

Resultative CP in Japanese

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1. Introduction

This paper focuses on the syntactic structure of resultative secondary predicates in Japanese. Resultatives in Japanese have a morphologically complex form composed of the stem of a lexical category and the suffix *-ku* or *-ni*; *-ku* attaches to an adjective, as shown in (1a), whereas *-ni* suffixes to a noun or nominal adjective, as shown in (1b,c):¹

- (1) a. John-ga kuruma-o kiiro-ku nut-ta.
 John-NOM car-ACC yellow-AFF paint-PST
 ‘John painted the car yellow.’
- b. Bill-ga sara-o konagona-ni wat-ta.
 Bill-NOM plate-ACC pieces-AFF break-PST
 ‘Bill broke the plate into pieces.’
- c. Mary-ga teeburu-o kirei-ni hui-ta.
 Mary-NOM table-ACC clean-AFF wipe-PST
 ‘Mary wiped the table clean.’

Although syntactic distribution of these resultatives has been closely studied (Takezawa 1993, Koizumi 1994, Ko 2011), their internal structure has not received much attention. Among a few works that refer to their structure are Nishiyama (1999), who claims that they are PredP, and Kishimoto (2022), who proposes that they be vP.²

In this paper I provide three pieces of evidence that resultatives in Japanese involve a larger structure than they are assumed to in previous studies; in particular,

they have a clausal structure of CP, as illustrated in (2):

- (2) a. John-ga kuruma-o kiiro-ku nut-ta.
 John-NOM car-ACC yellow-AFF paint-PST
 ‘John painted the car yellow.’
- b. John-ga kuruma-o [_{CP} Op_i [_{TP} t_i kiiro-ku]] nut-ta.

The theme argument of these resultatives is assumed to be a null operator that is moved to the specifier of CP and bound by the matrix object. This structure allows the CP to hold a predication relation with the object (see Williams 1980).

The discussion is organized as follows. Section 2 provides evidence for the CP structure of resultatives based on sentential adverbs. Section 3 presents data concerning topic phrases. Section 4 discusses facts about a focus particle. Section 5 offers a few remarks on the structure of the CP domain of resultatives. Finally, a summary of the discussion is given in section 6.

2. Sentential Adverbs

It is observed across languages that sentential adverbs, in particular, epistemic adverbs like *tabun* ‘probably’ and evidential adverbs like *dooyara* ‘apparently’, must precede manner adverbs like *subayaku* ‘quickly’ and *yukkuri* ‘slowly’ when they occur in the same clause (Jackendoff 1972, Cinque 1999). The same restriction is found in Japanese, as shown in (3) and (4):

- (3) a. John-wa sono hon-o tabun subayaku yon-da.
 John-TOP that book-ACC probably quickly read-PST
 ‘John probably read the book quickly.’
- b. * John-wa sono hon-o subayaku tabun yon-da.
 John-TOP that book-ACC quickly probably read-PST

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- (4) a. Mary-wa purezento-o dooyara yukkuri uketot-ta.
 Mary-TOP present-ACC apparently slowly receive-PST
 ‘Mary apparently received the present slowly.’
- b. * Mary-wa purezento-o yukkuri dooyara uketot-ta.
 Mary-TOP present-ACC slowly apparently receive-PST

It is argued by Kishimoto (2013) and Nasu (2019) that the sentential adverbs in question are licensed in CP. On the other hand, the manner adverbs are assumed to occur in vP (Nasu 2019). Given these, it is predictable that the sentential adverbs precede the manner adverbs, but not vice versa, in (3) and (4).

Now note that the sentential adverbs exhibit a peculiar distribution in the resultative construction; they can follow a manner adverb when they occur immediately before a resultative, as shown in (5); the examples are ungrammatical if the resultatives are omitted:

- (5) a. Mary-ga aisukuriimu-o yukkuri tabun *(kata-ku)
 Mary-NOM ice-cream-ACC slowly probably solid-AFF
 koorase-ta.
 freeze-PST
 (Lit.) ‘Mary froze the ice cream slowly probably solid.’
- b. John-ga teeburu-o subayaku dooyara *(kirei-ni)
 John-NOM table-ACC quickly apparently clean-AFF
 hui-ta.
 wipe-PST
 (Lit.) ‘John wiped the table quickly apparently clean.’

The grammaticality of these examples would not be predicted if the resultative construction involved a monoclausal structure. Instead, they indicate that the resultatives occur in an adjunct clause involving CP; the sentential adverbs are

licensed in the adjunct, whereas the manner adverbs are in the matrix clause.

3. Topic Phrases

Some resultatives can select a phrase marked by *nitotte* ‘for’ referring to the evaluator of the state described by them, as shown in (6):

- (6) a. John-ga niku-o roozin-nitotte yawaraka-ku ni-ta.
 John-NOM meat-ACC old.people-for tender-AFF boil-PST
 ‘John boiled the meat tender for old people.’
- b. Mary-ga otya-o kodomo-nitotte tekion-ni
 Mary-NOM tea-ACC child-for suitable-temperature-AFF
 atatame-ta.
 heat-PST
 ‘Mary heated the tea to a suitable temperature for children.’

These *nitotte* phrases cannot occur in these examples if the resultatives are omitted, as shown in (7):

- (7) a. John-ga niku-o (*roozin-nitotte) ni-ta.
 John-NOM meat-ACC old.people-for boil-PST
 (Lit.) ‘John boiled the meat for old people.’
- b. Mary-ga otya-o (*kodomo-nitotte) atatame-ta.
 Mary-NOM tea-ACC child-for heat-PST
 (Lit.) ‘Mary heated the tea for children.’

This confirms that the *nitotte* phrases are selected by the resultatives, but not by the matrix verbs.

Now note that the *nitotte* phrases can bear the topic marker *-wa*, which renders them a contrastive interpretation, as shown in (8):

- (8) a. John-ga niku-o roozin-nitotte-**wa** yawaraka-ku ni-ta.
 John-NOM meat-ACC old.people-for-TOP tender-AFF boil-PST
 ‘John boiled the meat tender for old people.’
- b. Mary-ga otya-o kodomo-nitotte-**wa** tekion-ni
 Mary-NOM tea-ACC child-for-TOP suitable-temperature-AFF
 atatame-ta.
 heat-PST
 ‘Mary heated the tea to a suitable temperature for children.’

It is argued by Kishimoto (2009) that *wa*-marked topic phrases in Japanese, including those having a contrastive meaning, need to be located in the CP domain at LF in order to be licensed. If topic phrases appear in a clause-internal position, they undergo LF-topic movement to CP. Given this hypothesis, the *nitotte* topic phrases in (8) must be placed in CP at LF.

One might wonder whether the topic phrases in (8) are licensed by moving to CP in the matrix clause. However, there is a fact that casts doubt on the claim. In particular, resultatives in Japanese constitute syntactic islands; *nitotte* phrases selected by resultatives cannot be scrambled out of the resultatives without rendering some marginality to the sentence, as shown in (9):

- (9) a. ?? Roozin-nitotte John-ga niku-o yawaraka-ku ni-ta.
 old.people-for John-NOM meat-ACC tender-AFF boil-PST
 ‘For old people, John boiled the meat tender.’
- b. ?? Kodomo-nitotte Mary-ga otya-o tekion-ni
 child-for Mary-NOM tea-ACC suitable-temperature-AFF
 atatame-ta.
 heat-PST
 ‘For children, Mary heated the tea to a suitable temperature.’

It is suggested in previous studies that LF movement as well as overt movement is subject to the island constraints (Choe 1987, Nishigauchi 1990). Kishimoto (2009) observes that LF-topic movement in Japanese also exhibits island effects. Given this, if the topic phrases in (8) were moved to the matrix CP at LF, the examples in (8), like those in (9), would exhibit island effects, contrary to fact. Thus, these examples lead us to conclude that the resultatives involve a CP structure that can host topic phrases.

4. The Focus Particle *dake*

It is known that the focus domain of the particle *dake* ‘only’ is determined according to its structural position. In particular, *dake* can be associated with a constituent that occurs within the maximal projection of the head to which the particle is attached (Kishimoto 2009, see Kuroda 1992, Aoyagi 1999). This is illustrated in (10), where *dake* occurs to the right of tense in the embedded clause; the particle is assumed to be adjoined to T and take TP as its scope in the clause:

- (10) John-ga [Mary-ga hon-o yon-da-**dake** to] it-ta.
 John-TOP Mary-NOM book-ACC read-PST-only that say-PST
 ‘John said that it was only the case that Mary read a book.’

(Kishimoto 2009: 474)

The particle *dake* can be associated with any constituent contained in TP in the embedded clause in (10); the example can be interpreted as “John said it was only Mary that read a book” if the focus of *dake* falls on the embedded subject; it can carry the meaning of “John said it was only a book that Mary read” if the embedded object is taken as the focus; it can also have the interpretation “John said that the only event that took place was Mary’s reading a book” if *dake* takes its scope over the whole embedded clause. On the other hand, *dake* cannot be associated with a constituent located outside TP in the embedded clause in (10); the example cannot be taken to

mean “only John said Mary read a book”, which would be possible if the matrix subject could be focused.

Although it is necessary for a constituent to occur within the focus domain of *dake* to be associated with it, as discussed above, Kishimoto (2009) suggests that a further structural condition is imposed on *dake*-focusing; the constituent cannot be separated from *dake* by the boundary of CP. This is illustrated by the following examples in (11):

- (11) a. John-wa [[Mary-ga sono-hon-o yon-da-**dake** (da)] to]
 John-TOP Mary-NOM that-book-ACC read-PST-only COP that
 it-ta.
 say-PST
 ‘John said that Mary only read that book.’
- b. John-wa [[Mary-ga sono-hon-o yon-da] **to-dake**]
 John-TOP Mary-NOM that-book-ACC read-PST that-only
 it-ta.
 say-PST
 ‘John said only that Mary read that book.’ (Kishimoto 2009: 478)

In (11a), where *dake* is attached to tense in the embedded clause, the particle can be associated with the direct object of the clause, yielding the interpretation “John said that Mary read only that book”, as we saw with *dake* in (10). However, in (11b), where *dake* is attached to the complementizer *to* ‘that’ in the embedded clause, the same interpretation is not available, which indicates that the direct object cannot be taken as the focus of *dake*. On the basis of this observation, Kishimoto (2009) suggests that there is a locality condition on *dake*-focusing; *dake* cannot be associated with a constituent across the clause-boundary of CP.

With this in mind, let us consider *dake*-focusing in the resultative construction. In (12), resultatives take a *nitotte* ‘for’ phrase discussed in the previous section and *dake*

is attached to the matrix verb.

- (12) a. John-wa niku-o Bill-nitotte yawaraka-ku ni-ta-**dake** (da).
 John-NOM meat-ACC Bill-for tender-AFF boil-PST-only COP
 ‘John only boiled the meat tender for Bill.’
- b. Mary-wa otya-o Jill-nitotte tekion-ni
 Mary-NOM tea-ACC child-for suitable-temperature-AFF
 atatame-ta-**dake** (da).
 heat-PST-only COP
 ‘Mary only heated the tea to a suitable temperature for Jill.’

These examples can have the interpretation in which *dake* is associated with the object of the verb; (12a) can be paraphrased as “It was only the meat that John boiled tender for Bill.” They can also carry the meaning in which *dake* takes the entire matrix vP as focus; (12a) can be paraphrased as “what John did was only boiling the meat tender for Bill.” However, they do not yield the construal in which the *nitotte* phrase is taken as the focus of *dake*; (12a) cannot be paraphrased as “It was only for Bill that John boiled the meat tender”.

These observations about the examples in (12) are accounted for if the resultatives are assumed to involve the structure of CP. Since the *nitotte* phrases in (12) would then occur within the CP, they cannot be associated with *dake* in the matrix clause across the clause-boundary. Note that these data are not only consistent with the claim made about the structure of the resultatives in previous sections, they suggest that it is obligatory rather than optional for the resultatives to involve the structure of CP.

5. The Structure of the CP Domain

We have seen three pieces of data that I claim constitute evidence for the CP status of resultatives in Japanese. As noted in section 1, the resultatives are assumed to

involve a null operator in the CP domain that allows them to hold a predication relation with the matrix object. Moreover, it has been proposed in section 3 that topic phrases of the resultatives are licensed in the CP domain. These claims are compatible if we posit that the CP domain is composed of several distinct functional projections, as shown in (13), which is proposed by Rizzi (1997):

- (13) ForceP-TopP*-FocP-TopP*-FinP (Rizzi 1997: 297)

It is argued by Kishimoto (2009) that *wa*-marked topic phrases in Japanese are licensed by filling a specifier position of TopP. It is assumed that the null operator involved in predication of the resultatives is placed in the specifier of ForceP.

Although a close investigation is left for future research, there is a fact that can provide support for this line of approach. As noted by Rizzi (1997), relative operators in Italian cooccur with topics if relatives precede topics, but not vice versa, as shown in (14):

- (14) a. Un uomo a cui, il premio Nobel, lo daranno senz'altro
 'A man to whom, the Nobel Prize, they will give it undoubtedly'
 b. * Un uomo, il premio Nobel, a cui lo daranno senz'altro
 'A man, the Nobel Prize, to whom they will give it undoubtedly'
 (Rizzi 1997: 289)

On the basis of this fact, Rizzi argues that relative operators fill the highest specifier position in the CP domain, that is, Spec,ForceP. Relative operators are comparable to the null operator posited in the structure of resultatives; they both involve non-quantificational A' binding. In particular, they are what is called an anaphoric operator in Rizzi (1997: 292), whose role is to connect a null constant to an antecedent rather than assign a range to a variable like a quantificational operator.³

6. Summary

This paper has been concerned with the structure of resultative secondary predicates in Japanese. It has been argued that they involve a clausal structure of CP by providing three pieces of evidence based on the distribution of sentential adverbs and topic phrases and the interpretation of a focus particle. Furthermore, it has been suggested that the structure of these resultatives contain a null operator as their theme argument; the operator is moved to the specifier of CP and bound by the object of the matrix verb, which allows the resultatives to establish a predication relation with the object.

Notes

1. As regards the syntactic category of the suffixes *-ku* and *-ni* attached to resultatives in Japanese, Nishiyama (1999) claims that they are both copulas, whereas Kishimoto (2022) suggests that *-ni* is a copula but *-ku* is an inflectional morpheme of an adjective. Leaving this issue open, I gloss them as AFF (affix) in this paper.
2. Nishiyama (1999) claims that the suffixes *-ku* and *-ni* attached to resultatives in Japanese are predicative copulas, which he assumes to be overt realizations of Pred proposed in Bowers (1993). Kishimoto (2022) proposes that those resultatives be headed by an invisible verb of a change of state, which selects the complex of a lexical category and a suffix as the complement.
3. Shim and Den Dikken (2007) argue that resultative secondary predicates in Korean involve a clausal structure of TP. It will be a topic of future research to compare their structural properties with those of resultatives in Japanese.

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