# Japanese Predicate Cleft Constructions as a Morphological Reduplication

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Japanese has predicate reduplication constructions (PRCs), which are also called Predicate Cleft Constructions (PCCs), as shown in (1), where two identical predicates appear.

(1) Ben-wa (kinoo) jisyo-o <u>kau/kat-ta</u> koto-WA (\*kinoo) <u>kat-ta</u>. Ben-Top yesterday dictionary-Acc buy/buy-Pst Nml-CTop yesterday buy-Pst 'Ben indeed bought a dictionary (yesterday). (But he returned it back.)'

In this paper, I will observe how this kind of constructions behave and propose an analysis based on Morphological reduplication, comparing with other verb reduplication phenomena in Japanese.

PRCs have the following properties: (i) two identical predicates appear adjacent in the sentence final position, (ii) the first predicate must be followed by either one of the nominalizers (Nml), -koto, -no, and -ni, which is followed by the contrastive topic marker (CTop), -WA, and (iii) the second predicate must be inflected while the first one can in affirmative sentences. In addition, in negative sentences, two predicates must be completely identical and inflected, as in (2).

- (2) a. Ben-wa soko-ni \*i-nai/i-nakat-ta koto-WA i-nakat-ta.
  B-Top there-at stay-Neg/stay-Neg-Pst Nml-CTop stay-Neg-Pst 'Ben indeed wasn't there.
  - b. \* Ben-wa soko-ni iru/i-ta koto-WA i-<u>nakat</u>-ta.
    B-Top there-at stay/stay-Pst Nml-CTop stay-Neg-Pst

Furthermore, causative and potential morphemes prefer two predicates to be identical, and Passive morpheme requires two predicates to be identical, which is given in (3-5).

- (3) a. Ben-wa Sean-ni hon-o ?yomu/\*yom-da koto-wa yom-<u>ase</u>-ta.
  B-Top S-Dat book-Acc read/read-Pst Nml-CTop read-Caus-Pst
  - b. Ben-wa Sean-ni hon-o \*yom-<u>ase</u>-ru/**yom-<u>ase</u>-ta** koto-wa y**om-<u>ase</u>-ta**.

    B-Top S-Dat book-Acc read-Caus/read-Caus-Pst Nml-CTop read-Caus-Pst 'Ben indeed made Sean read a book.'
- (4) a. Ben-wa nihongo-o ?hanasu/\*hanasi-ta koto-wa hanas-<u>e</u>-ta. B-Top Japanese-Acc speak/speak-Pst Nml-CTop speak-Pot-Pst
  - b. Ben-wa nihongo-o \*hanas-<u>e</u>-ru/hanas-<u>e</u>(r)-ta koto-wa hanas-<u>e</u>(r)-ta.

    B-Top Japanese-Acc speak-Pot/speak-Pot-Pst Nml-CTop 'Ben indeed could speak Japanese.'
- (5) a. Ben-wa pasokon-o \*nusumu/\*nusum-da koto-WA nusum-<u>are</u>-ta. B-Top computer-Acc steal/steal-Pst Nml-CTop steal-Pass-Pst

More interestingly, PRCs allow an argument or an adjunct to be clefted along with the predicate, as in (6). In that case, the reduplicated argument or adjunct seems to have some implication or contrasted meaning rather than the predicate.

- (6) a. Ben-wa jisyo-o kau/kat-ta koto-WA jisyo-o kat-ta.
  B-Top dictionary-Acc buy/buy-Pst Nml-CTop dictionary-Acc buy-Pst 'Ben indeed bought a dictionary. (But it was for kids.)'
  - b. Ben-wa hon-o <u>kinoo kaesu/kaesi-ta</u> koto-WA <u>kinoo kaesi-ta</u>. B-Top book-Acc yesterday return/return-Pst Nml-CTop yesterday return-Pst 'Ben indeed returned a book yesterday. (But it was at midnight.)'

Importantly, PRCs do not allow the first predicate to appear in any other places, as in (7).

| (7) a. | *[ <u>kau/kat-ta</u> | koto-WA]    | Ben-wa   | jisyo-o        | t | <u>kat-ta</u> . |
|--------|----------------------|-------------|----------|----------------|---|-----------------|
|        | buy/buy-Pst          | Nml-CTop    | Ben-Top  | dictionary-Acc |   | buy-Pst         |
| b.     | *Ben-wa              | [kau/kat-ta | koto-WA] | jisyo-o        | t | kat-ta.         |
|        | Ben-Top              | buy/buy-Pst | Nml-CTop | dictionary-Acc |   | buy-Pst         |

The observations above show that there is no evidence that tells syntactic movement derives the PRCs in Japanese, which seems to be different from PCCs observed in some other languages, such as Russian, Gbe languages or Hebrew (cf. Abels 2001, Aboh 2003 and Landau 2006).

It is well-known that Japanese has varieties of verb reduplications as shown below:

- (8) a. Taro-wa/-ga LSLT-o **yomi-yomi**, gohan-o tabe-ta T-Top/-Nom L-Acc read-read, meal-Acc eat-Pst 'Taro had a meal with reading LSLT.
  - b. Taro-wa/-ga LSLT-o **yóm-da yom-da**. T-Top/-Nom LSLT-Acc read-Pst read-Pst 'Taro read LSLT quite a lot.'
  - c. Taro-wa/-ga **odori**-ni/-mo **odot-ta**.
    T-Top/-Nom dance-ni/-mo dance-Pst
    'Taro danced a lot.'
  - d. Kono rakugaki-wa subarasi-sugi-te, **kesu**-ni **kes**-(ar)e-nai.

    This doodle-Top great-too-and, erase-NI erase-possible-Neg

    'This doodle is so great that I cannot erase it even though I try to.'

Comparing the productivity of these verb reduplications with that of Japanese PRCs, verb reduplications have restrictions on types of verbs to appear and requirements on the form or the number of morae of a verb, and they seem to have a certain meaning within the specific form. On the other hand, PRCs are completely productive with no restrictions on predicates at all.

I will argue below that there is only one predicate in the syntax, which is reduplicated after Spell-Out in the morpho-phonology domain. Predicate reduplication observed in PRCs is just a morphological effect to make the predicate marked by CTop.

Within the framework of Minimalist Program, I assume that Head-movement optionally applies in the syntax (cf. Chomsky 1995, Marantz 1997). Within the framework of Distributed Morphology, I also assume Morphological Mergers: (i) Lowering operates in terms of hierarchical structure, and (ii) Local Dislocation operates in terms of linear adjacency (Embick and Noyer 2001: 561). The CTop marker is assumed to be a focus sensitive particle adjoins to some phrase level.

Adopting Kotani (2009), I assume that there are two types of Head-movement in the

syntax: Head-movement and Partial Head-movement, as in (9). With Head-movement, movement starts with the root,  $\sqrt{\ }$ , up to T via v successive cyclicly, as in (9a). With Partial Head-movement, movement starts with v to T, skipping the root,  $\sqrt{\ }$ , as in (9b).

## (9) a. **Head-movement**:

(i) Spell-out: Subj  $[\nu_P \ [\nu_P \ Obj \ t_v] \ t_v]$ -CTop  $\sqrt{-\nu-T}$ (ii) Morphology: Subj  $[\nu_P \ [\nu_P \ Obj \ t_v] \ t_v]$ -CTop  $\sqrt{-\nu-T}$ (by Local Dislocation) => Subj Obj-CTop  $\sqrt{-\nu-T}$ 

### b. Partial Head-movement:

(i) Spell-out: Subj  $[vP \ [VP \ Obj \ V] \ t_v]$ -CTop v-T (ii) Morphology: Subj  $[vP \ [VP \ Obj \ V] \ t_v]$ -CTop v-T (by Local Dislocation) => Subj Obj V-CTop V-T

(10a) is a result of Head-movement in (9a). (10b) is a result of Partial Head-movement in (9b).

(10)a. Taro-ga LSLT-**WA** kat-ta. T-Nom L-CTop buy-Pst.

'Taro only bought LSLT.' (2-way ambiguous: Obj-, VP-contrasted)

i) Ben bought only LSLT(, but no other books).' [Obj-contrasted]

ii) Ben did only buying LSLT(, and he didn't do any other things).' [VP-contrasted]

b. Taro-ga LSLT-o kai-WA si-ta. T-Nom L-Acc buy-CTop do-Pst

'Taro only bought LSLT.' (3-way ambiguous: Obj-, VP-, V-contrasted) (10ai-ii) +

iii) Ben did only buying to LSLT(, and he didn't do anything else to LSLT). [V-contrasted]

In the case of no head-movement applied in the syntax, the morphology assembles the heads and inserts a certain lexical item into the head-complex. When CTop adjoins  $\nu$ P, we have T stranding with FP intervening between  $\nu$  and T at Spell-out.

#### (11) No Head-movement when CTop adjoins vP:

(i) Spell-out: Subj  $[v_P \ | \ \sqrt{P} \ ]v$ ]-C**Top** T (ii) Morphology: Subj  $[v_P \ | \ \sqrt{P} \ ]v$ ]-C**Top** T => \*Subj Obj  $\sqrt{-v}$ -C**Top** T

Note that CTop, -WA, only follows something non-verbal and comes at the end of a morpheme/word. This means that CTop cannot directly attach to  $\sqrt{-\nu}$  by itself because of the subcategorization mismatch. In addition, T cannot stand by itself. In order for the head-complex to be suffixed with the CTop marker -WA, the n head must be inserted right before CTop.

## (11') No Head-movement when CTop adjoins vP:

(i) Spell-out: Subj  $[\nu_P \ [\nu_P \ Obj \ \sqrt] \ \nu]$ -CTop T (ii) Morphology: Subj  $[\nu_P \ [\nu_P \ Obj \ \sqrt] \ \nu]$ -CTop T => \*Subj Obj  $[\nu_P \ [\nu_P \ Obj \ \sqrt] \ \nu]$ -CTop  $[\nu_P \ [\nu_P \ Obj \ \sqrt] \ \nu]$ -CTop  $[\nu_P \ [\nu_P \ Obj \ \sqrt] \ \nu]$ -CTop  $[\nu_P \ [\nu_P \ Obj \ ] \ \nu]$ -V-T]

At the same time,  $\sqrt{-v}$  must be reduplicated to form  $\sqrt{-v}$ -T next to the nominalized one so that T can suffix to the stem to realize as a part of the head-complex and the predicate itself has no categorical change in the morphology even though the nominalizer is inserted. As a result, we have an example where the first and the second predicates are not identical like

below:

(12) Taro-wa/-ga LSLT-o **kau** koto-wa **kat-ta**.
Taro-Top/-Nom LSLT-Acc buy Nml-CTop buy-Pst 'Taro indeed bought LSLT.'

When CTop adjoins CP, we have the head-complex nominalized by a nominalizer inserted into C, which is followed by CTop at Spell-out.

- (13) No Head-movement when CTop adjoins CP:
  - (i) Spell-out: Subj  $\left[ \begin{array}{ccc} \sqrt{P} & \text{Obj } \sqrt{J} & v \end{array} \right] \text{ T C-CTop} \\ \text{(ii)} & \text{Morphology:} & \text{Subj } \left[ \sqrt{P} & \text{Obj } \sqrt{J} & v \right] \text{ T C-CTop} \\ & => & *\text{Subj Obj } \sqrt{-v-\text{T-C-CTop}} \\ & => & \text{Subj Obj } \left[ \frac{\sqrt{-v-\text{T-n}}}{-n-\text{CTop}} & \sqrt{-v-\text{T-n}} \right] \end{array}$

Since CTop, -WA, cannot end a sentence,  $\sqrt{-v}$ -T is reduplicated right after that. Such reduplication is inevitable in order to keep the head-complex [+V], with no category changed, in the morphology and in order for CTop to be suffixed to the head-complex. In this case, an example such as (14) is derived. The both predicates are identical in this example.

(14) Taro-wa/-ga LSLT-o **kat-ta** koto-wa **kat-ta**.
Taro-Top/-Nom LSLT-Acc buy-Pst Nml-CTop buy-Pst 'Taro indeed bought LSLT.'

This analysis correctly predicts that nothing but a nominalizer followed by CTop can intervene between two predicates, as in (1), and that, if CTop associates with a predicate phrase including an argument/adjunct, the phrase should be reduplicated, as shown in (6). This analysis also explains the examples in (3-5) with no problem. Finally and most importantly, this analysis must predict that the V-contrasted meaning in (10b) and a PRC example in (1) must have the same meaning, which is correct.

#### References

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