

## Japanese Left Node Raising as ATB-scrambling

Chizuru Nakao (University of Maryland, College Park)

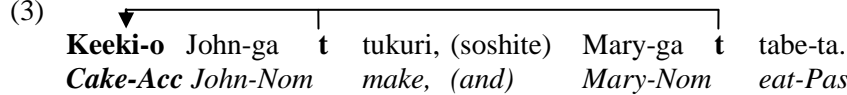
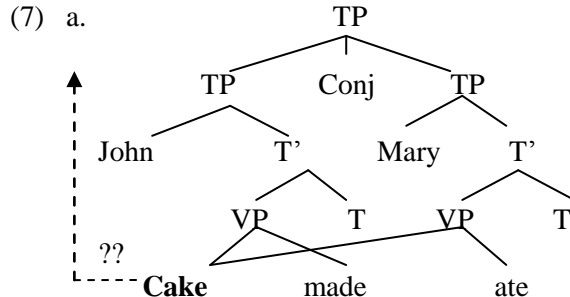
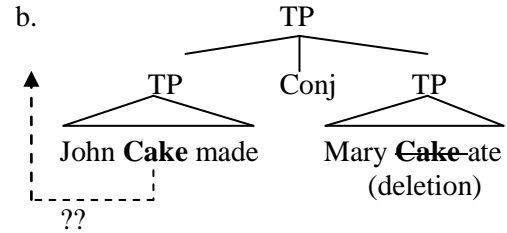
**Introduction:** This work examines properties of what I call **Left Node Raising (LNR)** in Japanese (e.g. (1)). In LNR, (i) two (or more) clauses are conjoined, and (ii) a shared element (e.g. ‘cake’) at the left-edge of the sentence is interpreted in both clauses, similarly to English **Right Node Raising (RNR)**. Given that both **pro-drop** and **scrambling** are available in Japanese, it *should* be possible to derive (1) as in (2a), where the ‘shared’ object is scrambled within the first conjunct and the empty argument in the second conjunct is a **pro** that refers to it. Under this view, LNR is **Null Object Construction (NOC)**: (2b)) plus conjunction of two sentences and the optional scrambling in the first conjunct. I will show below, however, that LNR and NOC behave differently in a number of respects, and argue that LNR is an instance of **ATB-scrambling** ((3)). I propose that the alternative structure (2a) is blocked due to the principle that states that movement is preferred to insertion of pro proposed by [1] and [2].

**LNR is not NOC:** Despite the superficial similarities, LNR and NOC show different behaviors, suggesting that LNR cannot be analyzed as in (2a). **[A] Case Matching:** The Case of the shared argument of LNR must be matched to predicates of both conjuncts. In (4a), the predicate in the first conjunct ‘send a flower to’ requires a Dative argument, while the predicate in the second conjunct ‘comfort’ takes an Accusative object. In such a case, LNR is impossible whether the shared argument (‘Mary’) has a Dative Case or Accusative Case. On the other hand, **pro** in NOC does not have to have the same Case as the antecedent. In (4b), the Accusative **pro** can refer to *Mary-Dat* in the first sentence. **[B] Honorification:** Japanese has inherently honorific NPs. For example, the NP *ozyoosama* ‘daughter<sub>(Hon)</sub>’ refers to a daughter of someone superior, while the NP *musume* ‘daughter’ is used in a neutral way. When a neutral NP *musume* is used, (5a) can mean “The teacher went to see off (his) daughter and I went to pick up (my) daughter,” where the shared argument denotes two daughters (**multiple referents**). When the shared NP is an honorified NP *ozyoosama*, however, the ‘multiple referents’ reading is impossible, because one of the referents (i.e. ‘my daughter’) should not be honorified. On the other hand, NOC allows for honorification mismatch between **pro** and its antecedent; **pro** in (5b) can take the honorified NP *ozyoosama* as its antecedent, and yet can refer to ‘my daughter.’ **[C] Distributive scoping:** Similarly to English RNR ((3)), Japanese LNR allows distributive scoping. (6a) allows the reading where “The song Taro sang and the song Hanako recorded were two different songs.” The NOC example (6b) does not have that reading; it only means that “Taro sang two songs and Hanako recorded the same two songs.” Although the account of distributive scoping is beyond the scope of this work, the contrast indicates that LNR and NOC are different constructions. Note that, although the shared object *can be* in-situ in all of the examples above, the LNR properties [A]-[C] are observed *only when (i) the sentences are conjoined and (ii) the object is fronted*, which shows the distinctiveness of the construction LNR.

**ATB-scrambling analysis:** [A]-[C] suggests that the NOC-based analysis of LNR ((2a)) is not tenable. Especially, [A] and [B] indicate that the shared argument must be identical in form in both conjuncts. To account for these data, I argue that LNR is derived by **ATB-scrambling** ((3)). There are other conceivable alternative analyses (**Multiple Dominance analysis** (7a) and **Deletion analysis** (7b)), but these analyses do not capture the fact that the LNR properties are observed only when (ii) *the object is fronted*; it is unclear why Multiple Dominance/Deletion is allowed only when the object ‘Cake’ moves in (7).

**LNR and Islands:** In our analysis in (3), the empty position in the second conjunct is a **trace** and not **pro**. Thus we predict that **island violation** is observed when the second conjunct involves an island, even if the first conjunct does not. Some informants reject the Complex NP example (8), proving this point. Moreover, even for speakers who accept (8), the properties of LNR observed in (4)-(6) disappear only when LNR involves an island. For example, the [A] **Case-Matching** requirement is absent (i.e. (9) is as good as (8)), and [C] **Distributive scoping** is impossible in (10). Thus I claim that simple LNR is ATB-scrambling, and the latter speakers are using the resumptive pro strategy when there is an island.

**Theoretical consequence:** [1] argues that movement is preferred over the use of pro, based on the fact that Japanese relativization shows movement properties when no island is crossed, and it shows pronoun-like properties when islands blocks movement (See also [2]). Our observation that LNR cannot be NOC unless it involves an island gives a further empirical support to such a principle.

- (1) **Keeki-o** John-ga tukuri, (soshite) Mary-ga tabe-ta. “John made, and Mary ate the cake.”  
*Cake-Acc John-Nom make, (and) Mary-Nom eat-Past*
- (2) a. **Keeki-o<sub>1</sub>** John-ga **t<sub>1</sub>** tukuri, (soshite) Mary-ga **pro<sub>1</sub>** tabe-ta.  
*Cake-Acc John-Nom make, (and) Mary-Nom eat-Past*  
 b. John-ga **keeki-o<sub>1</sub>** tukut-ta. Mary-ga **pro<sub>1</sub>** tabe-ta. “John made a cake. Mary ate (it).”  
*John-Nom cake-Acc make-Past Mary-Nom eat-Past*
- (3) 
- (4) a. \***Mary-ni/o** John-ga hana-o okuri, Tom-ga nagusame-ta.  
*Mary-Dat/Acc John-Nom flower-Acc give, Tom-Nom comfort-Past*  
 “John gave a flower and Tom comforted, (to) Mary.”  
 b. **Mary-ni/\*o** John-ga hana-o okut-ta. Tom-wa **pro** nagusame-ta.  
*Mary-Dat/\*Acc John-Nom flower-Acc sent-Past Tom-Top comfort-Past*  
 “John gave a flower to Mary. Tom comforted (her).”
- (5) a. **Musume-o/\*Ozyoosama-o** sensei-wa omiokuri-ni ik-are, boku-wa mukae-ni it-ta  
*Daughter-Acc/Daughter<sub>(Hon)</sub>-Acc teacher-Top see-off<sub>(Hon)</sub>-to go-Hon, I-Top pick-up-to go-Past*  
 “The teacher went to see off, and I went to pick up, our daughters.”  
 b. **Musume-o/?Ozyoosama-o** sensei-wa omiokuri-ni ik-are-ta.  
*Daughter-Acc/Daughter<sub>(Hon)</sub>-Acc teacher-Top see-off<sub>(Hon)</sub>-to go-Hon-Past*  
 Boku-wa **pro** mukae-ni it-ta.  
*I-Top pick-up-to go-Past*  
 “The teacher went to see off his daughter. I went to pick (mine) up.”
- (6) a. **Hutasu-no tigau kyoku-o** Taro-wa utai, Hanako-wa rokuonsi-ta.  
*Two-Gen different song-Acc Taro-Top sing, Hanako-Top record-Past*  
 “Taro sang, and Hanako recorded, two different songs.”  
 b. **Hutatu-no tigau kyoku-o** Taro-wa utat-ta. Hanako-wa **pro** rokuonsi-ta.  
*Two-Gen different song-Acc Taro-Top sing-Past Hanako-Top record-Past*  
 “Taro sang two different songs. Hanako recorded (them).”
- (7) a.  b. 
- (8) (\*)**Sono saifu-o** Taro-ga **t** hiroi, Hanako-ga [**t** nusum-ooto si-ta otoko]-o oikake-ta.  
*The wallet-Acc Taro-Nom pick-up, Hanako-Nom steal-to do-Past man-Acc chase-Past*  
 “The wallet, Taro picked up \_, and Hanako chased [the man who tried to steal \_].”
- (9) (\*)**Sono zyoyuu<sub>1</sub>-o** Taro-ga nagusame, Hanako-ga [**e<sub>1</sub>** kisusi-ta stookaa]-o oikake-ta.  
*The actress-Acc Taro-Nom comfort Hanako-Nom kiss -Past stalker-Acc chase-Past*  
 “The actress, Taro comforted \_ and Hanako chased [the stalker who kissed \_].”
- (10) **Hutatu-no tigau kyoku<sub>1</sub>-o** Taro-ga utai, Hanako-ga [**e<sub>1</sub>** rokuonsi-ta hito]-ni at-ta.  
*Two-Gen different song-Acc Taro-Nom sing Hanako-Nom record-Past person-Dat meet-Past*  
 “Taro sang \_ and Hanako met [the person who recorded \_], two different songs.”

**References:** [1] Ishii, Y. (1991) *Operators and Empty Categories in Japanese*, Ph.D diss., UConn. [2] Hornstein, N. (2001) *Move! A Minimalist Theory of Construal*, Blackwell: Oxford. [3] Abels, K. (2004) Right Node Raising: Ellipsis or Across the Board Movement. *NELS* 34.