# Countersluicing Ken Hiraiwa and Yoshiaki Kobayashi

Abstract. Sluicing deletes everything but a wh phrase. We document a novel phenomenon in Japanese, what we call countersluicing, in which everything but a wh phrase (and what follows it) survives deletion. Countersluicing lacks an overt wh phrase but nevertheless functions as a wh question. We propose that both countersluicing and sluicing have a cleft structure as their underlying structure. Countersluicing is derived from applying argument ellipsis to ForceP. This is exactly the opposite of what happens in sluicing in Japanese: argument ellipsis applies to a topicalized FinP. We provide several pieces of evidence for our analysis, involving multiple foci, connectivity effects, the clausemate condition, and island sensitivity.

#### 1. Introduction

In sluicing, everything but a wh phrase undergoes deletion (Ross 1969):

(1) I heard that Hans J. Wegner designed a famous chair in 1949, but what chair <del>did</del> he design in 1949?

On the assumption that ellipsis is a shared mechanism of universal grammar, it is not surprising that Japanese too has sluicing-like ellipsis phenomena (see Inoue 1976, Takahashi 1994, Merchant 1997, 2001, and Van Craenenbroeck & Lipták 2013, among others):<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The abbreviations used in this article are ACC = accusative, C = complementizer, COP = copula, DAT = dative, FOC = focus, GEN = genitive, FOC = nominative, COP = copula, FOP = copula,

- (2) A: Hans J. Wegner-ga 1949-nen-ni aru
  Hans J. Wegner-nom 1949-year-in certain
  yuumeena isu-o dezainsita n desu yo.
  famous chair-acc designed c cop spp
  '(You know) Hans J. Wegner designed a famous
  chair in 1949.'
  - B: Nan-toiu isu-o (desu ka) ??
    what-called chair-Acc cop q
    'What chair (was it)?'
  - A: The Chair desu.
    The Chair cop
    'It was The Chair.'

As Japanese is a *wh*-in-situ language, a number of works (Nishiyama, Whitman & Yi 1995, Kuwabara 1997, Fukaya & Hoji 1999, Saito 2004, and Hiraiwa & Ishihara 2012, among others) have argued that what looks like sluicing in Japanese derives from a cleft structure, as in (3). A wh phrase first undergoes a focus movement to the specifier of FocP. Then, topicalization applies to FinP, which is nominalized with the complementizer *no*. A sluiced question obtains by deletion of the semantically given topicalized clause (FinP).

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(3) Sluicing in Japanese (Hiraiwa & Ishihara 2012)

[TopP 
$$\{FinP \ [TP \dots t_{XP} \dots \} \ no_{Fin}\}$$
 [ForceP  $\{FocP \ XP_{Focus} \ [Foc' \ t_{FinP} \ desu_{Foc}]\}$ ]  $\{ka_{Force} \} \emptyset_{Top}\}$ 

Thus, according to the analysis of Hiraiwa & Ishihara 2012, the sluicing example in (2B) has the derivation in (4) (see Rizzi 1997 for the articulated CP structure): the topicalized complement clause FinP is deleted, as in (4b), and the copula (in Foc) and the Q complementizer (in Force) are optionally dropped, as in (4c).

- (4) a. [FinP Hans J. Wegner-ga 1949-nen-ni t<sub>i</sub> dezainsita no]-wa nan-toiu Hans J. Wegner-noм 1949-year-in designed с-тор what isu-o<sub>i</sub> desu ka∕? chair-асс сор Q 'What chair was it that Hans J. Wegner designed in 1949?'
  - b.  $[FinP Hans J. Wegner-ga 1949-nen-ni t_i dezainsita no]-wa nan-toiu isu-o_i$

desu ka∕?

c. [FinP Hans J. Wegner—ga 1949-nen-ni t<sub>i</sub> dezainsita no]-wa nan-toiu isu-o<sub>i</sub> desu ka ??

The (optional) appearance of a copula both in *wh*-cleft sentences like (4a) and in sluicing sentences like (4b) provides strong evidence for the cleft-based analysis of Japanese sluicing.<sup>2</sup>

In this short article, we describe an ellipsis phenomenon that is the opposite of sluicing—we call it *countersluicing*—in that everything *but* the *wh* phrase (and what follows it) survives deletion. We provide evidence that the syntactic structures of sluicing and countersluicing are symmetrical and that both phenomena are derived through argument ellipsis.

# 2. Countersluicing

There is a peculiar type of elliptical question in Japanese that is quite frequently used but has never been documented before. Consider the following discourse.

This is the reason why sluicing in Japanese is considered to be derived from a cleft structure, not from a *wh* question.

<sup>&</sup>lt;sup>2</sup> Unlike in sluicing, a copula does not appear in normal wh questions in Japanese:

<sup>(</sup>i) Hans J. Wegner-ga 1949-nen-ni nan-toiu isu-o dezainsimasita (\*desu) ka? Hans J. Wegner-nom 1949-year-in what-called chair-Acc designed cop Q 'What chair did Hans J. Wegner design in 1949?'

(5) A: [Arne Jacobsen-ga dezainsita no]-wa Ant Chair Clefting
Arne Jacobsen-nom designed c-top Ant Chair
desu.
cop

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'It was Ant Chair that Arne Jacobsen designed.'

B: [Hans J. Wegner-ga dezainsita no]-wa
Hans J. Wegner-Nom designed c-TOP
nan-toiu isu-o (desu ka) ??
what-called chair-Acc cop Q
'What chair (was it) that Hans J. Wegner designed?'

B': [Hans J. Wegner-ga dezainsita no]-wa Hans J. Wegner-noм designed с-тор nan-toiu isu-o (desu ka) ✓?

what-called chair-ACC COP Q

Lit. '(What chair was it) that Hans J. Wegner designed?'

A: The Chair desu.

The Chair cop

'It was The Chair.'

Unlike the sluicing seen in (2B), what is deleted in (5B') is not the topicalized FinP; rather, the wh phrase, the Q complementizer, and the copula from the full cleft question in (5B) are deleted. Nevertheless, (5B') is interpreted as a wh question, just as (2B) is. Note that the surface output of countersluicing in (5B') does not contain any wh expression, even though it functions as a wh question.

We call the construction in (5B') countersluicing because what is deleted is the opposite of what is deleted in the well-known sluicing: the topicalized complement clause FinP survives, and it is the focused wh part of the sentence that is deleted.

In Japanese, just in all the other languages of the world, what makes a question a *wh* question is the presence of a *wh* phrase. Consider the minimal pair in (6). The sentence in (6a) is unambiguously a *wh* question. In contrast, (6b), where the *wh* phrase *itu* 'when' is absent, can never have the same interpretation as (6a). Rather, it is obligatorily interpreted as a yes—no question.

(6) Context: Speaker A is explaining when famous  $\sqrt{wh}$ , \*yes-no Danish chairs were designed. Speaker B asks: Hans J. Wegner-ga The Chair-o Zyaa, itu then when Hans J. Wegner-Nom The Chair-Acc dezainsita no ?? designed c 'Then when was it that Hans J. Wegner designed The Chair?' b. Context: Speaker A is explaining famous Danish \*wh, √yes–no chairs. Speaker B asks: Zyaa, Hans J. Wegner-ga *The Chair-*o then Hans J. Wegner-Nom The Chair-Acc dezainsita no ?? designed c 'Then was it Hans J. Wegner that designed *The* 

Now observe that the countersluicing example in (7) is identical to (6b) except for the topic marker -wa at the right edge of the sentence. Nevertheless, (7) is interpreted as a wh question just as (6a) is, and it strictly disallows a yes-no-question interpretation.

(7) Context: Speaker A is explaining when famous Danish chairs were designed. Speaker B asks:

Zyaa, Hans J. Wegner-ga *The Chair*-o dezainsita then Hans J. Wegner-nom *The Chair*-Acc designed no-wa??

c-top

Lit. 'Then (when was it) that Hans J. Wegner designed *The Chair*?'

This indicates that countersluicing is not a pragmatic construction that freely derives an interpretation from the context. It is reasonable, therefore, to posit that a *wh* phrase exists structurally in the derivation of countersluicing, even if it is not visible.

Countersluicing is not completely parallel to sluicing, however. Unlike sluicing, it is limited to matrix clauses:

Chair?'

- (8) Context: Speaker A is explaining when Hans J. Wegner designed *The Chair*. Speaker B says:
  - a. Boku-wa [Hans J. Wegner-ga *The Chair*-о 1sg-тор Hans J. Wegner-nom *The Chair*-асс dezainsita no-wa itu (da) ka] siranakatta. designed с-тор when сор Q knew.not 'I didn't know when it was that Wegner designed *The Chair*.'

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b. Boku-wa [Hans J. Wegner-ga *The Chair-*o dezainsita no-wa itu (da) ka] siranakatta.

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c. \*Boku-wa [Hans J. Wegner-ga *The Chair-*o dezainsita no-wa itu (da) ka] siranakatta.<sup>3</sup>

Thus, it may appear that countersluicing is based on a mechanism that is distinct from that of sluicing. We will demonstrate that this is not the case.

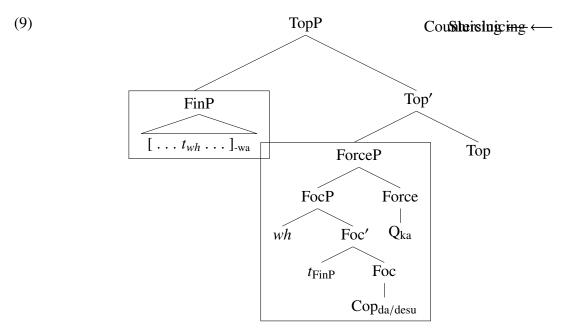
## 3. Proposal

Oku 1998 and S. Kim 1999 argue that what has been considered to be *pro* drop is actually a result of nominal ellipsis applying to the entire DP, and this phenomenon has come to be called *argument ellipsis* (see Saito 2007 and Takahashi 2008). Saito 2004's and Hiraiwa & Ishihara 2012's analyses of sluicing in Japanese assume, explicitly or implicitly, that the semantically given topicalized FinP is deleted by argument ellipsis or a similar operation.

We propose that countersluicing in Japanese also results from argument ellipsis.<sup>4</sup> In the cleft structure in (9), if argument ellipsis applies to the topicalized FinP, we get (straight) sluicing (see Saito 2004 and Hiraiwa & Ishihara 2012). In contrast, if argument ellipsis applies to the remnant ForceP in (9), we get countersluicing.

<sup>&</sup>lt;sup>3</sup> This sentence is grammatical on a factive-complement interpretation, 'I didn't know that Hans J. Wegner designed *The Chair*', but this reading is irrelevant for us here.

<sup>&</sup>lt;sup>4</sup> Argument ellipsis, as its name indicates, was originally proposed to account for argument *pro* drop (Oku 1998, S. Kim 1999). Thus, in its original sense, argument ellipsis is limited to arguments. But it was later discovered that some nonarguments can also be deleted, and the term was extended to cover such cases (see, in particular, Saito 2004, 2007, Oku 2016, and Funakoshi 2016). Whether argument ellipsis is limited to arguments or not is still under debate, and it is not our concern here to go into the matter. In this short article we will use the term *argument ellipsis* in the "broad" sense (i.e., ellipsis of XP), in accord with Saito 2004, 2007, and Oku 2016. But this should be taken as just for convenience. It will not affect our claim if it turns out that the broad interpretation of argument ellipsis is incorrect and the deletion operation involved in sluicing and countersluicing is something else.



The divergence reduces entirely to which syntactic object argument ellipsis targets, FinP or ForceP. Both the sluiced version and the countersluiced version are interpreted as a *wh* question at LF, because argument ellipsis is a PF operation.

Crucially, as Ikawa 2013, Sugisaki 2013, and other works observe, it is impossible to apply argument ellipsis to a *wh* phrase alone and retain the *wh*-question interpretation:

(10) \*Boku-wa [Hans J. Wegner-ga <del>[nan-toiu isu-o]</del> dezainsita ka] 1sg-тор Hans J. Wegner-nom what-called chair-acc designed of siranakatta.

knew.not

Intended: 'I didn't know (what chair) Hans J. Wegner designed.'

This excludes all the analytical possibilities in which the *wh* phrase is deleted independently of the Q complementizer and the copula. It follows that what is deleted must be a larger constituent containing the *wh* phrase, the copula, and the Q complementizer: in our proposal, ForceP.

For further evidence, compare (11B-B'''): in countersluicing, the Q complementizer ka along with the copula must be deleted, as in (11B), even though that is usually optional in matrix questions and in sluicing, as we saw in (2B).

A: [Arne Jacobsen-ga dezainsita no]-wa Clefting (= (5A))(11)Arne Jacobsen-Nom designed c-TOP Ant Chair desu. Ant Chair COP 'It was Ant Chair that Arne Jacobsen designed.' Countersluicing B: [Hans J. Wegner-ga dezainsita no]-wa (= (5B'))Hans J. Wegner-Nom designed c-TOP nan-toiu isu (desu ka)/? what-called chair cop o Lit. '(What chair was it) that Hans J. Wegner designed?' B': \*Hans J. Wegner-ga dezainsita no wa nan-toiu isu desu ka∕? B":\*Hans J. Wegner-ga dezainsita no wa nan-toiu isu desu ka∕?

It follows that the countersluicing in (5B')/(11B) cannot be derived by deleting the wh phrase, the copula, and the Q complementizer independently. Rather, the data make perfect sense if what is deleted in countersluicing is the entire ForceP containing them.

B""\*Hans J. Wegner-ga dezainsita no wa nan-toiu

There is also independent evidence that ForceP can be a target for ellipsis in Japanese. As (12b) shows, an embedded *wh* question (i.e., a ForceP) can undergo ellipsis in its entirety, and the original meaning is preserved.

(12) a. Ken-wa [ForceP Hans J. Wegner-ga itu *The Chair*-o dezainsita Ken-тор Hans J. Wegner-noм when *The Chair*-Acc designed ka](-o) sitteiru kedo . . . o-acc know but

'Ken knows when Hans J. Wegner designed *The Chair*, but . . .'

b. ... boku-wa [ForceP Hans J. Wegner-ga itu *The Chair-*o dezainsita 1sg-top Hans J. Wegner-nom when *The Chair-*Acc designed ka](-o) siranai.

q-acc know.not

isu desu ka 🐴

"... I don't know (when Hans J. Wegner designed *The Chair*)."

c. \*... boku-wa sore-o siranai.

1sg-top it-acc know.not

Intended: '... I don't know it (= when Hans J. Wegner designed *The* 

### Chair).'

Note that the surface form in (12b) cannot be derived by *pro* drop of a pronoun referring to the embedded question, because an overt pronoun is ungrammatical, as (12c) shows. The ellipsis seen in (12b) thus corroborates the proposed analysis of countersluicing in (9), in which the entire constituent ForceP is deleted.<sup>5</sup>

### 4. Symmetries between Sluicing and Countersluicing

Our proposal predicts that countersluicing will, like sluicing, display properties of clefting, simply because the underlying structure in both cases is a cleft.

Clefting and sluicing allow a multiple-focus/multiple-wh-question interpretation in Japanese (Nishigauchi 1998, Hiraiwa & Ishihara 2012), as in (13), and countersluicing allows this same interpretation, as in (14).

(i) Context: Speaker A is explaining what chairs Arne Jacobsen designed. Speaker B asks: Hans J. Wegner-wa??
Hans J. Wegner-top
Lit. '(What chair did) Hans J. Wegner (design)?'

This example is naturally analyzed as countersluicing. FinP remains in situ and it is instead the embedded subject that topicalizes. Then, argument ellipsis applies to ForceP:

(ii)  $[T_{OPP}]$  Hans J. Wegner-wa $_i$   $[F_{OrceP}]$   $t_i$  nan-toiu isu-o dezainsita no desu ka]]  $\nearrow$ ? Hans J. Wegner-TOP what chair-Acc designed c cop Q Lit. '(What chair did) Hans J. Wegner (design)?'

Our thanks to an anonymous reviewer for directing our attention to this possibility.

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<sup>&</sup>lt;sup>5</sup> The following fragmentary question similarly functions as a *wh* question.

(13) a. Aru yuumeena dezainaa-ga mukasi certain famous designer-nom long.time.ago

The Chair toiu isu-o dezainsita soo desu

The Chair called chair-Acc designed I.hear cop

ga...
but

'I heard that some famous designer designed a chair called *The Chair* a long time ago, but . . .'

Clefting

b. ... [The Chair-o dezainsita no]-wa dare-ga

The Chair-Acc designed c-TOP who-NOM

nan-nen-ni desu ka ??

what-year-in cop Q

Lit. '... who in which year was it that designed The

Chair?

C. [The Chair-o dezainsita no]-wa dare-ga

The Chair-Acc designed C-TOP who-NOM

nan-nen-ni desu ka∕?

what-year-in cop Q

Lit. '... who in which year was it (that designed The Chair)?

(14) A: Arne Jacobsen-wa 1952-nen-ni *Ant Chair*-o Arne Jacobsen-Top 1952-year-in *Ant Chair*-Acc dezainsita yo.
designed spp
'Arne Jacobsen designed *Ant Chair* in 1952.'

B: Zyaa, [The Chair-o dezainsita no]-wa dare-ga then The Chair-Acc designed c-TOP who-NOM nan-nen-ni desu ka?? what-year-in cop Q Lit. 'Then who in which year was it that designed The Chair?

B': Zyaa, [The Chair-o dezainsita no]-wa dare-ga then The Chair-Acc designed c-TOP who-NOM nan-nen-ni desu ka ??
what-year-in cop Q
Lit. 'Then (who in which year was it) that designed The Chair?

A: Hans J. Wegner-ga 1949-nen-ni da yo. Hans J. Wegner-nom 1949-year-in cop sfp Lit. 'It was Hans J. Wegner in 1949.'

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Countersluicing also behaves like sluicing and clefting in that it cannot be uttered out of the blue; it requires a suitable context, as in (5), (7), (11), and (14). This too supports our claim that it has the same underlying structure.

Furthermore, the fact that the answer to a countersluiced question, like the answer to a sluiced question, can be a PP clearly shows that it is based on a cleft structure (see Hiraiwa & Ishihara 2012 for connectivity effects):

(15)A: [Hans J. Wegner-ga dareka-no tameni Sluicing Hans J. Wegner-nom someone-gen for Peter's chair-o dezainsita soo desu ga, Peter's chair-Acc designed I.hear cop but [Peter's chair-o dezainsita no]-wa [PP dare-no Peter's chair-Acc designed c-TOP who-gen tameni] desu ka/? for COP O 'I heard that Hans J. Wegner designed Peter's chair for someone, but for whom was it (that he designed Peter's chair)?' B: [PP Børge Mogensen-no musuko-no tameni] desu. Børge Mogensen-gen son-gen for COP 'For Børge Mogensen's son.'

(16) A: [Hans J. Wegner-ga GE258-o dezainsita Clefting Hans J. Wegner-nom GE258-acc designed no]-wa [PP kisyukusya-no tameni] desu. c-top boarding.house-gen for cop 'It is for a boarding house that Hans J. Wegner designed GE258.'

B: [Peter's chair-o dezainsita no]-wa [PP dare-no Countersluicing Peter's chair-Acc designed c-TOP who-GEN tameni] desu ka??

for cop Q

'(For whom was it) that he designed Peter's chair?'

A: [PP Børge Mogensen-no musuko-no tameni]

Børge Mogensen-gen son-gen for desu.

cop

'For Børge Mogensen's son.'

Finally, nonclausemate elements cannot undergo countersluicing any more than they can undergo clefting or sluicing in Japanese (see Hiraiwa & Ishihara 2012):

- (17) Context: Speaker A says that they mistakenly told someone that someone designed *Ant Chair*. Speaker B asks:
  - a. \*[Kimi-ga matigaete [ $t_i$  Ant Chair-o dezainsita 2sg-nom mistakenly Ant Chair-Acc designed to]  $t_j$  itta no]-wa dare-ga $_i$  dare-ni $_j$  desu ka $\nearrow$ ? c told c-top who-nom who-dat cop Q Lit. 'Who to whom was it (that you mistakenly said designed Ant Chair)?'
  - b. \*[Kimi-ga matigaete [ $t_i$  Ant Chair-o dezainsita 2sg-Nom mistakenly Ant Chair-Acc designed to]  $t_j$  itta no]-wa dare-ga $_i$  dare-ni $_j$  (desu ka)  $\nearrow$ ? c told c-Top who-Nom who-DAT cop Q Lit. '(Who to whom was it) that you mistakenly said designed Ant Chair?'

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- (18) Context: Speaker A says that they mistakenly told Ken that Hans J. Wegner designed *Ant Chair*, but speaker B says:
  - \*[Kimi-ga matigaete [ $t_i$  Ant Chair-o dezainsita to]  $t_j$  3sg-nom mistakenly Ant Chair-Acc designed c itta no]-wa Børge Mogensen-ga<sub>i</sub> Naomi-ni<sub>j</sub> desu. told c-top Børge Mogensen-nom Naomi-dat cop Lit. 'It is Børge Mogensen to Naomi that you mistakenly said designed Ant Chair.'

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These facts lend further support to our claim that a cleft structure underlies countersluicing, while they exclude possible alternative analyses.

One might wonder if the countersluicing example in (5B')/(11B) is actually a specificational pseudocleft that consists of a relative clause headed by the proform no, a copula, and a wh phrase, interpreted as 'What is the thing that Hans J. Wegner designed?' This would be a nonmovement analysis, contrary to our proposal that the cleft structure to which countersluicing applies involves a movement dependency between the focused item (a wh phrase, in this case) and the gap in the topicalized remnant. This nonmovement analysis is possible because no is ambiguous between a proform and a complementizer. But that possibility must be rejected, because it is well known that the proform no in Japanese cannot refer to humans (McGloin 1985, Kuroda 1992, Hiraiwa 2016). Crucially, countersluicing can refer to humans, as shown in example (19).

(19) Context: Speaker A says that Arne Jacobsen designed

Ant Chair. Speaker B asks:

[The Chair-o dezainsita no]-wa? Countersluicing

The Chair-Acc designed c-TOP

Lit. '(Who is it) that designed The Chair?'

Furthermore, it is also well known that multiple foci are disallowed with a specificational pseudocleft in Japanese (see Hiraiwa & Ishihara 2012), whereas they are allowed in countersluicing, as (14B') shows.

Thus, the combination of the gap inside the nominalized clause with the fact that *no* must be a complementizer requires a movement analysis of the relation between the gap and the deleted *wh* phrase. And indeed, (20c) shows island sensitivity—whether or not countersluicing applies. This is in sharp contrast with (20b), which does not involve an island-violating dependency.

- (20) a. Hans J. Wegner-ga [1960-nen-no Hans J. Wegner-nom 1960-year-gen daitooryoosen tooronkai-de J. F. Kennedy to presidential debate-at J. F. Kennedy and Richard Nixon-ga suwatta isu]-o dezainsita. Richard Nixon-nom sat.on chair-acc designed 'Hans J. Wegner designed the chair that J. F. Kennedy and Richard Nixon sat on in the 1960 presidential debate.'
  - b. [Ken-ga [1960-nen-no daitooryoosen Ken-nom 1960-year-gen presidential tooronkai-de *t<sub>i</sub>* Hans J. Wegner-no isu-ni debate-at Hans J. Wegner-gen chair-dat suwatta to] itteita no]-wa (dare-ga desu ka) →? sat.on c said c-top who-nom cop Q 'Who was it that Ken said sat on Hans J. Wegner's chair in the 1960 presidential debate?' (Answer: J. F. Kennedy and Richard Nixon)
  - c. \*[Hans J. Wegner-ga [1960-nen-no Hans J. Wegner-nom 1960-year-gen daitooryoosen tooronkai-de  $t_i$  suwatta isu]-o presidential debate-at sat.on chair-acc dezainsita no]-wa (dare-ga desu ka) ?? designed c-top who-nom cop Q Lit. '(Who was it) that Hans J. Wegner designed the chair that  $t_{who}$  sat on in the 1960 presidential debate?' (Answer: J. F. Kennedy and Richard Nixon)

Countersluicing

Countersluicing

Fukaya & Hoji 1999 and Hiraiwa & Ishihara 2012 have already established that clefting and sluicing in Japanese show island sensitivity:<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> In Japanese, it has been observed that island sensitivity in cleft sentences is related to case marking: case-marked clefting/sluicing is island sensitive, whereas non-case-marked clefting/sluicing is not. As an anonymous reviewer points out, the data in (20) are important in that they show that island sensitivity does not depend on whether case marking is overt (as in clefting/sluicing) or unpronounced due to ellipsis (as in countersluicing). This suggests that island sensitivity is not morphological/phonological but rather syntactic. The fact that (20b) cannot have a pseudocleft as its underlying structure suggests that pseudocleft sentences have quite distinct syntax, which would block application of countersluicing,

a. \*[Hans J. Wegner-ga [1960-nen-no daitooryoosen
Hans J. Wegner-noм 1960-year-gen presidential
tooronkai-de t₁ suwatta isu]-o dezainsita no]-wa
debate-at sat.on chair-Acc designed с-тор
dare-ga desu ka⊅?
who-noм сор Q
Lit. 'Who was it (that Hans J. Wegner designed [the
chair [that twho sat on in the 1960 presidential debate]]).' (Answer: J. F. Kennedy and Richard Nixon)

b. \*[Hans J. Wegner-ga [1960-nen-no daitooryoosen Hans J. Wegner-Noм 1960-year-GEN presidential tooronkai-de  $t_i$  suwatta isu]-o dezainsita no]-wa debate-at sat.on chair-Acc designed с-тор J. F. Kennedy to Richard Nixon-ga desu. J. F. Kennedy and Richard Nixon-Noм сор Lit. 'It was J. F. Kennedy and Richard Nixon (that Hans J. Wegner designed [the chair [that  $t_i$  sat on in the 1960 presidential debate]]).'

Clefting

Sluicing

## 5. Asymmetries between Sluicing and Countersluicing

There are two striking asymmetries between sluicing and countersluicing. One is that countersluicing obligatorily deletes the Q complementizer ka. The other is that countersluicing is limited to matrix clauses. We will demonstrate that these asymmetries naturally follow from our analysis.

Let us consider the first asymmetry first. We have already seen the reason for it: countersluicing consists of applying argument ellipsis to ForceP, deleting the Q complementizer ka inside it. But importantly, the deletion of the Q complementizer does not come for free. As the minimally contrasting (22B) and (22B') show, the rising question intonation must be retained in countersluicing.

but we have to leave an investigation of pseudocleft structures for future research. We are grateful to the anonymous reviewer.

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(22)
        A: [Arne Jacobsen-ga dezainsita no]-wa Ant Chair
                                                                        Clefting
             Arne Jacobsen-Nom designed c-TOP Ant Chair
                                                                  (= (5A)/(11A))
            desu.
            COP
            'It was Ant Chair that Arne Jacobsen designed.'
        B: Hans J. Wegner-ga dezainsita no wa
                                                                 Countersluicing
            Hans J. Wegner-nom designed c TOP
                                                                 (= (5B')/(11B))
                       isu (desu ka)/?
            nan-toiu
            what-called chair cop Q
            Lit. '(What chair was it) that Hans J. Wegner de-
            signed?'
        B': *Hans J. Wegner-ga dezainsita no wa
            Hans J. Wegner-nom designed c TOP
            nan-toiu
                       isu (desu ka).
            what-called chair cop Q
             "That Hans J. Wegner designed."
```

Without the rising question intonation, the same string of words is necessarily interpreted as a declarative statement, which is gibberish.

The correlation here is actually more general. As has often been observed (see Yoshida & Yoshida 1996), in Japanese, the Q complementizer ka can be dropped in matrix questions, as (23b) shows, but the rising question intonation cannot be dropped. Absence of the rising question intonation fails to license Q-complementizer drop, as (23c) shows.

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(23)
             Otya-demo nomu ka??
        a.
             tea-even
                        drink o
             'Would you like some tea or something?'
             Otya-demo nomu <del>ka</del>∕?
        b.
             tea-even
                        drink o
             'Would you like some tea or something?'
        c. #Otya-demo nomu ka.
             tea-even
                        drink o
             *'Would you like some tea or something?'
             √'I will drink some tea or something.'
```

This rising question intonation is a feature of matrix questions. It does not occur in embedded questions:

(24) Boku-wa [otya-o nomu ka(\*/)] tazuneta. 1sg-тор tea-acc drink Q asked 'I asked whether they would like some tea.'

From these data, we can make the following generalizations.

- (25) a. Rising question intonation is limited to matrix questions.
  - b. Deletion of the Q complementizer *ka* must be supported by rising question intonation.

We assume, in accord with the Clausal-Typing Hypothesis of Cheng 1991, that a question must be "typed." In Japanese, there are two ways to type a clause as a question: the Q complementizer *ka* and rising intonation.

Thus, a countersluiced question is fine even if the Q complementizer is deleted, because it is a matrix question (a restriction to which we will turn in a moment) and so the rising intonation is available to support the deletion.

The Q complementizer can be deleted in matrix sluicing but not in embedded sluicing. This also makes good sense. It is due to the obligatory lack of rising question intonation in embedded questions in general.<sup>7</sup>

Now, given these properties, the second asymmetry also follows naturally. Because

(i) Context: Speaker A is explaining when Hans J. Wegner designed *The Chair*. Speaker B says:

Boku-wa [Hans J. Wegner-ga *The Chair*-o dezainsita no-wa itu 1sg-top Hans J. Wegner-nom *The Chair*-acc designed c-top when da \*(ka)] siranakatta.

cop Q knew.not
'I didn't know when it was (that Wegner designed *The Chair*).'

Sluicing

This observation seems to pose a challenge for Merchant's Sluicing–Comp Generalization:

(ii) Sluicing–Comp Generalization
In sluicing, no nonoperator material may appear in Comp. (Merchant 2001:62)

Evidently, embedded sluicing requires *ka* simply because rising question intonation, which is the other way to type the clause as a question, is not available. In this respect, embedded sluicing behaves like any other embedded question:

(iii) Boku-wa [otya-o nomu \*(ka)] tazuneta. 1sg-тор tea-Acc drink Q asked 'I asked whether they would like some tea.'

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<sup>&</sup>lt;sup>7</sup> This approach may also explain why embedded sluicing in Japanese must retain the Q complementizer *ka*:

countersluicing requires rising intonation and rising question intonation is not available in embedded questions in general, embedded countersluicing is doomed to crash:

- (26) Context: Speaker A is explaining when each of famous Danish chairs was designed. Speaker B says:
  - a. Boku-wa [Hans J. Wegner-ga *The Chair*-o Clefting 1sg-top Hans J. Wegner-nom *The Chair*-acc dezainsita no-wa itu (da) ka(\*/)] siranakatta. designed c-top when cop q knew.not 'I didn't know when it was that Hans J. Wegner designed *The Chair*.'
  - b. \*Boku-wa [Hans J. Wegner-ga *The Chair*-o dezain-sita no-wa itu (da) ka] siranakatta.<sup>8</sup>

Thus, the apparent asymmetries between sluicing and countersluicing reduce to the fact that countersluicing, unlike sluicing, deletes ForceP, which contains the Q complementizer *ka*; as a result, prosodic clause typing is required (see Cheng 1991).

#### 6. Concluding Remarks

We have documented a novel phenomenon in Japanese, what we call *countersluicing*, in which everything but a *wh* phrase survives deletion. We have proposed that countersluicing is built on a cleft structure and is derived by applying argument ellipsis to ForceP. This is exactly the opposite of what happens in sluicing in Japanese, in which everything but the *wh* phrase is deleted as a result of applying argument ellipsis to

In contrast, ka is optional in matrix sluicing:

(iv) Context: Speaker A is explaining when Hans J. Wegner designed *The Chair*. Speaker B asks:

[Hans J. Wegner-ga *The Chair*-o dezainsita no-wa itu desu (ka)/? Sluicing Hans J. Wegner-nom *The Chair*-acc designed c-top when cop q

'When was it (that Wegner designed *The Chair*)?'

This may well be simply because rising question intonation is available.

One way to understand why rising question intonation is only available in root clauses is to posit that it is located in a very high functional projection—whatever its label might be—that is only present in root clauses (cf. Haegeman 2012; see also Emonds 1970). Then it will necessarily survive deletion of ForceP in countersluicing. We leave this possibility for future consideration.

<sup>8</sup> There is an irrelevant alternate reading of this sentence that is grammatical. See footnote 3.

© 2009 The Author Journal compilation © 2009 Blackwell Publishing Ltd the topicalized FinP. Several pieces of evidence—multiple foci, island sensitivity, and connectivity effects—support our analysis.<sup>9</sup>

It may be predicted that this kind of countersluicing does not exist in languages that lack cleft-based sluicing or argument ellipsis (or constituent ellipsis not based on functional heads). Even though it goes beyond the scope of this article to discuss cross-linguistic data in detail, the prediction seems to be borne out.<sup>10</sup>

English, for example, allows TP ellipsis (sluicing), VP ellipsis, and NP ellipsis—which, according to Lobeck 1991, 1995 and Lobeck & Sleeman 2017, must all be properly licensed by agreement with functional heads—but it does not allow argument ellipsis or countersluicing:

(27) A: Arne Jacobsen designed Ant Chair.

B: \*Then who was it [FinP that designed *The Chair*]?

B': \*Then who designed *The Chair*?

Similarly, Buli and Kabiye (Mabia/Gur languages spoken in Ghana and Togo), which lack argument ellipsis, disallow countersluicing:

(28) Context: Speaker A says Mary ate sushi. Speaker B asks:

a. \*Ka bwa ati John di?

Foc what c John ate

'(What is it) that John ate?'

b. \*Abɛ(-ɛ) John dɔɔ?
what-foc John ate
'(What is it) that John ate?'

Kabiye

Buli

In contrast, Korean, which has argument ellipsis and cleft-based sluicing (J.-S. Kim 1997, S. Kim 1999, among others), does allow countersluicing:

<sup>&</sup>lt;sup>9</sup> An anonymous reviewer asks whether there is any evidence that countersluicing is surface anaphora. The island sensitivity and the connectivity effect do show that countersluicing, like sluicing, is surface anaphora, because they require an underlying syntactic structure (Hankamer & Sag 1976).

<sup>&</sup>lt;sup>10</sup> We are grateful to Abdul-Razak Sulemana and Komlan Essizewa for confirming the Buli and Kabiye data presented below, to Chung-hye Han and Seunghun Lee for confirming the Korean data, and to an anonymous reviewer for asking us to test the prediction.

(29) a. Context: Speaker A says John ate something.

Speaker B asks:

[John-i mekun kes]-un mwues-i-ni/?

Sluicing

John-nom ate c-TOP what-cop-q

'What is it (that John ate)?'

b. Context: Speaker A says Mary ate an apple.

Speaker B asks:

[John-i mekun kes]-un <del>mwues-i-ni</del> ∕??

Countersluicing

John-nom ate c-Top what-cop-q

'(What is it) that John ate?'

It remains to be seen what languages allow countersluicing and, more generally, what can and cannot be deleted in natural languages and how many different types of deletion are allowed in universal grammar.<sup>11</sup>

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(ii) #Then I saw who? I have no idea.

<sup>&</sup>lt;sup>11</sup> Countersluicing might be reminiscent of what are called quizmaster questions (Postal 1972, Authier 1993, Huddleston & Pullum 2002). Quizmaster questions in English typically allow *wh* in situ, and according to Authier 1993, have a flat or falling intonation and a conventional implicature that the answer is available to the speaker (see also Bolinger 1978). It should be emphasized, however, that countersluicing in Japanese functions as a genuine *wh* question and is not limited to quizmaster contexts, with the associated conventional implicature. Thus, (i) is perfectly felicitous even in a monologue context where the speaker initially thought they saw John but it turned out later that it was not him, while the English sentence in (ii) is not felicitous in the same context.

<sup>(</sup>i) Zyaa, [boku-ga ano toki mita no]-wa? Zenzen wakaranai. then 1sg-nom that time saw c-top at.all know.not Lit. 'Then (who was it) that I saw? I have no idea.'

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