

**Non-Movement Properties and Structural Isomorphism of Fragment Answers in Japanese**

**1. Introduction** This paper provides a non-movement analysis of Fragment Answers (FAs) in Japanese, exemplified in (1), and shows that FAs in Japanese provide strong counterevidence to the two widely-held views on deletion/ellipsis given in (2)-(3). Here and below, lexical pitch accents are indicated by acutes.

- (1) Q: Tároo-wa náni-o tábeta no? - A: kono ringo-(o) (da/desu). (FA)  
 Taro-TOP what-ACC ate Q this apple-ACC COP  
 ‘What did Taro eat?’ ‘this apple.’

(2) A remnant (non-elided) phrase undergoes movement out of the ellipsis site before deletion takes place.

(3) The elided XP and its antecedent YP must be in a (focus-assisted) mutual entailment relation (Merchant 2001).

Arguing against the movement approach (2), we specifically claim that the remnant answer phrase can stay inside the ellipsis site, as illustrated in (4), where deletion eliminates all the recoverable elements.

- (4) ~~[<sub>CP</sub> Tároo-wa~~ [<sub>(+F)</sub> KONO RINGO-(o)] ~~tábeta no~~] da/desu.  
 Taro-TOP this apple-ACC ate C COP.PRES ‘It is that Taro ate THIS APPLE.’

In addition, we will demonstrate that the semantic identity condition (3) is insufficient to accommodate all data of FAs in Japanese, and that the proper analysis of the relevant identity requires certain structural isomorphism.

**2. Arguments against the Movement Approach** Nishigauchi & Fujii (2006) propose a movement analysis, according to which FAs in Japanese are derived from the *no da* focus construction ‘it is that ...XP...’, through the following two steps; (i) the answer phrase undergoes focus-movement and vacates FinP headed by *no*, and then (ii) Deletion applies to the FinP, leaving the answer phrase and the copular intact (see Saito 2004 for a variant of the movement approach).

- (5) a. [[<sub>FinP</sub> Tároo-ga KONO RINGO(-o) tábeta no] da/desu].  
 Taro-NOM this apple-ACC ate C COP.PRES  
 b. [<sub>FocP</sub> KONO RINGO (-o)<sub>i</sub> [<sub>FinP</sub> Tároo-ga *t<sub>i</sub>* tábeta no] da/desu]. (Focus Movement)  
 this apple-ACC Taro-NOM ate C COP.PRES  
 c. [<sub>FocP</sub> KONO RINGO(-o)<sub>i</sub> [~~<sub>FinP</sub> Tároo-ga *t<sub>i</sub>* tábeta no~~] da/desu]. (Deletion)  
 this apple-ACC Taro-NOM ate C COP.PRES

We argue against this analysis, based on the possible readings of numeral quantifiers.

- (6) a. [otokónoko san-nín]-ga kinóo bóoto-o tukútta. (Non-split case)  
 boy three-CL-LNK -NOM yesterday boat-ACC made  
 b.(?) san-nín kinóo [otokónoko]-ga bóoto-o tukútta. (Split case)  
 three-CL yesterday boy-NOM boat-ACC made (Nakanishi 2007)

The non-split case (6a), where the numeral quantifier *san-nin* is adjacent to its host noun *otokonoko*, allows both the collective reading ‘three boys made a boat together yesterday’ and the distributive reading ‘three boys each made a boat yesterday’. In contrast, the split case (6b), where the numeral quantifier is split off from its host noun, lack the collective reading (see Nakanishi 2007). Our crucial data is the following FA, which allows the collective reading as well as the distributive reading.

- (7) Q: kinóo [otokónoko nán-nin]-ga bóoto-o tukútta no? A: go-nín da/desu.  
 yesterday boy how.many-CL-LNK-NOM boat-ACC made Q five-CL COP.PRES  
 ‘How many boys built a boat yesterday?’ ‘Five.’

Under the movement approach (2), the numeral quantifier *go-nin* should be split off from its host noun via movement out of the ellipsis site, just like (6b). Then, the movement analysis wrongly predicts that the FA should lack the collective reading. In passing, we also demonstrate that the bare copular source *sore-wa/pro* XP *da* ‘it/pro is XP’, another possible source put forth by Nishigauchi & Fujii (2006), cannot derive this reading, either. The availability of the collective reading indicates that the non-movement analysis, where the quantifier can stay adjacent to its host noun as in (8), is plausible.

- (8) [~~<sub>CP</sub> kinóo~~ [~~<sub>FinP</sub> otokónoko~~ [<sub>(+F)</sub> GO-NÍN]-ga] ~~bóoto-o tukútta no~~] da/desu.  
 yesterday boy five-CL-LNK -NOM boat-ACC made C COP.PRES

Moreover, the following FA is also problematic to the movement approach, according to which (9A) should be derived from the ungrammatical example in (10) by deletion of FinP.

- (9) Q: sono gakkoo-wa [[doko-gáeri]-no kóosi]-o yatóta no? A: Hurorida da/desu.  
 that school-TOP where-return-LNK teacher-ACC hired Q Florida COP.PRES  
 lit. ‘A teacher returning from where did that school hire?’ ‘Florida.’

- (10) \*<sub>[FocP]</sub> *Hurorida*<sub>i</sub> <sub>[FinP]</sub> sono gakkoo-wa [<sub>t<sub>i</sub></sub>-gáeri]-no kóosi-o yatótta no] da/desu.  
 Florida that school-TOP -return-LNK teacher-ACC hired C COP.PRES  
 ‘It is that that school hired a teacher returning from Florida.’

In (9Q), the wh-element *doko* ‘where’ is part of a compound, which is clearly indicated by the occurrence of *rendaku* (sequential voicing) and the deaccentuation of *doko*: *dóko* + *kaeri* → *doko-gáeri* (see, e.g., Kubozono 1999 for an overview of these compounding-specific processes in Japanese phonology). Since part of a compound cannot move in narrow syntax, leaving the other morpheme behind, we conclude that the FA should be derived without movement as illustrated in (11).

- (11) ~~<sub>[CP]</sub> sono gakkoo-wa [[<sub>[+F]</sub> HURORIDA]-gáeri]-no kóosi]-o yatótta no]~~ da/desu.  
 that school-TOP Florida-return-LNK teacher-ACC hired Q COP.PRES  
 lit. ‘It is that that school hired a teacher returning from Florida.’

**3. Beyond Semantic Identity** We will further argue that FAs to compound wh-words provides cases where the semantic identity condition (3) is proven to be insufficient. Consider the fact that (13A<sub>1</sub>-A<sub>3</sub>) but not (14A<sub>1</sub>-A<sub>2</sub>) can constitute felicitous answers to the question in (12Q).

- (12) Q: kimi-no tannin-wa [[nani-zuki]-no obasan] dátta no?  
 you-LNK homeroom.teacher-TOP what-loving-LNK ma’am COP.PST Q  
 lit. ‘[A [what-loving] ma’am] was your homeroom teacher?’
- (13) A<sub>1</sub>: zidori da/desu. A<sub>2</sub>: Hinai-zidori da/desu. A<sub>3</sub>: Óbama(-daitóoryoo) da/desu.  
 chicken COP.PRES Hinai-chicken COP.PRES Obama-President COP.PRES  
 ‘Chicken(s).’ ‘Hinai chicken(s).’ ‘President Obama.’
- (14) A<sub>1</sub>:\*[[<sub>RC</sub> Hinái-de umareta] zidori] da/desu. A<sub>2</sub>:\*[[<sub>RC</sub> daitóoryoo dearu] Óbama] da/desu.  
 Hinai-in was.born chicken COP.PRES President is Obama COP.PRES  
 ‘Chicken(s) [<sub>RC</sub> that was/were born in Hinai].’ ‘Obama, [<sub>RC</sub> who is the president].’

The difference between (13A<sub>1</sub>-A<sub>3</sub>) and (14A<sub>1</sub>-A<sub>2</sub>) lies in the structural status of the answer remnant. The remnants in (13A<sub>1</sub>-A<sub>3</sub>) are bare N(oun)s, and thus they can structurally correspond to the wh-morpheme *nani* ‘what’ within a compound in (12Q). In contrast, such an option is unavailable for the remnants in (14A<sub>1</sub>-A<sub>2</sub>), because they contain a relative clause (RC) and thus they are irreducibly phrasal NPs, “larger” than a morphemic N *doko*. Crucially, the relevant “morpheme” vs. “phrase” (or N vs. NP) contrast cannot be captured by any semantic identity condition of the sort in (3): the pairs of (13A<sub>2</sub>)/(14A<sub>1</sub>) and (13A<sub>3</sub>)/(14A<sub>2</sub>) are semantically identical (mutually entailing each other), and (13A<sub>1</sub>-A<sub>3</sub>) and (14A<sub>1</sub>-A<sub>2</sub>) cannot be differentiated in any semantic terms (referentiality, definiteness/specificity, mass/count, individual- vs. property-denoting, etc.). Clearly, then, a certain structural identity condition must be independently required to capture the contrast above. We hypothesize the relevant structural isomorphism condition as in (15), whose effect is illustrated by the ellipsis of CP in (16) (corresponding to (13A<sub>1</sub>) in our analysis), which takes (12Q) as its antecedent CP.

(15) The elided XP and its antecedent YP must be isomorphic in their syntactic structures.

- (16) ~~<sub>[CP]</sub> kánozyo-wa [[<sub>[N[+F]]</sub> zidori]-zuki]-no obasan] dátta no]~~ da/desu  
 she-TOP chicken-loving-LNK ma’am COP.PST C COP.PRES  
 ‘She was [a [chicken-loving] ma’am].’

Note that (14A<sub>1</sub>-A<sub>2</sub>), as well as (13A<sub>1</sub>-A<sub>3</sub>), can constitute felicitous answers to the question in (17Q).

- (17) Q: kimi-no tannin-wa [[náni-ga/o sukí-na] obasan] dátta no?  
 you-LNK homeroom.teacher-TOP what-NOM/ACC fond.of-LNK ma’am COP.PST Q  
 lit. ‘[A ma’am [who is fond of what]] is your homeroom teacher?’

(17Q) is semantically identical with (12Q), while it is minimally different from (12Q) in that *nani* ‘what’ stands as a phrase (NP). The ellipsis of CP with a phrasal NP remnant in (14A<sub>1</sub>-A<sub>2</sub>) can then satisfy the structural isomorphism condition in (15), taking (17Q) as its antecedent CP. Again, the “morpheme” vs. “phrase” (N vs. NP) contrast cannot be captured by the semantic identity condition in (3), lending further support to our structural isomorphism requirement in (15).

**4. Conclusion** To sum up, the FAs in Japanese provide strong evidence for the non-movement approach and the morphosyntactic isomorphism approach over the previous approaches given in (2) and (3).

**References** Nishigauchi & Fujii 2006. Where the island remains (unrepairable). ms. Saito 2004. Ellipsis & pronominal reference in Japanese clefts. *Nanzan Linguistics* 1:21-50. Merchant 2001. *The syntax of silence*. OUP.