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Sluicing-COMP Generalization and Two Types of Coordinated Sluicing in Japanese*

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1 Introduction

Coordinated wh-questions (CWQs) are attested in many languages (Zhang 2007, Whitman 2004, Citko and Gračanin-Yuksek 2013, among others). CWQs are particularly interesting in that they conjoin elements with different grammatical roles or syntactic categories, such as objects and modifiers, or subjects and objects, as shown in (1). The fact that elements of different grammatical roles cannot be base-generated in one position (i.e. the base positions of the subject and the object are different) necessitates the assumption that wh-phrases are not coordinated in their base positions.

- (1) a. What and when does John normally eat? (Zhang 2007: 2134)

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- b. (Ittai) nani-o sosite ikura-de kimi-wa katta no?
 the hell what-ACC and what.price-at you-TOP bought Q
 ‘Lit. What (the hell) and at what price did you buy?’ (Ishii 2014: 89)

This has triggered extensive debate regarding what exactly is being coordinated and how. Under a monoclausal wh-coordination analysis, conjoined elements are the wh-phrases themselves (Kazenin 2002, Merchant 2007, Zhang 2007, Gribanova 2009). In contrast, a biclausal analysis assumes that CPs are conjoined, with wh-movement taking place within each CP (Browne 1972, Giannakidou and Merchant 1998, Tomaszewicz 2011). Furthermore, under the proposal that CWQs can have three possible derivations—one mono-clausal and two bi-clausal—Citko and Gračanin-Yuksek (2013) argue that languages differ in which of these structures they allow (see also Haida and Repp 2011). Regarding cross-linguistic variation, Bošković (2024) argues that the wh-indeterminate system is a prerequisite for allowing wh-coordination. This claim is supported by the fact that wh-indeterminate elements can appear in such constructions, as shown in (2) (see also Kazenin 2002 and Lipták 2003). In (2a), the conjoined elements are existential quantifiers; in (2b), universal quantifiers; in (2c), negative concord items, and in (2d), negative polarity items.

- (2) a. Neko i nešto kupuje. (Serbo-Croatian)
 someone and something buys
 ‘Someone is buying something.’
 b. Svako i svašta kupuje.
 everyone and everything buys
 c. Niko i ništa ne kupuje.
 nobody and nothing not buys
 d. Nije nam rekao da li iko i išta kupuje.
 isn’t us told whether anybody and anything buys
 ‘He didn’t tell us whether anybody is buying anything.’ (Bošković 2024: 6)

Based on this generalization, Japanese, another wh-indeterminate language, is expected to allow wh-coordination. The examples in (3) show that, similar to Serbo-Croatian, wh-indeterminate phrases can appear in the construction in question.

- (3) a. Dareka-ga sosite nanika-o Hanako-ni ageteta yo.
 someone-NOM and something-ACC Hanako-DAT gave PRT
 ‘(Lit.) Someone and something gave to Hanako.’
 b. John-wa nani-mo sosite dare-ni-mo hanasa-nak-atta.
 John-TOP what-also and who-DAT-also talk-NEG-PST
 ‘John didn’t tell nothing to no one.’

However, previous literature assumes the coordination of larger structures, such as CPs or vPs, rather than coordination of wh-phrases. For instance, Ishii (2014) proposes the backward sluicing analysis and Kasai (2016) argues that the construction involves vP coordination with backward vP-deletion. Therefore, this paper examines properties of CWQs in Japanese to evaluate these competing analyses, and argues that Japanese CWQs are derived by wh-coordination.

I then turn to Japanese sluicing and show that Japanese sluicing does not manifest *no* because the lowest C head, Fin, undergoes deletion. Conversely, Japanese sluicing always contains *ka*, indicating that the Force head remains outside the deletion site, as shown in (4) (these facts, in turn, suggest that Merchant's (2001) Sluicing-COMP generalization applies to the lowest complementizer in Japanese).

- (4) Ken-wa nanika-o katta ga, boku-wa [**nani-o** (***no**) (**da**) **ka**] siranai.
 Ken-TOP something-ACC bought but I-TOP what-ACC C C Q know.not
 'Ken bought something, but I don't know what.'

Building on this observation, I argue that coordinated sluicing in Japanese falls into two subclasses, depending on whether the first conjunct contains *ka*. If it does not, coordinated sluicing is derived from wh-coordination in a monoclausal structure. If it does, it results from multiple applications of sluicing in a biclausal structure.

- (5) Dareka-ga sosite nanika-o Bill-ni nomaseta rasii kedo,
 someone-NOM and something-ACC Bill-DAT made.drink seem but
 'It seems that someone made Bill drink something, but'
 a. [dare-ga sosite nani-o (da) **ka**] wakaranai.
 who-NOM and what-ACC C Q know.not
 'I don't know who and what.'
 b. [dare-ga (da) **ka**] sosite [nani-o (da) **ka**] wakaranai.
 who-NOM C Q and what-ACC C Q know.not
 'I don't know who and what.'

The paper is structured as follows. Section 2 reviews previous analyses of Japanese CWQs that assume coordination of larger conjuncts and outlines their theoretical and empirical issues. Section 3 argues that Japanese CWQs are derived by wh-coordination. Section 4 examines coordinated sluicing in Japanese, and shows that it has two derivational sources. Section 5 concludes this paper.

2 CP/vP Coordination Analysis

Ishii (2014) argues that Japanese CWQs are derived by backward sluicing (see also Giannakidou and Merchant (1998), Kazenin (2002), and Lipták (2003) for the backward sluicing analysis on CWQs in English). The derivation proceeds as follows. After constructing the two conjuncts—[_{TP} [_{VP} Mary-ni nani-o ageta]] and [_{TP} dare-ga [_{VP} Mary-ni nani-o ageta]]—the wh-phrase *dare-ga* in the second conjunct undergoes sideward movement to Spec,TP of the first conjunct. In the first conjunct, *dare-ga* then moves overtly to Spec,CP. Ishii argues that this overt wh-movement follows from clausal typing (Cheng 1991), which requires a wh-question to be overtly marked either by a Q-particle in C or by fronting a wh-phrase into the minimal domain of C. Because the interrogative C in the first conjunct is null, the wh-phrase *dare-ga* must move overtly. In the second conjunct, however, C is overtly realized as a Q-particle, so clausal typing does not trigger overt movement of the wh-phrase *nani-o* to Spec,CP. Instead, *nani-o* moves only to a TP-adjoined position, where it satisfies the parallelism condition on ellipsis. The two clauses are then coordinated, and backward sluicing applies to the first conjunct, yielding the structure in (6b).

- (6) a. (Ittai) dare-ga sosite nani-o Mary-ni ageta no?
 the hell who-NOM and what-ACC Mary-DAT gave Q?
 ‘Lit. Who (the hell) and what gave to Mary?’ (Ishii 2014: 93)
- b. [[CP [CP dare-ga₁ [~~TP~~ ~~t₁~~ [~~VP~~ Mary-ni ~~nani-o~~ ~~aget~~]]] C_[+Q]]
 [&P sosite [CP [TP nani-o₃ [TP t₁ [_{VP} Mary-ni t₃ ageta]]] no]]] (Ishii 2014: 94)

Under Ishii’s backward sluicing analysis, however, it is unclear why the first conjunct cannot contain an overt complementizer *ka* when embedded, given that Japanese embedded sluicing typically includes both the wh-phrase and the interrogative complementizer *ka* (I am grateful to Kensuke Takita and Taichi Nakamura for pointing this out).

- (7) a. Boku-wa, Hitomi-ga nani-o (*ka) sosite dare-ni ageta no ka siritai.
 I-TOP Hitomi-NOM what-ACC Q and who-DAT gave C Q want.to.know
 ‘(Lit.) I want to know what and to whom Hitomi gave.’
- b. Hitomi-ga nanika-o tabeta rasii kedo, boku-wa nani-o *(ka) siritai.
 Hitomi-NOM something-ACC ate seem but I-TOP what-ACC Q want.to.know
 ‘It seems that Hitom ate something, and I want to know what.’

Relatedly, as Kasai (2016) notes, it is unclear why CWQs are not derived by forward sluicing.

- (8) a. Watasi-wa [&P[CP dare-ga *pro* tabeta ka] sosite [CP nani-o₂ [~~CP~~ ~~*pro*~~ ~~t₂~~ ~~tabeta ka~~]]]
 I-TOP who-NOM ate Q and what-ACC ate Q
 sira-nai.
 know-NEG
 ‘(Lit.) I don’t know who ate, and what.’
- b. *Watasi-wa dare-ga tabeta ka sosite nani-o sira-nai. (Kasai 2016: 136)

To account for the absence of the complementizer after the 1st wh-phrase, Kasai (2016) argues that CWQs in Japanese are derived by backward vP-ellipsis, with the wh-phrase in the first conjunct undergoing movement to a position adjoined to vP.

- (9) a. Watasi-wa dare-ga sosite nani-o tabeta ka siranai.
 I-TOP who-NOM and what-ACC ate Q know.not
 ‘(Lit.) I don’t know who and what ate.’
- b. Watasi-wa [CP [TP [&P [_{VP} dare-ga₁ [~~VP~~ ~~t₁~~ ~~*pro*~~ ~~tabe~~]]] sosite [_{VP} *pro* nani-o tabe]ta]ka] siranai. (Kasai 2016: 137)

Kasai suggests that the forward vP-ellipsis is not applicable, as it leads to a stranded tense morpheme, which is impossible in Japanese.

- (10) *Watasi-wa [_{VP} dare-ga t tabe] sosite [_{VP} nani-o [~~t~~ ~~tabe~~]] -ta ka siranai.
 I-TOP who-NOM eat and what-ACC ate T Q know.not
 ‘(Lit.) I don’t know who and what ate.’

However, under this reasoning, if the stranded affix is salvaged by the insertion of *su* ‘do’, there is no reason to prohibit forward vP-ellipsis. Fujii (2016), Funakoshi (2020) and Maeda and Sakamoto (2025) observe that when the verb is followed by a focus particle, *do*-support occurs, as shown in (11a). They further note that, taking (11a) as an antecedent, the vP can undergo ellipsis, resulting in light-verb stranding VP-ellipsis, as shown in (11b).

- (11) a. Taroo-wa ringo-o tabe-sae si-ta.
 Taroo-TOP apple-ACC eat-even do-PST
 ‘Taroo even ate apple.’
 b. Hanako-mo sita. (Light-verb stranding VP-ellipsis)
 Hanako-also did
 ‘Hanako also did.’ (Funakoshi 2020: 122)

Still, the insertion of the focus particle *sae* ‘even’ does not improve the acceptability of (10), as shown in (12a). Therefore, Kasai’s analysis faces the same kind of difficulty as Ishii’s; it is unclear why CWQs with forward ellipsis are ungrammatical.

- (12) a. *Watasi-wa dare-ga tabe-sae sosite nani-o si-ta ka siranai.
 I-TOP who-NOM eat-even and what-ACC do-T Q know.not
 ‘(Lit.) I don’t know who and what even ate.’
 b. Watasi-wa [CP [TP [&P [vP dare-ga -[vP *t pro* tabe]-sae sosite [vP nani-o [~~vP *pro t* tabe~~]] si-ta]ka] siranai.

Note that issues such as the absence of a complementizer in the first conjunct and the obligatory application of backward deletion, as discussed above, do not arise under the wh-coordination analysis, where wh-phrases themselves are coordinated without the application of ellipsis. In the next section, I examine the data that support the wh-coordination analysis.

3 Wh-Coordination Analysis

I argue that Japanese CWQs are derived by wh-coordination in a monoclausal structure. I follow Bošković (2024) for the derivation of monoclausal CWQ and assume that CWQs are derived by sideward movement of two wh-phrases to form ConjP derivationally (see also Zhang 2007). The availability of wh-coordination in Japanese follows from Bošković’s generalization that languages that have wh-indeterminate system allow wh-coordination.

- (13) a. [wh₂ ...]
 [and wh₂] (SM)
 b. [wh₁...wh₂...]
 [wh₁ and wh₂] (SM)
 c. [CP [wh₁ and wh₂] [TP ...wh₁ ...wh₂...]

Also, the fact that Japanese CWQs disallow the complementizer *ka* or the copula *da* after the first wh-phrase, as shown in (14), indicates that Japanese CWQs involve either wh-coordination or vP-coordination, but not CP-coordination.¹

- (14) Boku-wa, Hitomi-ga nani-o (*da) (*ka) sosite dare-ni ageta no (da) ka
 I-TOP Hitomi-NOM what-ACC C Q and who-DAT gave C C Q
 siritai.
 want.to.know
 ‘(Lit.) I want to know what and to whom Hitomi gave.’

In the following subsections, I further examine the clause-mate condition, coordination of likes, and pair-list readings. The first set of evidence demonstrates the absence of CP-coordination, while the second and third sets show that Japanese CWQs allow only wh-coordination, to the exclusion of CP- or vP-coordination.

3.1 Clause-mate Condition

Bošković (2024) argues that wh-coordination obeys the clause-mate condition, because a ConjP created by sideward movement must be integrated into the structure at the CP level; there can be no more than one root CP in a derivation. As shown in (15), Japanese CWQs also obey the clause-mate condition.

- (15) a. Ken-wa **dare-ni** [Maki-ga **nani-o** tabeta to] itta no?
 Ken-TOP who-DAT Maki-NOM what-ACC ate C said Q
 ‘Who did Ken tell Maki ate what?’
 b. *Ken-wa **dare-ni sosite nani-o** Maki-ga tabeta to itta no?
 Ken-TOP who-DAT and what-ACC Maki-NOM ate C said Q
 ‘Who did Ken tell Maki ate what?’

The fact that Japanese CWQs obey the clausemate condition suggests that the relevant coordination is derived via sideward movement of wh-phrases, which is sensitive to CP boundaries (Bošković 2024).

3.2 Coordination of Likes

In CWQs, only focused and quantificational elements can be conjoined. As illustrated in (16a), non-wh elements cannot be coordinated in CWQs. However, focused phrases can be conjoined, as shown in (16b) and (16c). While scrambled noun phrases may carry focus or topic interpretations (Miyagawa 2010), simple scrambling of noun phrases is not enough to permit their appearance in CWQs, as demonstrated in (17) (Bošković 2024).

- (16) a. *Ken-wa [Yuki-ni sosite wain-o] ageta.

¹ The fact that Japanese allows obligatory arguments to be coordinated (e.g. (6a)) is compatible with wh-coordination (Bošković 2024, Citko and Gračanin-Yuksek 2013). Yet, the fact is also compatible with the larger coordination, given that Japanese allows *pro* both in the subject and the object positions (Ishii 2014, Kasai 2016).

- Ken-TOP Yuki-DAT and wine-ACC gave
'(Intended) Ken gave Yuki wine.'
- b. Ken-wa [Yuki-dake-ni sosite wain-dake-o] ageta.
Ken-TOP Yuki-only-DAT and wine-only-ACC gave
'(Intended) Ken gave only Yuki only wine.'
- c. Mary-ni ageta no-wa [John-ga sosite wain-o] da. (cleft)
Mary-DAT gave C-TOP John-NOM and wine-ACC COP
'It is John and wine that gave to Mary.'
- (17) a. * Ivanu i kola prodaju. (Serbo-Croatian)
Ivan.DAT and car.ACC they-are-selling
'(Intended) They are selling Ivan a car.' (Bošković 2024: 6)
- b. * Yuki-ni sosite wain-o Ken-ga ageta.
Yuki-DAT and wine-ACC Ken-NOM gave
'(Intended) Ken gave Yuki wine.'

What *wh*-phrases, indeterminate phrases, and focus phrases have in common may be additional A'-features assigned to NPs. Coordination of Likes (COL) requires that the coordinated phrases share such A'-properties, including focus and *wh* (Bošković 2024, Takano 2020). Category-feature sharing, or argument-feature sharing, is not sufficient to satisfy COL, since their categories and grammatical functions often differ.

Moreover, A'-feature-sharing condition, a manifestation of COL, prohibits heterogeneous coordination in CWQs (see Bošković 2024 for a detailed discussion of the restriction in Serbo-Croatian).

- (18) a. * Dare-ga sosite ringo-dake-o tabeta no?
who-NOM and apple-only-ACC ate Q
'(Lit.) Who and only apples ate?'
- b. *Dareka-ga sosite nani-mo Hanako-ni age-nak-atta yo.
someone-NOM and what-also Hanako-DAT gave-NEG-PST PRT
'(Lit.) Someone and nothing didn't give to Hanako.'
- c. *John-wa nani-o sosite dare-ni-mo hanasa-nak-atta no?
John-TOP what-ACC and who-DAT-mo talk-NEG-PST Q
'(Lit.) Didn't John tell what to no one?'

Note that if larger elements (CPs/vPs) are coordinated, it becomes difficult, if not impossible, to account for the ungrammaticality of (18), where feature differences in NPs play a crucial role.

3.3 Pair-List Reading

Kasai (2016) argues that Japanese CWQs only allow Single-pair (SP) readings, as illustrated in (19b), while multiple *wh*-questions exhibit ambiguity between SP and Pair-List (PL) readings, as shown in (19a) (*cf.* Kazenin 2002, Bošković 2003, Merchant 2007).

- (19) Context: John, Tom, Mary are talking about the potluck party. (in favor of PL reading)
- a. Asita-no pottorakku paatii-ni dare-ga nani-o mottekuru ka hanasiaou.

- tomorrow-GEN potluck party-to who-NOM what-ACC bring Q talk
 ‘Let’s talk about who brings what to the party tomorrow.’
 b. #Asita-no pottorakku paatii-ni dare-ga sosite nani-o mottekuru ka hanasiaou.
 tomorrow-GEN potluck party-to who-NOM and what-ACC bring Q talk
 ‘(Lit.) Let’s talk about who and what brings to the party tomorrow.’ (Kasai 2016: 132)

With the assumption that Quantifier Absorption within a single CP domain results in a PL reading (Gribanova 2009, Citko and Gračanin-Yuksek 2013), Kasai (2016) attributes the absence of PL reading to the assumption that the *wh*-phrases in CWQs remain within vPs. However, eight out of nine informants allow the PL reading with (19b) and (20).

- (20) Saikin, insei-ga yoku jaanaru-ni tookoo siteiru mitai dakedo,
 recently graduate.student-NOM often journal-to submit is.doing seem but
 dare-ga sosite dono jaanaru-ni tookoo sita no?
 who-NOM and which journal-to submit did Q
 ‘(Lit.) Recently, graduate students often submit their papers to journals, but who and to which journal submitted?’

This, combined with the Quantifier Absorption analysis, suggests that *wh*-phrases in CWQ undergo movement to the CP domain within a single clause.

To sum up, supporting Bošković’s (2024) typological generalization on CWQ, I have argued that Japanese CWQs are derived by *wh*-coordination in a monoclausal structure by examining the absence of the complementizer, the clause-mate condition, the ban on heterogeneous coordination, and the availability of PL reading.

4 Coordinated Sluicing

I argue that Japanese sluicing has multiple derivational sources (Maeda and Miyamoto 2024): (i) *wh*-movement to CP followed by clausal deletion (genuine sluicing) (Takahashi 1994, Takita 2012), and (ii) deletion of the presuppositional clause of a cleft construction (pseudo-sluicing) (Saito 2004). These derivations are schematized in (22b-c) under a cartographic approach to the Japanese right periphery, where the complementizer *no* occupies the lowest C position (Fin), *da* occupies the Focus head, and the interrogative complementizer *ka* is in the Force head, as shown in (21).

- (21) [ReportP [ForceP [FocP [FinP [TP ...] *no*] *da*] *ka*] *to*] (Saito 2012)

- (22) a. Taroo-wa nanika-o katta ga, boku-wa [**nani-o** (***no**) (**da**) **ka**] siranai.
 Taro-TOP something-ACC bought but I-TOP what-ACC C C Q know.not
 ‘Taro bought something, but I don’t know what.’
 b. [ForceP [FocP nani-o_i [~~FinP [TP Taroo-ga *t_i* katta] **no**]] (**da**)] **ka**] siranai. (genuine sluicing)
 c. [ForceP [FocP [~~FinP Taroo-ga *t_i* katta~~ **no**]]-ga nani-o (**da**)] **ka**] siranai. (pseudo-sluicing)~~

Importantly, irrespective of the derivational route, Japanese sluicing never contains *no* and always contains *ka*, as shown in (22a). That is, Merchant’s (2001) sluicing-COMP generalization applies

to the lowest complementizer *no* in Japanese. The absence of *no* in Japanese sluicing follows straightforwardly from a pseudo-sluicing derivation, as *no* is located within the presuppositional FinP that undergoes Argument Ellipsis (Saito 2004). Under genuine sluicing, however, the absence of the Fin head *no* is puzzling if the elided constituent is TP. The obligatory absence of *no* therefore suggests that sluicing targets FinP, deleting the lowest C head (Fin) along with it (Thoms 2010). As a theoretical motivation, I propose the Spec-Head Requirement (SHR) on ellipsis, which states that an ellipsis-licensing head must project a Spec (Saito and Murasugi 1991, Lobeck 1995). Since Fin does not project a Spec, it cannot license TP ellipsis. In contrast, Foc enters into agreement with a wh-phrase in its Spec (Thoms 2010, Saito 2024), thereby licensing FinP ellipsis.

These FinP deletion analyses predict that *ka*, the higher C head, is predicted to be obligatory in Japanese sluicing. This prediction in turn clarifies the underlying differences between the two types of coordinated wh-sluicing illustrated in (23a, b).

- (23) Dareka-ga sosite nanika-o Bill-ni nomaseta rasii kedo,
 someone-NOM and something-ACC Bill-DAT made.drink seem but
 ‘It seems that someone made Bill drink something, but’
 a. [dare-ga sosite nani-o (da) **ka**] wakaranai. (CMS)
 who-NOM and what-ACC C Q know.not
 ‘I don’t know who and what.’
 b. [dare-ga (da) **ka**] sosite [nani-o (da) **ka**] wakaranai. (CSS)
 who-NOM C Q and what-ACC C Q know.not
 ‘I don’t know who and what.’

I argue that in Coordinated Multiple Sluicing (CMS), where the first conjunct lacks *ka*, the structure is monoclausal. In this configuration, both wh-phrases undergo sideward movement to form wh-coordination, which then merges with FocP in the CP domain, followed by FinP ellipsis/sluicing. In contrast, Coordinated Single Sluicing (CSS) involves a biclausal structure, where each conjunct undergoes FinP ellipsis/sluicing separately, with one wh-remnant per clause.

- (24) CMS
 a. [ForceP [FocP wh₁ & wh₂ [~~FinP~~ [~~TP~~ ... t₁ ... t₂ ...] ~~no~~] (da)] **ka**] siranai. (genuine sluicing)
 b. [ForceP [FocP [~~FinP~~ [~~TP~~ ... t₁ ... t₂ ...] ~~no~~] ~~ga~~ wh₁ & wh₂ (da)] **ka**] siranai. (pseudo-sluicing)
 (25) CSS
 a. [ForceP [FocP wh₁ [~~FinP~~ [~~TP~~ ... t₁ ...] ~~no~~] (da)] **ka**]
 & [ForceP [FocP wh₂ [~~FinP~~ [~~TP~~ ... t₂ ...] ~~no~~] (da)] **ka**] siranai. siranai. (genuine sluicing)
 b. [ForceP [FocP [~~FinP~~ [~~TP~~ ... t₁ ...] ~~no~~] ~~ga~~ wh₁ (da)] **ka**]
 & [ForceP [FocP [~~FinP~~ [~~TP~~ ... t₂ ...] ~~no~~] ~~ga~~ wh₂ (da)] **ka**] siranai. (pseudo-sluicing)

In the following, I support the distinction between CMS and CSS by examining three diagnostics: the clause-mate condition, heterogeneous remnants, and pair-list readings.

First, CMS obeys the clause-mate condition, whereas CSS does not, as shown in (26).

- (26) Dareka-ga [Mai-ga dareka-o hometa to] itta ga,
 someone-NOM Mai-NOM someone-ACC praised C said but

‘Someone said Mai praised someone, but’

- a. *[dare-ga sosite dare-o **ka**] wakaranai. (CMS)
 who-NOM and who-ACC Q know.not
 ‘I don’t know who and who.’
- b. [dare-ga (da) **ka**]sosite [dare-o (da) **ka**] wakaranai. (CSS)
 who-NOM C Q and who-ACC C Q know.not
 ‘I don’t know who and who.’

Following Bošković (2024), I assume that a constituent formed by sideward movement (e.g., {wh & wh}) must be reintegrated into the root structure within the same clause. This restriction on sideward movement accounts for the clause-mate condition in CMS. Since CSS is not derived by sideward movement, the clause-mate condition is not attested in CSS.

Second, CSS allows heterogeneous remnants, while CMS does not.

- (27) Mai-ga dareka-ni ringo-dake-o ageta rasii kedo
 Mai-NOM someone-DAT apple-only-ACC gave seems but
 ‘It seems that Mai gave someone only apple, but’
- a. * **Dare-ni** sosite (hontooni) **ringo-dake-o** ka wakaranai. (CMS)
 who-DAT and really apple-only-ACC Q know.not
 ‘(Lit.) I don’t know to who and (really) only apple.’
- b. **Dare-ni** (da) ka sosite (hontooni) **ringo-dake-o** (da) ka wakaranai. (CSS)
 who-DAT C Q and really apple-only-ACC C Q know.not

With CMS, I assume that the Coordination of Likes (COL) principle ensures that the ConjP formed by sideward movement must share a common A’-feature (such as *wh* and *focus*) (Takano 2020, Bošković 2024). This A’-feature-sharing condition prohibits heterogeneous coordination in CMS, as shown in (27a). In contrast, CSS involves coordination at the CP level, rather than coordination of the remnants themselves. As a result, COL does not restrict the feature mismatches between remnants in CSS, as shown in (27b).

Finally, CMS allows a Pair-list reading (PL), whereas CSS does not. For example, in (28), where a PL reading is available, CMS allows an SP/PL ambiguity, while CSS does not. Moreover, the universal quantifier the antecedent clause forces the pair-list interpretation on the multiple sluicing in (29a). Under the same context, CMS (29b) also allows a PL reading, while CSS in (29c) does not, leading to degraded acceptability.

- (28) Santasan-ga nanika-o dareka-ni ageta rasii kedo
 Santa Claus-NOM what-ACC someone-DAT gave seems but
 ‘It seems that Santa Claus gave something to someone, but’
- a. Nani-o sosite dare-ni ka sitteru? (SP/PL) (CMS)
 what-ACC and who-DAT Q know
 ‘(Lit.) Do you know what and who?’
- b. Nani-o (da) ka sosite dare-ni (da) ka sitteru? (SP/*PL) (CSS)
 what-ACC C Q and who-DAT C Q know
 ‘(Lit.) Do you know what and who?’

- (29) Paatii-ni minna-ga nanika-o mottekuru rasii kedo
 party-to everyone-NOM something-ACC bring seem but
 ‘It seems that everyone will bring something to the party, but’
- a. Dare-ga nani-o ka wakaranai. (#SP/PL) (multiple sluicing)
 who-NOM what-ACC Q know.not
 ‘(Lit.) I don’t know who what.’
- b. Dare-ga sosite nani-o ka wakaranai. (#SP/PL) (CMS)
 who-NOM and what-ACC Q know.not
 ‘(Lit.) I don’t know who and what.’
- c. Dare-ga ka sosite nani-o ka wakaranai. (#SP/#PL) (CSS)
 who-NOM Q and what-ACC Q know.not
 ‘(Lit.) I don’t know who and what.’

Under the assumption that PL readings arise through Quantifier Absorption within a single CP (Gribanova 2009, Citko and Gračanin-Yuksek 2013, Kasai 2016), the availability of PL readings in CMS is expected, as its monoclausal structure provides a CP domain for Quantifier Absorption. In contrast, the biclausal structure of CSS, where each wh-phrase moves to a separate CP, lacks the necessary environment for Quantifier Absorption, blocking the PL reading.

The above differences suggest that CMS and CSS are not merely variants distinguished by the phonological manifestation of *da/ka*, rather, they have fundamentally different underlying structures. Thus, I argue that with an overt cue for bi-clausal structure, i.e., the complementizer *ka* after the first wh-phrase, coordinated sluicing is derived from a bi-clausal structure (CSS), while without it, it is derived from wh-coordination in a monoclausal structure.

5 Conclusion

In this paper, I have argued that Japanese CWQs are derived by wh-coordination via sideward movement in a monoclausal structure. This is in line with Bošković’s generalization that wh-indeterminate system is a prerequisite condition for wh-coordination.

I argue that sluicing in Japanese involves FinP ellipsis, with *no* obligatorily elided and *ka* always present. This, in conjunction with a cartographic structure of the right periphery, supports the two underlying structures for coordinated sluicing: a monoclausal derivational source (CMS) or a bi-clausal source (CSS), with distinct empirical differences.

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