I have eaten before I came.’ In (35b), the \textit{te}, located between the verbs ‘chirp’ and ‘exist,’ denotes the progressive aspect of the event described by the first verb ‘chirp.’

The assumption (32) states that the two different endings of nominal secondary predicates, \textit{de} and \textit{ni}, differ minimally in one respect: the \textit{de} contains \textit{te}, while the \textit{ni} does not. On this view, I could offer an account for the occurrence of the \textit{de} in Japanese depictive sentences. The depictive sentence (30) is analyzed as in structure (36).
According to my claim (26), the temporal property of a depictive predicate of sentence (30) is syntactically represented by \( te \), the T. Then, as shown in (36), the depictive phrase, a PredP headed by \( ni \), is selected by the \( te \), and we get the linear sequence \( ni-te \), giving rise to the phonological realization of \( de \).

Also, the occurrence of the particle \( ni \) as an ending of resultative predicates follows from the proposal. The relevant structure of example (31) is given below.

I argue that resultative predicates lack a temporal structure. Thus, the resultative phrase, PredP, appears as is, without the presence of a T. The sequence \( ni-te \) is therefore not realized in this structure, correctly excluding the occurrence of \( de \) as a resultative predicate marker.

In this subsection it is shown that the different morphological manifestation attested in Japanese secondary predicates is explained by my proposal: the two types of secondary predicates differ in the presence or the non-presence of a T-node.\(^9\)

\(^9\) One might argue that the different morphological manifestations, \( de \) in depictives and \( ni \) in resultatives, are
4.3. Japanese: quantifier float

The current analysis correctly explains the difference in behavior between Japanese depictive and resultative sentences with regard to quantifier float. The examples showing the crucial contrast between the two types of constructions are repeated as (38) and (39).

(38) Depictive

John-ga kuruma-o sinpin-de ni-dai kat-ta. = (16)

‘John bought two cars new.’

(39) Resultative

*John-ga kuruma-o makka-ni ni-dai nut-ta. = (17)
John-NOM car-ACC very red-NI two-CL paint-PAST

‘John painted two cars very red.’

The observed fact is that when the numeral quantifier (NQ) and its associated NP are not adjacent to each other, the resultative sentence in (39) becomes degraded, while the depictive (38) remains acceptable. The relevant structures assigned to the two sentences are (40) and (41), respectively.

(40) \[
\begin{aligned}
  &vP John-ga [vP kuruma-o] [TP[\text{PredP} PRO \{\text{sinpin-ni}\}-\text{te}] [vP[QP e_i \text{ni-dai } \text{kau}]]
  \\
  &John-NOM car-ACC new-NI-TE two-CL buy
\end{aligned}
\]

(41) \[
\begin{aligned}
  &vP John-ga [vP[\text{PredP} kuruma-o makka-ni ] \text{ni-dai nuru}]
  \\
  &John-NOM car-ACC very red-NI two-CL paint
\end{aligned}
\]

In (40), the NQ, \text{ni-dai} ‘2-CL,’ and its associate, \text{kuruma-o} ‘car-ACC,’ are base-generated in the lower VP, forming a constituent, Quantifier Phrase. Then, \text{kuruma-o} is scrambled out of this QP across the TP adjunct, \text{sinpin-ni-te} ‘new,’ to the VP initial position, leaving its trace behind.\footnote{It is widely held that an NQ and its associated NP (or its trace) must mutually c-command each other (Miyagawa 1989). In structure (40), the mutual c-command requirement between the NQ and the NP is satisfied, thereby offering an acceptable configuration. By contrast, in structure (41), the NQ, \text{ni-dai}, and its associate, \text{kuruma-o}, do not involve movement, which does not affect the argument of the present work.}

In (40), the NQ, \text{ni-dai} ‘2-CL,’ and its associate, \text{kuruma-o} ‘car-ACC,’ are base-generated in the lower VP, forming a constituent, Quantifier Phrase. Then, \text{kuruma-o} is scrambled out of this QP across the TP adjunct, \text{sinpin-ni-te} ‘new,’ to the VP initial position, leaving its trace behind.\footnote{The base position of the accusative NP in structure (40) is indicated by \text{e}. I leave open the question whether or not scrambling in Japanese involves movement, which does not affect the argument of the present work.}
form a constituent. Rather, the accusative NP forms a constituent with the resultative predicate, *aka-ni* ‘red,’ and the whole constituent forms a PredP. In this structure, the mutual c-command condition between the NQ and its associate is not met, correctly analyzing the resultative sentence (39) as ungrammatical.

### 4.4. Romance languages: agreement

Finally, the problem with the agreement phenomenon observed in Romance languages disappears under my proposal. The proposed structures of depictives and resultatives offer a configuration for the agreement to be established between the secondary predicate and its predication subject, complying with the minimalist assumption (20). To illustrate, a French depictive example is repeated as (42a), and its relevant structure is shown in (42b).

(42) a. Pierre mange la viande crue.    = (18)
    ‘Pierre eats the meat raw.’

    b. \[ VP Pierre [VP [VP mange la viande]] [TP [PredP PRO [Pred Pred crue]]]]\]

In (42b), the direct object, *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.

### 4.5. Korean

In this subsection, I take up the analysis of Korean resultatives proposed by Shim & Den Dikken (2007), which appears to be problematic to my proposal.\(^{11}\)

On the basis of a variety of empirical arguments, the authors claim that resultative secondary predicates in Korean are TP adjuncts. One of their arguments deals with (43).

    Jim-NOM throat-NOM/-ACC become.hoarse-KEY cry-PAST-Dcl
    ‘Jim cried his throat hoarse.’

    Jim-NOM rice-ACC belly-NOM/-ACC explode-KEY eat-PAST-Dcl
    ‘Jim ate his belly full.’

\(^{11}\) I thank one of the anonymous reviewers of ConSOLE XVII, whose comments helped me in the development of this subsection.
In these sentences, the subject of the secondary predicates, ‘throat/belly,’ is nominative and not accusative. According to Shim & Den Dikken, this Case marking pattern indicates that Korean resultative predicates are associated with a local tense, on their assumption that the distribution of nominative Case in Korean is closely connected to that of tense. Shim & Den Dikken’s claim that resultative secondary predicates in Korean are TP adjuncts seems to conflict with my argument that resultative secondary predicates are not associated with a tense.

More recently, however, Son (2008) proposes that not all resultative secondary predicates in Korean involve TP adjuncts. She observes that the “TP adjunct” data presented by Shim & Den Dikken (2007) are eventive-resultatives and Korean has another type of resultatives, namely stative-resultatives, which do not syntactically behave in the same way as the eventive ones. Son provides a wide range of data showing the syntactic differences between the two types of resultatives, and argues that eventive resultatives are adjoined to VP, in accordance with Shim & Den Dikken, while statives are small-clause complements of VP. One distinction between the two varieties of resultatives is the different type of Case assigned to the subject of resultative phrases. Observe Son’s examples of stative resultatives in (44).

(44) **Stative-resultative**

a. Chelswu-ka chaysang-ul/*i kkaykkusha-key takk-ass-ta.
   Chelswu-NOM desk-ACC/*NOM clean-KEY wipe-PAST-Dcl
   ‘Chelswu wiped the table clean.’

b. Inho-ka chelpan-ul/*i napcakha-key twutulki-ess-ta.
   Inho-NOM iron.plate-ACC/*NOM flat-KEY pound-PAST-Dcl
   ‘Inho pounded the iron plate flat.’

(Son 2008)

The subject of the secondary predicates in these sentences is marked accusative and not nominative, displaying the opposite Case-marking pattern to that of Shim & Den Dikken’s examples in (43).

Interestingly, she also observes the difference in temporal properties between the two varieties of resultatives. Examples (45a-b) illustrate this contrast.

(45) a. **Stative-resultative**

   Inho-ka o-pwun??-tongun/-maney chelpan-ul
   Inho-NOM five-minute-for/-in iron.plate-ACC
   napcakha-key twutulki-ess-ta
   flat-KEY pound-PAST-Dcl
   ‘Inho pounded the iron plate flat for five minutes/in five minutes.’
b. Eventive-resultative

Inho-ka o-pwun-tongun/?-maney sinpal-i
Inho-NOM five-minute-for/-in shoes-NOM
tahl-key ttwi-ess-ta.
wear.threadbare run-PAST-Dcl

‘Inho ran his shoes threadbare for five minutes/in five minutes.’

On the one hand, the stative resultative sentence (45a) is not perfectly compatible with the adverbial of duration ‘for five minutes,’ while it is allowed to occur with a telic adverbial ‘in five minutes.’ On the other hand, the eventive resultative sentence in (45b) does not conflict with expression ‘for five minutes,’ whereas the oddity arises with ‘in five minutes.’ Son further compares this set of data to the English counterparts shown in (46).

(46) a. John pounded the iron plate flat *for five minutes/in five minutes.
    b. John ran his shoes threadbare *for five minutes/in five minutes.

The English resultatives (46), both stative (a) and eventive (b), pattern with the Korean stative resultative in (45a), and not with the eventive example (45b).

Therefore, if Son’s observation is correct, the eventive resultatives in Korean as in (43) and (45b) differ in their temporal property from that of the stative resultatives in Korean as in (44) and (45a) and of English resultatives like (46): the Korean eventive resulatives can occur with an expression of temporal duration. In this respect, this type of secondary predicate behaves like a standard depictive predicate (see section 3.2). Then, following Son’s analysis, the data that serve as the basis of the TP adjunct analysis of Shim & Den Dikken, are the eventive resulatives, and hence, they are not counterexamples to my claim that resultative secondary predicates lack a temporal structure. I thus conclude that the argument presented by Shim & Den Dikken (2007) does not present an immediate challenge to my proposal.  

In this section, I provided an account for the four sets of cross-linguistic data discussed in section 2, under the distinct syntax approach to secondary predication — the “adjunct” analysis for depictive constructions and the “small clause” analysis for resultatives — coupled with the

Furthermore, M.-J. Kim (2002) and Y.-T. Kim (2007) observe that the suffix -key, which attaches to resulative predicates, also provides a depictive reading, as shown in example (i).

(i) John-un encena pap-ul ttukep-key mek-nun-ta.
    John-TOP always rice-ACC hot-KEY eat-PRES-Dcl
    ‘John always eats rice hot.’ (M.-J. Kim 2002:15)

Along with the data on key-marked eventive resultatives provided by Son (2008), this fact shows that some of the key-marked secondary predicates in Korean do not behave like English-type resultative predicates, but rather pattern like depictives. This confirms the description that not all Korean resulatives pattern with standard resultative sentences, suggesting that the syntactic status of the key-marked secondary predicates in Korean calls for a fuller explanation.
novel argument that the adjoined depictive phrases are TP. The observed phenomena across languages which are problematic under the complex predicate analysis receive an adequate explanation on my account.

Another advantage of the present analysis is that the syntax-semantics mapping is maintained as one to one. This is not the case with the complex predicate analysis proposed by Rothstein (2003, 2004) nor the one proposed by Cormack & Smith (1999). On their assumption, the semantic difference between the object-oriented depictive and resultative constructions is not reflected in their syntactic structures. Thus, the complex predicate analysis requires a more complex semantic calculation to distinguish the two interpretations of object-oriented depictive and resultative sentences. Under the traditional approach, such complexity in semantics could be avoided.

5. Predictions

5.1. Negation

The analysis presented in this paper makes a correct prediction on the following two contexts. The first one is negation of secondary predication in English. I argue that depictive secondary predicate phrases are TP. Then, if we follow Zanuttini (1996) and assume that clausal negation requires TP, we predict that the T which heads a depictive phrase can license negation. This prediction is borne out by examples (47) - (48).

(47) **Depictives**
   a. John left the room not drunk.
   b. John left the meeting not satisfied with the decision.
   c. John met Mary not angry at herself.
   d. John ate the meat not rare.

(Ike-uchi 2003:156) [judgments: original]

(48) **Depictives**
   a. He arrived not proud of what he had done.
   b. Not happy with the results, they abandoned the experiment.

(Fabb 1984:108)

Moreover, Guéron & Hoekstra (1995) observe that the adjuncts with –ing participle can license negation, as shown in (49).

(49) a. Not knowing the answer, John felt at a loss.
   b. This student, not having written any paper, should be flunked.

(ibid.:95)
On the assumption that these sentential adjuncts are subject-oriented depictives, the fact that they allow negation is naturally expected.\textsuperscript{13}

By contrast, we expect that resultative predicates cannot feature negation, since, as I argue, this type of secondary predicate phrases do not include the local T which can license negation. This is indeed the case, as shown in examples (50).

(50) \textit{Resultatives}
   a. *John painted the wall not red.
   b. *John hammered the metal not flat.
   c. *John ran his shoes not threadbare.
   d. *John laughed Mary not silly.

While some of these examples may be interpreted as involving contrastive negation, (e.g., \textit{John painted the wall not red but blue}), it is not possible to analyze them as featuring a clausal negation of resultative secondary predication. This is not the case with depictive sentences as in (47) - (49).

5.2. Small clauses in Japanese

The other expected phenomenon under my analysis is the distribution of the particles \textit{ni} and \textit{de} that attaches to nominal predicates in Japanese small clause constructions. In my account for the occurrence of \textit{ni} and \textit{de} in Japanese secondary predicates (section 4.2), I crucially adopted assumption (32), repeated here.

(51) The \textit{de} that follows a nominal predicate is the phonologically contracted form of two lexical items — \textit{ni}, a Pred, and \textit{te}, a T. = (32)

Now, on the general assumption that small clauses lack tense (cf. Hoekstra 1988, Stowell 1991), it is expected that the nominal predicate that appears in the small clause complement of verbs like \textit{consider} is marked by \textit{ni}, and not \textit{de}, since \textit{de} contains a T. This is what we observe in examples (52).

\textsuperscript{13} While I assume that the present participle adjuncts are subject-oriented depictives like the one in example (i), the adjunction site of the depictive phrase as in (i) may not be the same as that of the depictive predicates as in (ii).

(i) \textit{Angry at John, Bill} didn’t leave the room. Depictive > Neg only (Roberts 1988:707)
(ii) \textit{Bill} didn’t leave the room angry at John. Neg > depictive only (ibid.)

The scope facts with regard to negation indicate that the two types of depictives are to be distinguished syntactically (see Ike-uchi 2003 for discussion on this issue). I am grateful to a reviewer for noting this contrast.
Consider-type verbs

(a) John-ga Mary-o totemo miryokuteki-ni/*-de omot-ta.
   John-NOM Mary-ACC very attractive-NI/-DE consider-PAST
   ‘John considered Mary very attractive.’
   (Takezawa 1993:53; note 18)

(b) John-ga Mary-o totemo miryokuteki-ni/*-de kanzi-ta.
   John-NOM Mary-ACC very attractive-NI/-DE feel-PAST
   ‘John found Mary very attractive.’

Inchoative and causative constructions further provide data that confirm our prediction. It is commonly held that inchoative and causative verbs take a small clause complement. Observe Japanese examples in (53) and (54).

(53) **Inchoative**

John-ga sensei-ni/*-de nat-ta.
John-NOM teacher-NI/-DE become-PAST
‘John became a teacher.’

(54) **Causative**

John-ga Mary-o siawase-ni/*-de si-ta.
John-NOM Mary-ACC happy-NI/-DE make-PAST
‘John made Mary happy.’

The nominal predicate in these examples is marked by *ni* and not *de*, again as correctly predicted by assumption (51).

In this section, I discussed two phenomena, negation of secondary predication in English and small clauses in Japanese. In both cases, the analysis provided in this paper makes a correct prediction.

6. Conclusion

In this paper, I presented an empirical argument based on evidence that comes from different languages against the complex predicate analysis of the two types of secondary predication — depictive and resultative — put forth by Cormack & Smith (1999) and Rothstein (2003, 2004). It is shown that the “two distinct syntax” approach to secondary predication, coupled with the novel argument that depictive secondary predicates are TP adjuncts, works better than the
complex predicate analysis, in that the former, not the latter, captures in a principled way the presented cross-linguistic data.

While I fully acknowledge that most of the arguments in favor of the complex predicate analysis in the literature are left unaddressed in this paper, I hope to have shown that there are some shortcomings to the complex predicate approach and that the traditional “distinct syntax” analysis remains valid in some respects.

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