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### 1. Introduction

- Set Merge: when  $\alpha$  and  $\beta$  are merged, either  $\alpha$  or  $\beta$  may supply the label, Chomsky (2008).
- Example (1a) is ambiguous,

(Chomsky 2008:145)

b. read [ $_{\rm DP}$ [ $_{\rm D}$  what][you wrote what]] c. wonder [ $_{\rm CP}$ [ $_{\rm D}$  what][you wrote what]]

(free relative) (interrogative)

- Relabeling: when a single head raises from within a clause and then labels the clause.
- e.g. what in (1b), relabels and nominalizes a clause.
- Cecchetto & Donati (2015), hereafter C&D, develop a comprehensive theory of relativization based on relabeling.
- The wh-relative example in (2a) is derived using man to relabel the underlying clause John saw which man as shown in (2b):
- (2) a. the man which John saw
  - b. [  $_{\rm DP}$  the [  $_{\rm N}$  man [  $_{\rm CP}$  [  $_{\rm DP}$  which man] [ John saw [  $_{\rm DP}$  which man] ] ] ]
- In this theory, relabeling is necessary for relativization.
- (3a) cannot be interpreted as an (in-situ) free relative, and only heads are permitted to relabel
  - (3b) only has available a clausal reading (cf. (1a)):
- (3) a. you read what
  - b. [CP [what book] you read what book]
- We extend C&D's relabeling analysis to account for basic Japanese relative clauses.
- Japanese has internally headed relative clauses and externally headed relative clauses.
  - (4a) is an internally-headed relative (IHR) clause with a nominalizing (NM) morpheme -no (cf. Kuroda 1992)
- (4b) is an externally-headed relative (EHR) clause with the external head keeki 'cake'.
- (4) a. Yoko-wa [[Taro-ga sara-no ue-ni keeki-o oita]-no]-o tabeta Yoko-Top Taro-Nom plate-Gen on-Loc cake-Acc put-NM-Acc ate
  - Yoko-wa [[Taro-ga sara-no ue-ni oita] keeki]-o tabeta
  - Yoko-Top Taro-Nom plate-Gen on-Loc put cake-Acc ate 'Yoko ate the cake that Taro put on the plate' (Shimoyama 1999:147)
- Shimoyama argues against an invisible LF-raising account of IHRs based on scope facts. (5a-b) exhibit a scope contrast with respect to *hotondo* 'most'.
- In (5a) most of the cookies were in the fridge. If kukkii 'cookie' were to undergo LF raising together with hotondo, then hotondo should be able to get higher scope with kukkii-o hotondo in the relative clause head position (cf. Shimoyama 1999).
- In (5b) most of the cookies were brought to the party.
- (5) a. Taro-wa [[Yoko-ga reezooko-ni kukkii-o hotondo irete-oita]-no]-o paatii-ni motte-itta Taro-Top Yoko-Nom fridge-Loc cookie-Acc most put-Aux-NM-Acc party-Dat brought Yoko put most cookies in the fridge and Taro brought them to the party
  - b. Taro-wa [[Yoko-ga reezooko-ni irete-oita] k ukkiro hotondo] paatii-ni motte-itta
    Taro-Top Yoko-Nom fridge-Loc put-Aux cookie-Acc most party-Dat brought
    'Taro brought most cookies that Yoko put in the fridge to the party' (Shimoyama 1999:149-150)
- Question: How does relabeling work in Japanese relative clauses, if there is no raising

# 2. Proposals

- The nominalizer -no is the relabeler that precipitates relativization.
- The nominalizer -no blocks extraction causes an island effect There is no raising and relabeling in an IHR such as (5a).
- In (5a) assume that the phrase kukkii-o hotondo 'most cookies' is formed in-situ and does not
- The nominalizer no Agrees with (binds) kukkii to obtain an interpretation.

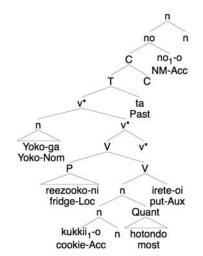


Figure 1: Structure of internally-headed relative clause (5a)

- In the EHR (5b), there is relabeling
  - kukkii raises and Merges with the CP, and kukkii labels.
- categorizer n is Merged.
- hotondo 'most' adjoins to nP.

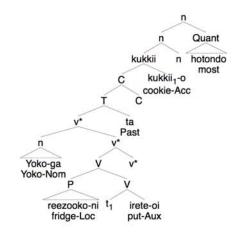


Figure 2: Structure of externally headed relative clause (5b)

- In (5b), why can't the relative head (most salient argument) raise?
  - no creates an island effect
    - no selects for a CP

#### 3. Further Evidence

- In (5b), kukkii raises to become the head of the relative clause, which then merges with hotondo at the matrix clause level, thereby deriving the attested scope facts.
- (6) has the same truth conditions as (5b), indicating that hotondo merges with the relative clause headed by no:
- (6) Taro-wa [[Yoko-ga reezooko-ni kukkii-o irete-oita]-no]-o hotondo paatii-ni motte-itta Taro-Top Yoko-Nom fridge-Loc cookie-Acc put-Aux-NM-Acc most party-Dat brought 'Taro brought most cookies that Yoko put in the fridge to the party'
- Shimovama (1999) observes that, under scrambling, an expected scope difference with a quantificational IHR fails to materialize.
- (7a-b) have the same interpretation.
  - The expected scope difference is observed when EHRs are substituted for the IHRs in (7a-b).
- (7) a. Hotondo-no gakusei-ga [[Taro-ga dono syukudai-mo sikenmae-ni dasita] -no] -o most-Gen student-Nom Taro-Nom every homework before exam-at assigned-NM-Acc turned in
  - dasita]-no]-o, hotondo-no gakusei-ga t, b. [[Taro-ga dono syukudai-mo sikenmae-ni Taro-Nom every homework before exam-at assigned-NM-Acc most-Gen student-Nom teisyutusita

turned in

'Most students turned in every homework that Taro assigned before the exam' (Shimoyama 1999:153)

## 4. Conclusions and Further Issues

- In a Japanese EHR, the root of the relative head freely re-Merges and relabels the CP, followed by obligatory Merge of an external n (as all roots must be categorized) (cf. Fig. 2).
- In a Japanese IHR, since Merge is free, the available option of no re-Merge by the internal relative root is taken; a nominalizer no is externally Merged to nominalize the CP (cf. Fig. 1).
- Relabeling and nominalizer no are in complementary distribution.
- Nominalizer no identifies with a salient argument in the RC
- Note that extra-syntactic head identification is also required in gapless relatives, as in (8).
- (8) [meizin-ga ryoori-sita] azi expert-Nom cooked flavor

the flavor that results when an expert cooks' (Tsujimura 2007:305, per Kitagawa 1982:201).

- Questions arise regarding which arguments no can identify with (bind).
- In the IHR (9a/4a) the object keeki 'cake' can be relativized.
- In (9b), the subject Taro cannot be relativized
- (9) a. Yoko-wa [[Taro-ga sara-no ue-ni keeki-o oita]-no]-o tabeta Yoko-Top Taro-Nom plate-Gen on-Loc cake-Acc put-NM-Acc ate Yoko ate the cake that Taro put on the plate' (Shimoyama 1999:147) b. \*Yoko-wa [[Taro-ga yuka-no ue-ni keeki-o otoshita]-no]-o nagusameta
  - Yoko-Top Taro-Nom floor-Gen on-Loc cake-Acc dropped-NM-Acc comforted Yoko comforted Taro who dropped his cake on the floor.

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