# Syntactic Amalgams in Japanese\*

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#### 1. Introduction

#### (1) Goals

- a. To observe that in a certain context, a constituent which normally functions as a CP surprisingly behaves as if it were not.
- b. To propose that this hitherto-undiscussed phenomenon in question is best analyzed as an instance of syntactic amalgams (SAs) in the sense of Lakoff (1974), extending Kluck's (2011, 2014) analysis.
- c. To argue that several differences between the English-type SAs and their Japanese counterparts can be reduced to independently motivated ones.
- →Although the empirical focus of the previous studies on SAs is virtually confined to English and a few Indo-European languages (see, for instance, Tsubomoto & Whitman 2000, Guimarães 2004, Grosu 2006, Kluck 2011, 2014, Johnson 2014; Bhatt 2017), it is shown that there is a comparable phenomenon in Japanese.

#### (2) Roadmap

Section 2: Observations

Section 3: Proposals and Analysis

Section 4: Summary and Further Issues

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# 2. Observations

- (3) Interrogative CPs behaving as indefinite expressions
  - a. Osuro-ni [dare da(tta) ka]-ga iku to kiita

    Oslo-to who Cop Q-Nom go C heard

    '(lit.) I heard that [who it is] (= someone) would go to Oslo.'
  - b. Taroo-ga [nan(i) da(tta) ka]-o katta(-rasii)

    T.-Nom what Cop Q-Acc bought-seem

    '(lit.) (It seems that) Taroo bought [what it is] (= something).'
  - c. Taroo-ga [doko da(tta) ka]-e itta(-rasii)

    T.-Nom where Cop Q-to went-seem

    '(lit.) (It seems that) Taroo went to [where it is] (= somewhere).'
  - d. Taroo-ga [itu da(tta) ka] (-ni) kuru(-rasii)

    T.-Nom when Cop Q-at come-seem

    '(lit.) (It seems that) Taroo would come [when it is] (= sometime).'
  - →In (3), the boxed constituents consisting of the wh-phrase (e.g. dare 'who'), the present/past form of the copula da(tta), and the question-marker ka (call it wh+Cop+Q construction) appear to be in "wrong" positions.
  - → As shown in (4) below, the constituents in question usually serve as interrogative CP arguments.
  - →On the other hand, the ones in (3) are interpreted as indefinite expressions, as their translations suggest.
- (4) Interrogative CPs behaving as clausal arguments
  - a. Mazu, [(sore-ga) dare/nan(i)/doko/itu da(tta) ka]-ga mondai-da first it-Nom who what where when Cop Q-Nom problem-Cop '(lit.) First of all, [who/what/where/when it is] is the problem.'
  - b. Taroo-wa [(sore-ga) dare/nan(i)/doko/itu da(tta) ka]-o sitteiru

    T.-Top it-Nom who what where when Cop Q-Acc know

    '(lit.) Taroo knows [who/what/where/when it is].'
  - c. Wadai-ga [(sore-ga) dare/nan(i)/doko/itu da(tta) ka]-e/ni kawatta topic-Nom it-Nom who what where when Cop Q-to changed '(lit.) The topic has changed to [who/what/where/when it is].'

#### (5) Semantic selection

- a. Kinoo [dare/\*doko da(tta) ka]-ga odotta(-rasii)

  yesterday who where Cop Q-Nom danced-seem

  '(lit.) (It seems that) yesterday, [who it is] (= someone) danced.'
- b. Kinoo [doko/\*dare da(tta) ka]-ga ooyuki-datta(-rasii)

  yesterday where who Cop Q-Nom heavy.snow-Cop

  '(lit.) (It seems that) yesterday, it snowed heavily [where it is] (= somewhere).'
- → The contrast between (5a) and (5b) indicates that the wh-part determines the interpretation of the whole wh+Cop+Q construction.
- → This observation suggests that what enters into the semantic selection with the predicate is not the wh+Cop+Q construction as a whole but its subpart, i.e. the wh-part.
- →Note that in (4), where the wh+Cop+Q constructions are interpreted as interrogative CP arguments, the choice of the wh-part does not affect the whole interpretation of them; they still serve as an interrogative CP (though the content of the question changes).

# (6) Concealed questions?

- a. Taroo-ga [dare da(tta) ka]-o tazuneta(-rasii)

  T.-Nom who Cop Q-Acc asked/visited-seem
  - (i) '(lit.) Taroo asked [who it is].'
  - (ii) '(lit.) Taroo visited someone.'
- b. Taroo-ga {[CP (sore-ga) itu ka] / [DP zikan]-o} tazuneta

  T.-Nom it-Nom when Q time-Acc asked

  '(lit.) Taroo asked [what time it is]/the time.'
- →In (6a), the matrix verb *tazuneta* is lexically ambiguous between 'asked' and 'visited,' and the choice affects the interpretation of the wh+Cop+Q constructions.
- →Note that this is totally different from the situation found in concealed questions like (6b), where the DP is interpreted similarly to the genuinely interrogative CP and the matrix verb *tazuneta* must mean 'asked', no matter whether the complement is a CP or a DP.

- (7) Clausal embedding within wh+Cop+Q
  - Osuro-ni [Taroo-ga [dare da(tta) to] itteita ka]-ga iku to kiita T.-Nom who Cop Oslo-to  $\boldsymbol{C}$ said Q-Nom go Cheard '(lit.) I heard that [who Taroo said [that it is]] (= someone, whose identity Taroo mentioned but I don't remember) would go to Oslo.'
  - b. Taroo-ga [dono onnanoko da(tta) ka]-to dekaketa(-rasii)

    T.-Nom which girl Cop Q-with went.out-seem

    '(lit.) (It seems that) Taroo went out with [which girl it is] (= some girl).'
  - c. Taroo-ga [[dono onnanoko da(tta) to] Ziroo-ga itteita ka]-to

    T.-Nom whichgirl Cop C Z.-Nom said Q-with

    dekaketa(-rasii)

went.out-seem

- '(lit.) (It seems that) Taroo went out with [which girl Ziroo said [that it is]] (= some girl, whose identity Ziroo mentioned but I don't remember).'
- → The wh+Cop+Q construction allows clausal embedding within it as in (7a, c).
- $\rightarrow$ This suggests that the Cop+Q part (i.e. da(tta) ka) is not an ignorable, syntactically-uninteresting appendage.
- → Rather, the wh+Cop+Q construction has internal syntax which can be infinitely long and complex.
- → Note also that the wh-part can be made complex, as in (7b-c).
- (8) Types of complementizers
  - a. Osuro-ni [dare da(tta) ka/\*no/\*to/\*Ø]-ga iku to kiita (cf. (3a))

    Oslo-to who Cop Q C C -Nom go that heard

    '(lit.) I heard that [who it is] (= someone) would go to Oslo.'
  - b. Osuro-ni Taroo-ga [dare da(tta) to] itteita ka/\*no/\*to/\*Ø]-ga Oslo-to T.-Nom who Cop  $\boldsymbol{C}$ said -Nom kiita (cf. (7a)) iku to Cheard go
    - '(lit.) I heard that [who Taroo said [that it is]] would go to Oslo.'
  - $\rightarrow$  The wh+Cop+Q construction must end with the question-marker ka.
  - → Although CPs headed by to and Ø cannot be Case-marked, the unavailability

of *no*, which can be Case-marked, is rather surprising.

 $\rightarrow$  As shown in (8b), *no* is not available even when it follows a verb, not the copula da(tta).

# 3. Proposals and Analysis

#### 3.1. Main ideas and background

- (9) Main ideas
  - a. The wh+Cop+Q construction is an instantiation of syntactic amalgams (SAs) in the sense of Lakoff (1974).
  - b. The wh+Cop+Q construction involves ellipsis and parenthesis, following the spirit of Kluck's (2011, 2014) analysis of SAs.

#### > Background on syntactic amalgams

- (10) SAs in English
  - a. John invited [you'll never guess <u>how many people</u>] to his party.

(adapted from Lakoff 1974:321)

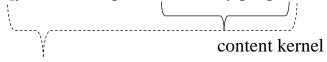
b. John is going to [I think it's Chicago] on Sunday.

(adapted from Lakoff 1974:324)

- → Lakoff (1974) observes that a clausal constituent may occupy the complement position where usually only a nominal can appear, calling the phenomenon *syntactic amalgam*.
- → The examples in (10) exemplify the two sub-varieties of SAs in English; (10a) is called *Andrews Amalgams* and (10b) is called *Horn Amalgams*.

# (11) Terminology

John invited [you'll never guess how many people] to his party.



interrupting clause (IC)

- → Following Kluck (2011, 2014), we call the bracketed part (i.e. the whole clausal constituent) *interrupting clause* (IC) and the underlined part that at least semantically functions as the "real" complement *content kernel*.
- $\rightarrow$  Note that predicates like *invite* and *go to* in (10) never take clausal arguments.

→ Rather, it is the content kernel (minus the wh-part in the case of Andrews Amalgams) that serves as an argument.

#### (12) Clausal embedding

- a. John has donated [IC only his wife knows exactly how much money] to charity ever since he became rich.
- b. John has donated [IC Sarah once told me that [only his wife knows exactly how much money]] to charity ever since he became rich.

(adapted from Guimarães 2004:61)

- → Although SAs may appear to belong to the periphery, previous studies have shown that it is not the case.
- →One such arguments is provided by Guimarães (2004), who observes that SAs allow clausal embedding as shown in (12).
- (13) Cross-linguistic availability and parametric variations: Romance
  - a. John invited 300 people to [IC you can imagine what kind of party].
  - a'. \* John invited 300 people [IC you can imagine **to** what kind of party]. (adapted from Guimarães 2004:85)
  - b. \* João convidou 300 pessoas **pra** [IC você pode imaginar John invited 300 persons to you can imagine que tipo de festa] what kind of party
  - b'. João convidou 300 pessoas [IC você pode imaginar **pra** que tipo de festa] (Portuguese: adapted from Guimarães 2004:86)
  - → Guimarães (2004) also argues that SAs are found in Romance languages such as Portuguese, with certain parametric variations.
  - → As shown in (13), there is a contrast between English and Portuguese with respect to the possible position of the preposition selected by the main verb.
  - → According to Guimarães (2004), this pattern correlates with the possibility of P-stranding.

- (14) Cross-linguistic availability and parametric variations: Germanic
  - a. Bob found -[IC] was it a <u>Stradivarius</u>?] in his attic.
  - b. Bob found [IC can you believe what?!] in his attic.

(adapted from Kluck 2011:68)

- c. Bill heeft [IC het was waarschijnlijk <u>Bea</u>] gekust.

  Bill has it was probably Bea kissed

  'Bill kissed [it was probably <u>Bea</u>].'
- c'. Bill heeft [IC waarschijnlijk was het Bea] gekust.
- c".\* Bill heeft [IC het waarschijnlijk <u>Bea</u> was] gekust.

(Dutch: adapted from Kluck 2011:52)

- → The examples in (14a,b) indicate that SAs exhibit root-properties (to which we return below); Subject-Aux inversion may take place within ICs.
- →In Dutch, ICs exhibit V2, a characteristic property of root clauses in the language, as shown in (14c-c").
- ✓ The observations in (12)-(14) suggest that not only SAs are productive and available in other languages than English but also they reflect the basic syntactic properties of the languages.
- ✓ As far as we are aware of, however, the empirical focus of the previous studies is confined to English and a few European languages (but see Bhatt 2017 for Hindi).

# > The sluicing-and-parenthesis-approach to SAs

- (15) Similarity with sluiced parentheticals
  - a. Bea hit someone you'll never guess who in the face.
    - cf. Bea hit [IC you'll never guess who] in the face.

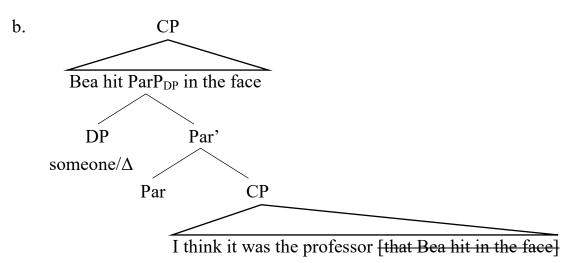
(adapted from Kluck 2011: 293)

- b. Bea hit someone, I think it was the professor, in the face.
  - cf. Bea hit [IC I think it was the professor] in the face.

(adapted from Kluck 2014: 25)

- →Observing that SAs are similar to parenthetical expressions with sluicing such as (15), Kluck (2011, 2014) argues that SAs have the structures in (16).
- (16) Sluicing-and-parenthesis-based approach to SAs

a. CPBea hit  $ParP_{DP}$  in the face  $DP \qquad Par'$ someone/ $\Delta$   $Par \qquad CP$  you'll never guess [who [Bea hit in the face]]



- →In both Andrews Amalgams and Horn Amalgams, what occupies the matrix argument position is Par(enthetical)P, whose categorial status is determined by the element in its Spec.¹
- → ParP takes a CP complement, within which sluicing takes place.<sup>2</sup>
- (17) IC specifies the content of  $\Delta$  through ellipsis-identity

Antecedent: Bea hit  $\Delta$  in the face  $\rightarrow$  F-clo(A) =  $\exists x$ . Bea hit x in the face

Ellipsis: Bea hit  $t_{who}$  in the face  $\rightarrow$  F-clo(E) =  $\exists x$ . Bea hit x in the face

<sup>&</sup>lt;sup>1</sup> Although we have examined the examples where ICs behave as if they were DPs, there are cases in which ICs appear where only adjectives can usually appear.

<sup>&</sup>lt;sup>2</sup> Kluck (2011, 2014) takes reduction of the cleft presupposition is an instance of sluicing.

- → In the case of SAs, the content of the null element in Spec, ParP, (i.e.  $\Delta$ ) is specified by the CP in the complement position (i.e. IC) via establishing the mutual entailment relation (cf. Merchant 2001) between the ellipsis site and its antecedent.
- (18) Position of nominal and clausal arguments in Dutch
  - a. Ik kan me [DP] de film] nog goed herinneren.
    I can REFL the movie still good remember
    'I can still remember [the movie] well.'
  - a'. \* Ik kan me nog goed **herinneren** [DP de film].
  - b. Ik kan me nog goed **herinneren** [CP] welke film Bea gezien heeft].

    I can REFL still good remember which movie Bea seen has

    'I can remember [which movie Bea has seen].'
  - b'. \* Ik kan me [CP] welke film Bea gezien heeft] nog goed herinneren.
  - c. Bob kan zich [IC ik geloof dat het Bea was] nog erg goed
    Bob can REFL I believe that it Bea was still very good
    herinneren.

remember

'Bob can remember [I believe it was Bea] very well.'

- c'. \* Bob kan zich nog erg goed **herrineren** [IC ik geloof dat het Bea was] (Dutch: adapted from Kluck 2011:2-3)
- → In languages like Dutch, when the verb sits in the non-V2 position, nominal arguments precede it while clausal ones follow it, as shown in (18a-a') and (18b-b').
- → As shown in (18c-c'), SAs in Dutch patterns with nominal arguments but not with clausal arguments, despite their appearance.
- (19) Essences of Kluck's analysis
  - a. External syntax: The IC in SAs a *parenthetical* expression modifying a null element, which determines the "label" of the whole constituent.
  - b. Internal syntax: The IC involves *ellipsis*.

- c. ...  $[\Delta P \Delta [IC ... content kernel ... [Ellipsis ...] ...]]...$
- → In the analysis of the wh+Cop+Q construction to be developed, we adopt the essences of Kluck's (2011, 2014) analysis summarized in (19).<sup>3</sup>

## 3.2. Analysis

- (20) The wh+Cop+Q construction
  - a. Osuro-ni [dare da(tta) ka]-ga iku to kiita (= (3a))

    Oslo-to who Cop Q-Nom go C heard

    '(lit.) I heard that [who it is] (= someone) would go to Oslo.'
  - b. Taroo-ga [nan(i) da(tta) ka]-o katta(-rasii) (= (3b))

    T.-Nom what Cop Q-Acc bought-seem

    '(lit.) (It seems that) Taroo bought [what it is] (= something).'

#### (21) Analysis

- a. Oslo-to Oslo-to go C-Nom who Cop 0 -Nom kiita iku to Cheard go '(lit.) I heard that [who it is [that would go to Oslo]] would go to Oslo.'
- b. Taroo-ga [ $_{\Delta P}$  [ $_{IC}$  [Taroo-ga  $e_i$  katta no]-ga nan(i) $_i$  da(tta) ka]]  $_{\Delta}$ ]-o  $_{T.-Nom}$   $_{T.-Nom}$  bought C-Nom what Cop  $_{Q}$  -Acc katta(-rasii) bought-seem
  - '(lit.) (It seems that) Taroo bought [what it is [that Taroo bought]].'
- → We propose that the wh+Cop+Q construction is derived from a cleft construction by eliding the presupposition part.
- The IC, which involves ellipsis, is then assembled with the null element  $\Delta$  as a parenthetical expression, just like Kluck's (2011, 2014) approach.

<sup>&</sup>lt;sup>3</sup> For reasons of time and space, we do not review the other existing approaches to SAs such as the relative clause-based analysis (Tsubomoto & Whitman 2000, Grosu 2006, 2010) and the multidominance-based analysis (van Riemsdijk 1998, 2006a,b, Guimarães 2004, Johnson 2014). See Kluck (2011) for a review of them.

### (22) Japanese "sluicing"

- a. Kinoo dareka-ga kita-rasii-ga, [dare(-ga) da ka] wakaranai yesterday someone-Nom came-seem-but who-Nom Cop Q not.know '(lit.) It seems that someone came yesterday, but I don't know who.'
- b. ... [[kinoo e; kita no]-ga dare(-ga); da ka] wakaranai yesterday came C-Nom who-Nom Cop Q not.know '(lit.) ... I don't know [who it is [that came yesterday]].'
- → Various studies have argued that "sluicing" in Japanese involves ellipsis of the presupposition part of a cleft construction (Nishiyama, Whitman & Yi 1996, Fukaya & Hoji 1999, Hiraiwa & Ishihara 2002, 2012, Saito 2004, Nishigauchi & Fujii 2006, Fukaya 2007, Takita 2010, a.o.).
- → Thus, the ellipsis employed in our analysis is independently attested.
- ✓ The proposed analysis already captures a similarity between SAs in English and other European languages and their Japanese counterparts, namely obligatory application of ellipsis.
- ✓ They become ungrammatical when the alleged elided part is overtly realized, although the IC part is a fully grammatical sentence when it stands alone.

#### > Cases with non-wh elements

✓ An argument for the proposed analysis comes from examples like (23), where non-wh elements appear instead of wh-elements.

#### (23) With non-wh elements

- a. Kono resutoran-wa Osuro da(tta) ka]-ni honten-ga aru(-rasii)

  this restaurant-Top Oslo Cop Q-in main.shop-Nom is-seem

  '(lit.) (It seems that) this restaurant's main shop is in [whether it is Oslo].'
- b. Erika-ga [keeki-ka kukkii da(tta) ka]-o yaita(-rasii)

  E.-Nom cake-or cookie Cop Q-Acc baked-seem

  '(lit.) (It seems that) Erika based [whether it is cakes or cookies].'
- → Under the proposed analysis, (23b), for instance, is analyzed as having a structure like (24a).

- (24) Non-wh elements as cleft-focus
  - a. Erika-ga  $[_{\Delta P}]_{IC}$  [Erika-ga  $e_i$  yaita no]-ga [keeki-ka kukkii] $_i$  E.-Nom E.-Nom baked C-Nom cake-or cookie da(tta) ka]  $\Delta$ ]-o yaita(-rasii) Cop Q -Acc baked-seem
    - '(lit.) (It seems that) Erika baked [whether it is cakes or cookies [that Erika baked]].'
  - b. A: Erika-wa nani-o yaita no?

    E.-Top what-Acc baked-Q

    'What did Erika bake?'
    - B: Tabun, [Erika-ga e; yaita no]-wa [keeki-ka kukkii(-o)]i desu perhaps E.-Nom baked C-Top cake-or cookie-Acc Cop

      'Perhaps, it is cakes or cookies [that Erika baked].'
  - → The ellipsis process employed in (24a) is independently proposed by the ellipsis approaches to "sluicing with non-wh remnants" and fragment answers, illustrated by (24b).

#### > Internal syntax: Evidence for ellipsis

- ✓ Although the obligatory ellipsis makes it hard to ensure that there is an elided clausal part, a piece of evidence can be gained by looking at examples like (25)-(27) below.
- (25) Case/postposition-marking patterns: Nominative Case
  - a. Osuro-ni [dare da(tta) ka]-ga iku to kiita

    Oslo-to who Cop Q-Nom go C heard

    '(lit.) I heard that [who it is] (= someone) would go to Oslo.'
  - b. Osuro-ni [dare-ga da(tta) ka] iku to kiita
  - c. <sup>?(?)</sup>Osuro-ni [dare-ga da(tta) ka]-ga iku to kiita
  - → In all the examples examined so far, the Case-marker/postposition is attached to the (non-)wh+Cop+Q construction (i.e. the IC), as in (25a).
  - → As shown in (25b), it can be attached to the wh-part (i.e. the content kernel).
  - → It is even possible to double it, as shown in (25c), although the sentence may

not be perfectly well-formed.

- (26) Case/postposition-marking patterns: Accusative Case
  - a. Taroo-ga [dare da(tta) ka]-**o** mikaketa(-rasii)

    T.-Nom who Cop Q-Acc saw-seem
    - '(lit.) (It seems that) Taroo saw [who it is] (= someone).'
  - b. Taroo-ga [dare-o da(tta) ka] mikaketa(-rasii)
  - c. <sup>?(?)</sup>Taroo-ga [dare-o da(tta) ka]-o mikaketa(-rasii)
- (27) Case/postposition-marking patterns: Postposition
  - a. Tegami-ga [dare da(tta) ka]-kara todoita(-rasii)

    letter-Nom who Cop Q-from arrived-seem

    '(lit.) (It seems that) a letter arrived from [who it is] (= someone).'
  - b. Tegami-ga [dare-kara da(tta) ka] todoita(-rasii)
  - c. (?) Tegami-ga [dare-kara da(tta) ka]-kara todoita(-rasii)
  - → As shown in (27c), doubling seems to be easier with postpositions.
- (28) Case/postposition-marking patterns with embedding
  - Osuro-ni Taroo-ga [dare-ga da(tta) itteita ka]-ga iku tol Oslo-to T.-Nom who-Nom CCop said Q-Nom go kiita (cf. (7a))to

C heard

- '(lit.) I heard that [who Taroo said [that it is]] (= someone, whose identity Taroo mentioned but I don't remember) would go to Oslo.'
- b Tegami-ga [[dare-**kara** da(tta) to] Ziroo-ga itteita ka]-**kara**T.-Nom who-from Cop C Z.-Nom said Q-with
  todoita(-rasii)

went.out-seem

- '(lit.) (It seems that) a letter arrived from [from whom Ziroo said [that it is]] (= someone, whose identity Ziroo mentioned but I don't remember).'
- →Examples with doubled Case-marker/postpositions can be improved if the

wh+Cop+Q construction involves clausal embedding (compare (25c) with (28a) and (27c) with (28b)).

- ✓ We interpret these observations as support for postulating the elided structure.
- ✓ That is, (25c) and (27c), for instance, are analyzed as having structures like (29).
- (29) Case/postposition-marking on cleft-focus
  - a. Osuro-ni  $[_{\Delta P}$   $[_{IC}$   $[_{Osuro-ni}$   $e_i$  iku no]-ga dare- $ga_i$  da(tta) ka]Oslo-to Oslo-to go C-Nom who-Nom Cop Q  $\Delta$ ]-ga iku to kiita-Nom go C heard

'(lit.) I heard that [who it is [that would go to Oslo.'

- b. Tegami-ga [ΔP [IC [tegami-ga e; todoita no]-ga dare-kara; letter-Nom letter-Nom arrived C-Nom who-from da(tta) ka] Δ]-kara todoita(-rasii)
  Cop Q -from arrived-seem
  '(lit.) (It seems that) a letter arrived from [from who it is [that a letter arrived]]'
- → In (29), the Case-marker/postposition attached to the constituent headed by Δ (i.e. ΔP) is licensed by the matrix verb while the one on the content kernel (i.e. the focused phrase) comes from the verb within the elided cleft subject (see Hoji 1990, Hiraiwa & Ishihara 2012, a.o. for Case/postposition-marking on focused phrases in Japanese cleft construction).

### > External syntax: ICs as parentheticals

- (30) Possible clause-types in English SAs
  - a. John is going to [IC I think it's  $\underline{\text{Chicago}}$ ] on Sunday. (= (10b))
  - b. Bob found -[IC was it <u>a Stradivarius</u>?] in his attic. (= <math>(14a))
  - c. Bob found [IC how strange that it turned out to be a Stradivarius!] in his attic. (adapted from Kluck 2011:68)
  - d. Bob found [guess what!] in his attic. (adapted from Kluck 2011:68)

- →Kluck (2011) observes that various types of clauses can serve as the ICs of the English-type SAs.
- →On the other hand, in the alleged Japanese SAs, only interrogatives can be ICs, as shown in (8).
- ✓ This difference can be reduced to the semantic nature of SAs.
- ✓ Kluck (2011) points out that SAs in general express conventional implicature in the sense of Potts (2005), and argues in particular that Horn Amalgams like (30a-c), which involve cleft construction, express hedge interpretation.
- ✓ In this respect, Japanese SAs pattern with Horn Amalgams both syntactically and semantically.
- Given that the complementizers no, to and  $\emptyset$  express something like declarative, presupposition and report, respectively, while ka expresses question in Japanese (Saito 2012), only ka can appear in Japanese SAs because the others are incompatible with the hedge interpretation.

# (31) *Independence of ICs*

a. \* No professor<sub>i</sub> taught, [IC {he<sub>i</sub>/his<sub>i</sub> students} claimed it was <u>a boring class</u>]. (adapted from Kluck 2011:97)

b. He<sub>i</sub> had been kissing, [IC the professor<sub>i</sub> finally admitted it was <u>Bea</u>]. (adapted from Kluck 2011:101)

- → The materials within the IC are invisible to those in the main clause (except the content kernel itself<sup>4</sup>).
- → Hence, variable-binding is impossible in (31a) while no Condition C violation arises in (31b).

(adapted from Kluck 2014:2)

Kluck (2011, 2014) argues that the contrast follows from the fact that reconstruction of the content kernel into the ellipsis site as in (ii). Note that this constitutes evidence for the ellipsis within the IC.

(ii)  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP]$  you can imagine [CP] [how many stories about the professor]  $[ParP \Delta [CP] ]$  [how many stories abou

<sup>&</sup>lt;sup>4</sup> Compare (i-a) with (i-b): In the former, the R-expression is contained within the IC but not the content kernel just like (31b), while in the latter it is a part of the content kernel.

<sup>(</sup>i) a. He<sub>i</sub> told Bea [ $_{IC}$  the professor<sub>i</sub> didn't even remember <u>how many stories</u>].

b. \* Hei told Bea [IC you can imagine how many stories about the professori].

- (32) Binding into the IC in Japanese
  - Daremo<sub>i</sub>-ga [<sub>IC</sub> [dare to] soitu<sub>i</sub>-no hahaoya-ga itteita da(tta) a. everyone-Nom who Cop  $\boldsymbol{C}$ his-Gen mother-Nom said ka]-to dekaketa(-rasii) Q-wth went.out '(lit.) (It seems that) Everyone went out with [who his mother said [that
  - it is]] (= someone, whose identity his mother mentioned but I don't remember).'
  - b. \* Kanozyo<sub>i</sub>-wa [IC [dare da(tta) to] Hanako<sub>i</sub>-ga itteita ka]-ga

    she-Top who Cop C H.-Nom said Q-Nom

    kuru to itteita(-rasii)

    come C said-seem

    '(lit) (It seems that) She said [who Hanako said [that it is]] (= some
    - '(lit.) (It seems that) She said [who Hanako said [that it is]] (= someone, whose identity Hanako mentioned but I don't remember) would come.'
  - → In Japanese, the IC does not appear to be independent from the main clause.
  - → Hence the intended bound-variable reading is available in (32a) and the Condition C effect is observed for (32b).
  - ✓ This difference between the English-type SAs and the Japanese ones can be straightforwardly captured, once we assume that the IC is introduced as parenthetical expressions.
- (33) Appositive relatives and variable binding
  - a. \* Every Christian<sub>i</sub> forgives John, who harms him<sub>i</sub>.
  - b. Dono gakusei<sub>i</sub>-mo [soitu<sub>i</sub>-o hihansuru] Yamada-sensei-ni which student-also he-Acc criticize Y.-Prof.-to kansyasiteiru thank
    - '(lit.) Every student<sub>i</sub> is appreciate Prof. Yamada, who criticizes him<sub>i</sub>.'

      (adapted from Del Gobbo 2017:24)
  - → Appositive relative clauses, a well-known class of parenthetical expressions, is opaque for variable-binding in English as in (33a) while Japanese does allow binding into them as in (33b).

✓ The difference between (31) and (32) can thus be reduced to the independently attested one with respect to the way of introducing parenthetical expressions.

# 4. Summary and Further Issues

#### (34) Summary

- a. The properties regarding the wh+Cop+Q construction can be captured in terms of the sluicing-and-parenthetical approach to the syntactic amalgams in English.
- b. The attested difference between the English-type SAs and the Japanese counterparts can be reduced to the independently motivated properties of the languages.

#### (35) Remaining issues

- a. Why is it the case that parentheticals in English are independent of the main clause while those in Japanese are not?
- →Kluck (2011, 2014) argues, following de Vries (2007, 2012), that parentheticals are introduced by a special kind of Merge called *par(enthetical)*-Merge, which is essentially triggered by the Par-head.
- → If parentheticals are generally introduced by *par*-Merge, why do Japanese parentheticals behave differently?
- →At the same time, the theoretical status of *par*-Merge is unclear, given the recent discussion by Chomsky (2017) and Chomsky, Gallego and Ott (2019), where possible instantiations of Merge is severely restricted (see also Komachi, Kitahara, Uchibori & Takita 2019).
  - b. Why is ellipsis obligatory in SAs?
  - c. Can other types of SAs including Andrews Amalgams be found in Japanese?

# (36) Further prospectus

a. Kinoo, dareka-ga kita yesterday someone-Nom came

'Yesterday, someone came.'

- b. Kinoo,  $[\Delta P] = [IC] = \frac{e_i kita no}{ga} dare_i (da(tta)) ka ] \Delta ]$ -ga kita yesterday came C-Nom who Cop Q -Nom came '(lit.) Yesterday, [who it is [that came]] (= someone) came.'
- → Since Kuroda (1965) Japanese indefinite expressions like *dareka* 'someone' have been assumed to be composed of indeterminate pronouns such as *dare* (and *nani* for *what*, *doko* for *where*, and so on) and the particle *ka*.
- →Given that the copula in Japanese cleft constructions can be dropped in general, the apparently simple indefinite expression can be derived from the Japanese-type SAs.
- $\rightarrow$ Is  $\triangle$ , not so-called indeterminate pronouns, the true indefinite expression in Japanese? (see Saito 2017 for the recent proposal treating them as true operators without any quantificational force.)

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