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Internally-headed and doubly-headed relatives in Japanese – How are they related to each other?

Chisato Kitagawa^(*), University of Massachusetts Amherst, US, kitagawa@asianlan.umass.edu

Grosu & Hoshi (2019: 20), in their rejoinder to Kitagawa (2019), propose that apparent violations of island constraints in the so-called internally-headed relative clauses are accounted for by considering them as reduced doubly-headed relative clauses. This paper shows that this claim by Grosu and Hoshi is not empirically sustainable, and further that it misses the discourse function of doubly-headed relative clauses. A discussion of gapless light-headed externally-headed relative clauses is also presented so as to identify how this construction type interrelates with internally-headed relative clauses and doubly-headed relative clauses.

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1. Introduction

Grosu, Hoshi, and Landman in their theoretical interests in the typology of relative clauses started their characterization of Japanese IHRCs as “strange relatives of the third kind” first presented in Grosu & Landman (1998), citing how they are neither restrictive nor nonrestrictive. In a series of papers, including Grosu (2010), Grosu & Landman (2012), Grosu & Hoshi (2016), Landman (2016), and Grosu & Hoshi (2018), that thesis has taken a more concrete form.

The basic thesis they hold is that Japanese IHRCs involve a null operator movement *cum* lambda abstraction over the operator’s trace and are, therefore, strictly island-sensitive; if the internal semantic head (IH) is isolated in a syntactic island, such movement operation must necessarily be blocked. This conclusion, Landman (2016: 5–6) asserts, is fully corroborated by Grosu and Hoshi (2016), who present extensive discussion eliminating challenges, and showing “beyond doubt” that a Japanese IHRC violating an island constraint is “invariably illicit” (Landman 2016: 6). It is against this claim that Kitagawa (2019) offers some critical counter-examples, which violate the Complex NP Constraint (CNPC) and the Adjunct Island Constraint (AJIC) (e.g., Kitagawa 2019: 17–18, (34) and (39)). They are far from being “invariably illicit” but are subject instead to idiosyncratic variations in the native speakers’ acceptability judgments ranging between totally acceptable, somewhat odd, and totally unacceptable.

It is with this backdrop that Grosu & Hoshi (2019) (henceforth G&H), in their rejoinder to Kitagawa (2019), make the following claim: “*prima facie* IHRCs with referential IHs are in fact a hitherto unrecognized variety” of doubly-headed relative clauses (henceforth “DHRCs”) (G&H 2019: 2), and that “the *prima facie* allowable violation of island constraints in the apparent IHRCs are accounted for by the thesis that they are in fact not IHRCs, but homophonous ‘reduced’ DHRCs” (G&H 2019: 20).

The objective of this paper is three-fold: (i) to demonstrate that this claim by G&H is not empirically sustainable; (ii) to point out how G&H miss the import of the discourse function of DHRCs (as referred to in Kitagawa 2019: 25–27); and (iii) to clarify in what manner the three construction types – IHRCs, DHRCs, and gapless light-headed externally-headed relative clauses (EHRCs) – do, or do not, interact with each other.

The outline of the paper is as follows. In Section 2, I discuss issues raised by G&H which are subsidiary to their DHRC-masquerading-as-an-IHRC thesis. Section 3 offers evidence to suggest that their arguments to counter Kitagawa’s (2019) “*pro*-head analysis of Japanese IHRCs” lack empirical validity. Section 4 focuses on the discourse function of DHRCs. Section 5 deals with issues relating to gapless light-headed EHRCs, including their interrelation with IHRCs and DHRCs. “Concluding words” are given in Section 6.

2. Preliminaries

In this section my main concern involves the following two issues: (i) clarification of Kitagawa’s account against the claims of Grosu, Hoshi, and Landman referred to in Section 3 on the

idiosyncratic variations of the IHRCs; and (ii) the issue of nonrestrictive relatives that Kitagawa (2019) adopts in his analysis of IHRCs.

On the first question, it is important to note that Kitagawa (2019) does not claim that IHRCs are impervious to syntactic islands; IHRCs are sensitive to them. What he suggests (Kitagawa 2019: 19–20) is that, with an IHRC like (1) even though the effect of syntactic islands such as Complex NP Constraint (CNPC) and Adjunct Island Constraint (AJIC) exists, a pragmatic “repair” mechanism may override the island effect for some native speakers of Japanese (recall that, as amply demonstrated in Kitagawa 2019, the acceptability of the IHRC constructions is idiosyncratic).¹

- (1) Boku-wa I_{DP} [C_{NPC} [sono toppina kaiketuhoo_i-o teiansi-ta] seibisi] -ga
I-TOP that preposterous solution-ACC propose-PAST engineer-NOM
imadewa moo Amerika no kaisya-de erakunattei-ru] no [*pro*_i] no habahiroi
now already U.S. 's company-in big.shot.be-PRES no no wide.ranged
zituyoosei-ni imasaranagara kantansi-ta. (See Kitagawa 2019:17, (34))
applicability-at again marvel.at-PAST
'I again marveled at the wide-range applicability of that (seemingly) preposterous
solution, which the engineer, who is now a big shot in an American company, proposed.'
- (2) [[[A_{JIC} [kyoosooaite no osiego-ga sono zyuyyoona kasetu_i-o
rival no student-NOM that important.be hypothesis-ACC
kokusaikaigi-de happyoosi-te koohyoo-o hakusi-ta] node]
international.conference-at present-ing popularity-ACC gain-PAST because
Yano-sensei-ga sukkari otikondesimat-ta] no [*pro*]_i] no syooryaku-nasi no purinto-ga
Y-Prof-NOM greatly get.depress-PAST no no omission-free no copy-NOM
kore des-u.²
this be-PRES
(See Kitagawa 2019:18, (39))
'This is a complete copy of the important hypothesis, concerning which Prof. Yano was so
greatly depressed because his rival's student presented it at an international Conference
and received favorable responses.'

How is the repair done? It is accomplished by means of “coreference” not encoded in syntax (Reinhart 1983), which involves “referential properties” (Dechaine & Wiltschko 2002:420), taking place between the IH and the external head (henceforth “EH”) *pro* of the IHRC. Having the IH with a specific referential property as the antecedent, the external head *pro* as an anaphoric

¹ Kitagawa (2019: 17–18) reports that eighteen linguistically sophisticated native speaker informants were asked to evaluate the felicity level of sentence (1), the scale of acceptability being: (i) “OK” means that a given sentence is “perfectly acceptable”; (ii) “?” means “somewhat odd but more or less acceptable; and (iii) “*” stands for “not acceptable.” For sentence (1) one responded with “OK,” seven with “?,” and ten with “*” (Kitagawa 2019:17, (34)).

² Acceptability judgments by the same native speaker consultants for this sentence are as follows “OK”: 3; “?”: 7; “??”: 1; “*”: 7 (see Kitagawa 2019: 18, fn.23).

definite is interpreted to be that unique referent. It is this structural context of an IHRC that permits such a coreference relation to be formed (Kitagawa 2019: 20).

What is predicted here is that the replacement of the referential antecedent by a clearly indefinite expression would render the IHRC to be incoherent.³ This prediction is borne out, as exemplified by the infelicitous “indefinite” version of (1) (Kitagawa 2019: 19, (40)).⁴

- (3) (i) *Boku-wa [_{DP} [_{CNPC} [**nanraka no** kaiketuhoo_i-o teiansi-ta] seibisi]-ga
I-TOP some no solution-ACC propose-PAST engineer-NOM
imadewa moo Amerika no kaisya-de erakunattei-ru] no [**pro**_i]] no
now already U.S. no company-in big.shot.be-PRES no no
habahiroi zituyoosei-ni imasaranagara kantansi-ta.
wide.ranged applicability-at again marvel.at-PAST
(Intended: ‘I again marveled at the wide-range applicability of some solutions, which the engineer, who is now a big shot in an American company, proposed.’)

³ A reviewer calls into question the implicit assumption that indefinite expressions headed by *nanraka* cannot be referential and hence cannot be coreferential with a definite *pro*, based on the acceptability of (i):

- i: Seibisi-ga nanraka-no kaiketuhoo-o teiansi-ta. *pro* habahiroi zituyousei-ga at-ta.
engineer-NOM some-no solution-ACC propose-past. wide.ranging applicability-NOM be-past

Why (i) is more acceptable than (3) remains unclear, though one possibility is that *pro* can be dynamically bound in (i) but not in (3).

⁴ A similar acceptability discrepancy can be seen between the felicitous IHRC (i) (though subject to idiosyncratic variations in the acceptability; see Kitagawa 2019: 17, fn. 19), (36)) and its infelicitous indefinite version (ii) (Kitagawa 2019: 20, (44)).

- (i) Kono hukuro-ni-wa [_{DP} noomintati-ga [_{CNPC} [**sono hatugasi-na-i wata**_i-o kaihatusi-ta]
this bag-in-TOP farmers-NOM that germinate-not-PRES cotton-ACC develop-PAST
kaisya]-ni mainen tagaku no okane-o harai-tuzuke.nakereba.narazu, kurusinde.i-ru]
company-to every.year huge 's money-ACC pay-continue.must-PRES.and suffering.be-PRES
no [_{DP} **pro**_i]] no tane]-ga haittei-mas-u.
no no seed-NOM contain-POLITE-PRES
'Contained in this bag are the seeds of cotton that do not (prematurely) germinate, for which the farmers must pay a huge amount of money every year to the company that developed them.'

- (ii) *Kono hukuro-ni-wa [_{DP} noomintati-ga [_{CNPC} [**nanraka no** hatugasi-na-i **wata**-o
this bag-in-TOP farmers-NOM some.kind of germinate-not-PRES cotton-ACC
kaihatusi-ta] kaisya]-ni mainen tagaku no okane-o harai-tuzuke.nakereba.narazu,
develop-PAST company-to every.year huge 's money-ACC pay-continue.must-PRES.and
kurusinde.i-ru] no [_{DP} **pro**]] no tane]-ga haittei-mas-u.
suffering.be-PRES no no seed-NOM contain-POLITE-PRES
(Intended: ‘Contained in this bag are some cotton seeds that do not (prematurely) germinate, for which the farmers must pay a huge amount of money every year to the company that developed them.’)

The acceptability scale of (i), according to Kitagawa (2019: 17, fn.19), is: one “OK”; 7 “?”; and 10 “*.”

- (ii) *[[[_A]IC [kyoosooaite no osiego-ga nanraka no kasetu-o
 rival no student-NOM some of hypothesis-ACC
 kokusaikaigi-de happyoosi-te koohyoo-o hakusi-ta] node]
 international.conference-at present-ing popularity-ACC gain-PAST because
 Yano-sensei-ga sukkari otikondesimat-ta] no [pro]] no syooryaku-nasi no
 Prof. Y-NOM greatly get.depress-PAST no no omission-free 's
 purinto-ga kore des-u.
 copy-NOM this be-PRES

(See Kitagawa 2019:18, (39))

(Intended: ‘This is a complete copy of some hypothesis, concerning which Prof. Yano was so greatly depressed because his rival’s student presented it at an international and received favorable responses.’)

This sort of explication is altogether unavailable with a G&H type analysis. The *pro*-head analysis, in fact, is the only model at present that accommodates such a coreference phenomenon.

2.1. Relevancy Condition

Of course, successful interpretation of the IHRCs still needs to satisfy Kuroda’s “Relevancy Condition” (Kuroda 1975–1976; 1992).⁵ For, as Huang (1984) and Hasegawa (1985) respectively comment on *pro*’s versatility in interpretation in Chinese and Japanese, the interpretation of *pro* may involve any diverse and idiosyncratic “inference, context, and knowledge of the world” on the part of the reader’s or the hearer’s part (Huang 1984: 531). Nothing structural in Kitagawa’s (2019) analysis forces the speech participants to interpret the EH *pro* having a coreference relation to the antecedent IH in IHRCs. Thus, Kuroda’s Relevancy Condition is required to properly interpret any given IHRC in Japanese. Conversely, it is one of the revealing properties of Japanese IHRCs that such a condition is required of the IHRCs.

2.2. Kitagawa’s (2019) analysis of the IHRC as a nonrestrictive relative clause

Turning now to the nonrestrictive relative clause issue, let me first note how an IHRC gets interpreted in Kitagawa’s (2019) analysis. Consider an IHRC example (4a):

⁵ Kuroda proposes a “Relevancy Condition” as follows: for an IHRC to be acceptable, “it is necessary that it be interpreted pragmatically in such a way as to be directly relevant to the pragmatic content of its matrix clause” (1975–76: 86, (6)). As Ito (1986: 114) puts it, such factors as “simultaneity, colocationality, intentional and physical connections” need to contribute to the Relevancy Condition. While descriptively adequate, the existence of the Relevancy Condition on IHRCs has not been given an adequate theoretical explanation to date.

- (4) a. Mary-ga [[John-ga [[zibun no gakusei-ga zyuuyooona kasetu_i-o teiansi-ta]
M-NOM J-NOM self 's student-NOM important hypothesis-ACC propose-PAST
to] zimansitei-ta] no [*pro*_i]] no kekkan-o sitekisi-ta.
COMP boast-PAST *no* *no* defect-ACC point.out-PAST
'John had boasted [that his student proposed an important hypothesis]], and Mary
pointed out the defect in it.'
- b. [_{DP/IHRC} ... [_{CP/IHR} ... **NP**_i ... V] *no* [_{DP} [_{NP} ***pro***_i] D]] Θ -Assigner

In structural terms, the IHRC represented in (4b) is a nonrestrictive relative. To follow Kitagawa (2019), example (4a) is structurally represented as in (4b), in which the IHRC's EH [[*pro*] D] is an E-type pronoun. The Θ -Assigner is either a verbal predicate or a syncategorematic noun (Kuroda 1999: 421–423; e.g., an inalienably possessed noun such as *sippo* 'tail', *kekkan* 'defect'). Example (4a) can be analyzed as follows: (i) the IH *kasetu* 'hypothesis' is theta-marked by *teiansi-ta* 'proposed'; (ii) the external head *pro* is theta-marked by the syncategorematic noun *kekkan* 'defect'; (iii) the external head *pro* and the IH are linked *via* the E-type relation, which I indicate here by the use of co-indexation (not to be understood as representing a rigorous syntactic identity). In this operation, I assume that the presence of COMP is transparent.

It is expected that G&H would object to the idea that Japanese IHRCs are nonrestrictive relatives, because, for them, Japanese IHRCs are "strange relatives of the third kind," neither restrictive nor nonrestrictive. G&H, however, let Shimoyama (1999, 2001) take the lead, tracing her analysis that the IHRCs are analytically distinct from the restrictive relative clauses in denoting a proposition rather than a predicate; to quote G&H (2019: 4–5): she observes that such an analysis "makes IHRCs partly similar to nonrestrictive/appositive" externally-headed relative clauses" (EHRCs), "whose relative clause is also arguably analyzable as denoting a proposition." G&H note that, despite this assumed similarity, "Shimoyama does not propose to bring IHRCs and appositive EHRCs under a common analytical umbrella because of another property that IHRCs share with restrictive EHRCs, but not with appositive EHRCs." That property can be "neutrally described as integration" (into the matrix), i.e., as forming a single illocutionary unit with the matrix. Clauses that are not integrated into the matrix, in particular, appositives, can be suppressed without affecting the truth conditions of the matrix. With this summation, G&H (2019: 10) "conclude" that Kitagawa (2019) "has failed to make a convincing case for viewing the relative clause of an IHRC as nonrestrictive."

What G&H fails to see is that the critical integration is achieved in Kitagawa's (2019: 7–9) by means of the anaphoric definite *pro*-head that relates to the IH in the relative.⁶ It is assumed in this process that the IH of an IHRC is confined to a position internal to the relative clause.

⁶ A reviewer points out that an integrated pronoun can take an antecedent inside a non-integrated clause in cases of cross-sentential anaphora like (i) in English:

i: John, who owns a large dog, is interested in animal rights. He treats it as he would a child.

One other minor point is noted before we move to the next section. G&H comment on Kitagawa’s (2019) rejection of Shimoyama’s (2001: chapter 3) “no referential IH” claim, although they state that “while discourse anaphora is not necessarily of the E-type variety...” they then accept Shimoyama’s claim that the anaphoric relation in IHRCs “**must** be of the E-type, *referential IHs being excluded*” G&H (2019: 9). They state: Kitagawa (2019) notes that examples which violate this “no referential IHs” generalization (without violating islands) were also submitted to his eighteen consultants and turned out to exhibit a roughly comparable cross-idiolectal variation, **a state of affairs for which he admits he has no satisfactory explanation**” (the emphasis by the present author). But, Kitagawa (2019) admits nothing of the sort. The fact is clear and simple. The IH of the Japanese IHRC can be referential including proper names for a sizable number of native speakers of Japanese (though still subject to idiosyncratic variations), as amply demonstrated in Kitagawa (2019).

3. G&H’s proposal

One of the key findings of Kitagawa (2019), as articulated earlier, is that such IHRC examples as (1) and (2) are far from being invariably illicit (see fns. 1 and 3) as Grosu, Hoshi, and Landman would have it, since they are subject to idiosyncratic variation judgments ranging between totally acceptable, somewhat odd, and totally unacceptable, thus disproving their assertion that native speakers would invariably consider them to be illicit “beyond doubt” (Landman 2016: 5–6).

The fact that sentences like (1) and (2) exhibit a systematic variation among speakers with respect to their acceptability status clearly indicates that Japanese IHRCs do not invariably involve the null operator movement envisioned by Grosu, Hoshi, and Landman.

Facing the grammatical status of these examples, G&H now add a new category to their typological inventory relating to Japanese IHRCs, namely, that there exists a hitherto unknown construction type called “maximally reduced DHRC,” which is homophonous with the corresponding IHRC but impervious to island constraints. It is this “maximally reduced DHRC” homophonous with the IHRC, they claim, that exhibits “a systematic variation among speakers,” not the real IHRC.

G&H’s defense to override Kitagawa’s (2019) critique thus takes the following form:

- (5)
 - a. “the *prima facie* allowable violation of island constraints involved with the apparent IHRCs is completely accounted for by the thesis that they are in fact not IHRCs but homophonous ‘reduced’ DHRCs” (G&H 2019: 20), because “DHRCs are insensitive to the CNPC and AJIC” (G&H 2019: 15).
 - b. Constructions such as (1) and (2) thus “allow two parses, one as an IHRC and one as a reduced DHRC” (G&H 2019: 19).

Here, the pronoun *it* in the second sentence is anaphoric on *a large dog*, which itself is contained in a non-restrictive, and hence non-integrated, relative clause. Why this English example behaves differently from the Japanese IHRC example remains unsolved.

- c. The point noted in (5b) is possible because the EH of a DHRC is subject to the semantic and pragmatic redundancy requirement (G&H 2019: 14). The EH material in the scope of *sono* constitutes redundant information. This requirement is satisfied if the material at issue is less informative than the IH, but not if that material is more informative than the IH (G&H 2019: 13). The redundancy property of the EH material of a DHRC “in no way requires that all the explicit information provided by the IH be redundantly expressed in the EH” (G&H 2019: 18–19).
- d. “In view of this, note that the semantics of a DHRC will be unaffected if the redundant information in the EH is suppressed altogether, and if *sono* ‘that’ is replaced with a null definite D, which is independently needed for IHRCs. We suggest that such maximally ‘reduced’ DHRCs exist” (G&H 2019: 19).

This “reduced DHRC” thesis by G&H, however, is flawed on three distinct fronts, as described in the following section.

4. Empirical validity

To follow their theory, let me posit the DHRC versions of (1) and (2) as (6) and (7) respectively, marking the portions either suppressed or made phonologically null in accordance with G&H’s proposal with a “double strikethrough.”

- (6) Boku-wa [_{DP} [_{CNNP} ~~sono toppina~~ ~~kaiketuhoo~~_i-o teiansi-ta] seibisi]-ga imadewa
I-TOP that preposterous solution-ACC propose-PAST engineer-NOM now
moo Amerika no kaisya-de erakunattei-ru] ~~sono-kaiketuhoo~~_i] no habahiroi
already U.S. ’s company-in big.shot.be-PRES that solution no wide.ranged
zityuoosei-ni imasaranagara kantansi-ta.
applicability-at again marvel.at-PAST
(Intended: ‘I again marveled at the wide-range applicability of that (seemingly) preposterous solution, which the engineer, who is now a big shot in an American company, proposed.’)
- (7) [[[_{AJIC} [kyoosooaite no osiego-ga ~~sono zyuuyoo~~_i ~~kasetu~~_i-o
rival ’s student-NOM that important.be hypothesis-ACC
kokusaikaigi-de happyoosi-te koohyoo-o hakusi-ta] node] Yano-sensei-ga
international.conference-at present-ing popularity-ACC gain-PAST because Y-Prof-NOM
sukkari otikondesimat-ta] ~~sono-kasetu~~_i] no syooryaku-nasi no purinto-ga kore des-u.
greatly get.depress-PAST that solution no omission-free no copy-NOM this be-PRES
(Intended: ‘This is a complete copy of the important hypothesis, concerning which Prof. Yano was so greatly depressed because his rival’s student presented it at an international conference and received favorable responses.’)

4.1. Whence comes *no*?

Note that one technical problem about G&H’s suggestion can be identified immediately: lacking entirely in their “maximally reduced” account is the necessary presence of the particle *no* in

IHRCs, for which G&H provide no recourse. In Kitagawa’s (2019) model, the EH of the IHRC contains the *pro* (i.e., [_{DP}[_{NP} *pro*]_i] D]) acting as an E-type pronoun, the *no* in question being accounted for by the pronominal modification marker insertion rule in Kitagawa & Ross (1982), which is independently motivated (see fn. 2).

4.2. Two parses, the same problem, re: (5a, b)

G&H’s central claim (5a, b) is that such “IHRC” examples as (1) and (2) that Kitagawa (2019) cites to disprove Grosu, Hoshi, and Landman’s theory about Japanese IHRCs are not real IHRCs but the homophonous “reduced” DHRCs. This new claim does nothing for G&H’s theory, however. Grosu, Hoshi, and Landman fundamentally claim that Japanese IHRCs involve a null operator movement. Thus, the only “two parses” allowable for G&H are the following: one is an infelicitous IHRC parse that is strictly sensitive to the island constraints (Landman 2016: 6); the other is a DHRC parse that is completely felicitous because the “DHRCs are insensitive to the CNPC and AJIC” (G&H 2019: 19). The import of Kitagawa (2019) is that it is this prediction that is distinctly demonstrated to be empirically false, because IHRCs do exhibit idiosyncratic variations with respect to island constraints. So, G&H’s “two parses” argument (5a, b) adds nothing to their effort to disprove Kitagawa’s (2019) *pro*-head analysis of Japanese IHRCs.

4.3. G&H’s “reduced DHRC” thesis, re. (5c, d)

G&H provide two sets of empirical evidence in support of their “IHRC as a ‘reduced DHRC’” claim. The first set has to do with their claim (5c, d), cited below as (8a, b, c) (see G&H 2019: 14, (21a, b, c)).

- (8)
- a. Junya-wa [[Ayaka-ga *akai ringo-o* mui-ta] sono *akai ringo*]-o tabe-ta.
J-TOP A-NOM red apple-ACC peel-PAST that red apple-ACC eat-PAST
‘Ayaka peeled a red apple/some red apples and Junya ate the red apple(s).’
 - b. Junya-wa [[Ayaka-ga *akai ringo-o* mui-ta] sono *ringo*]-o tabe-ta.
J-TOP A-NOM red apple-ACC peel-PAST that apple-ACC eat-PAST
‘Ayaka peeled a red apple/some red apples and Junya ate the apple(s).’
 - c. ??Junya-wa [[Ayaka-ga *ringo-o* mui-ta] sono **akai ringo**]-o tabe-ta.
J-TOP A-NOM apple-ACC peel-PAST that red apple-ACC eat-PAST
(Intended: ‘Ayaka peeled an apple/some apples and Junya ate the red apple(s).’)
 - d. Junya-wa [[Ayaka-ga *ringo-o* mui-ta] sono {**umasoo-na**, **massiroi**}]
J-TOP A-NOM apple-ACC peel-PAST that {tasty-looking-be, white}
ringo]-o tabe-ta.¹
apple-ACC eat-PAST
‘Ayaka peeled an apple/some apples and Junya ate {that delicious looking, pure white} apple(s).’

G&H (2019: 13) state that the EH material in the scope of *sono* in (8a, b) “constitutes redundant information” and that this is the reason why (8c) is odd, because here “a requirement for the felicity of DHRCs” – that the EH material is “less informative than the IH” in the sense spelled out in (5c) – is violated. And, sure enough, (8c) is “infelicitous when uttered out of the blue.” The fact that (8c) is odd is thus critically important to G&H in introducing their (5a, b) claims. For their claim (5b) to be valid, their redundancy requirement (5c, d) must necessarily predict that (8c) is infelicitous, since in the context of (8c) the EH *akai ringo* ‘red apple’ is in fact not redundant but richer than the IH *ringo* ‘apple’. And it is indeed the case that (8c) is infelicitous. But, note that the source of (8c)’s oddity need not be because the EH *akai ringo* ‘red apple’ is not redundant, but could instead be because the (red) apple when peeled is no longer red. That such is indeed a legitimate issue is demonstrated by the fact that example (8d) is perfectly felicitous.

G&H (2019: 14, (22a, b)) gives the second set of examples in support of their claim (5c, d), which is cited in (9a, b).

- (9) a. Junya-wa [[Masao-ga *Ayaka*-o kirattei-ru] sono *kanozyo*]-o aisitei-ru.
 J-TOP M-NOM A-ACC hate-PRES that she-ACC love-PRES
 ‘Masao hates Ayaka and Jun’ya loves her.’
- b.??Junya-wa [[Masao-ga *kanozyo*-o kirattei-ru] sono *Ayaka*]-o aisitei-ru.
 J-TOP M-NOM she-ACC hate-PRES that A-ACC love-PRES
 ‘?? Masao hates her and Jun’ya loves Ayaka.’
- c. Junya-wa [[Masao-ga *kanozyo*-o kirattei-ru] sono {**utiki-na**, **zimi-na**, **kawaisoo-na**,
 J-TOP M-NOM she-ACC hate-PRES that introvert-be, plain-be, pitiable-be,
aikurusi-i} *Ayaka*]-o aisitei-ru.
 lovely-be Ayaka-ACC love-PRES
 ‘Jun’ya loves that {introvert, plain looking, pitiable, lovely} Ayako who Masao hates.’

With (9 a, b), G&H identify the source of the oddity of (9b) in the fact that the EH *Ayaka* is a proper noun, whereas the IH *kanozyo* ‘she/her’ is a pronoun; the EH proper noun is more informative than the IH pronoun, thus violating the redundancy requirement (5c). Note, however, that the oddity of (9b) need not be identified in this manner. I suggest that (9b) is odd because it violates the linear order strategy for pronominalization (i.e., the antecedent must precede the pronoun). G&H’s “reduced DHRC” thesis thus contradicts the empirical fact that (9c) is perfectly felicitous.⁷ Felicitous examples (10) and (11) follow suit.

⁷ Why the linear order strategy for pronominalization can be suspended in the case of (9c) but not (9b) is unclear.

- (10) Ken-wa [[sensee-ga *ringo-o* hitotu kure-ta] sono {**aka-i**, **simidarake no**,
K-TOP teacher-NOM apple-ACC one peel-PAST that {red-PRES, stain.covered 's
sinabi-ta, **tuyayaka-na**} *ringo*]-o kazit-ta.
wilt-PAST, shiny-PRES} apple-ACC bite.into-PAST
'Ken bit into the one {red, stain covered, wilted, shiny} apple that the teacher gave
him.'
- (11) Ken-wa [[Sue-ga Ken no tanzyoobi-ni *keeki-o* tukut-ta] sono {**gooka-na**,
K-TOP S-NOM K 's birthday-for cake-ACC make-PAST that {gorgeous-be,
ibitu-na, **yooti-na**} *keeki*]-ni kangekisi-ta.
deform-be, childish-be} cake-by overwhelm.be-PAST
'Sue made a birthday cake for Ken, and Ken was overwhelmed by that {gorgeous, deformed,
childishly.made} cake.'

I argue in the succeeding sections that what is at play in these examples is not what G&H claim at all. What is at play is the discourse function of a DHRC.

5. The discourse function of the DHRC

Let me first note a peculiar property of this construction type. As commented in Kitagawa (2019: 25–27), the DHRC is a stylistically awkward and esoteric construction type not normally heard in daily conversation. However, this stylistically awkward and esoteric type of the DHRC construction is still available, since cross-sentential anaphora with the indefinite antecedent is fine when a speech participant wishes to avoid ambiguity as to the identity of the EH. I am indebted to one of the reviewers of an earlier version of this paper for pointing this out.

With this premise, compare the IHRC example (12a) and the DHRC examples (12b, c, d) associated with that IHRC. Note that with the *pro*-headed IHRC it is unclear what the subject referent *Ken* ate. There is no such ambiguity with DHRCs (12b, c, d).

- (12) (a) IHRC:
Ken-wa [[Sue-ga *ringo to nasi-o* motteki-ta] no [*pro*]-o tabe-ta.
K-TOP S-NOM apple & pear-ACC bring-PAST *no* eat-PAST
'Sue brought an apple and a pear, and Ken ate it/them.'
- (b) DHRC-1:
Ken-wa [[Sue-ga *ringo to nasi-o* motteki-ta] sono akai ringo-o tabe-ta.
K-TOP S-NOM apple & pear-ACC bring-PAST that red apple-ACC eat-PAST
'Sue brought an apple and a pear, and Ken ate the red apple.'

(c) DHRC-2:

Ken-wa [[Sue-ga ringo to *nasi-o* motteki-ta] sono yawarakasoo-na nasi-o
 K-TOP S-NOM apple & pear-ACC bring-PAST that soft-be pear-ACC
 tabe-ta.
 eat-PAST
 ‘Sue brought an apple and a pear, and Ken ate the tenderly soft looking pear.’

(d) DHRC-3:

Ken-wa [[Sue-ga ringo to *nasi-o* motteki-ta] sono akai ringo-to yawarakasoo-na
 K-TOP S-NOM apple & pear-ACC bring-PAST that red apple-& soft-be
 nasi-o tabe-ta.
 pear-ACC eat-PAST
 ‘Sue brought an apple and a pear, and Ken ate the red apple and the tenderly soft
 looking pear.’

Consider (13a) further, which may be ambiguous as to exactly whose innocent physical manifestation in the painting impacted the speaker’s heart. In the corresponding DHRC versions (13b) and (13c) there is no such ambiguity.

(13) a. IHRC:

[[Hahaoya_i-ga akago_j-ni miruku-o ataetei-ru] no [*pro*_(i,j)]]-o syasin-ni
 mother-NOM baby-to milk-ACC give-PRES *no* -ACC photo-to
 tot-ta.
 take-PAST
 ‘I took a picture of a mother giving milk to a baby.’

b. DHRC-1:

[[Hahaoya_i-ga akago-ni miruku-o ataetei-ru] sono hahaoya_i-o syasin-ni
 mother-NOM baby-to milk-ACC give-PRES that mother *no* photo-DAT
 tot-ta.
 take-PAST
 ‘I took a picture of the mother giving milk to a baby.’

c. DHRC-2:

[[Hahaoya-ga akago_i-ni miruku-o ataetei-ru] sono akago_i-o syasin-ni tot-ta
 mother-NOM baby-to milk-ACC give-PRES that baby-ACC photo-DA take-PAST
 sono.mono-ga kono e-ni-wa yoku torae-rare-tei-u.
 ‘I took a picture of the baby that the mother is giving milk.’

Likewise, while IHRC (14) below is difficult to interpret, as Landman (see 2016: 5, (7b)); the grammatical judgment is Landman’s) points out, but its DHRC version (14) is reasonably felicitous because it clearly spells out what the external head is:

(14) IHRC:

*Mary-wa [John-ga [atarasii kasetu-o teiansita] gakusei-o homete-ita]-no]-no
 M-TOP J-NOM new hypothesis-ACC proposed student-ACC praise-had-no-no
 kekkan-o sitekisita.
 defect-ACC pointed.out

‘Mary pointed out a defect in: [*the new hypothesis such that ...*] John had praised [the student who proposed *a new hypothesis*].’

(15) DHRC:

Mary-wa [John-ga [atarasii kasetu-o teiansita] gakusei-o homete-ita] sono
 M-TOP J-NOM new hypothesis-ACC proposed student-ACC praise-had that
 (atarasii) kasetu no kekkan-o sitekisi-ta.

(new) hypothesis no defect-ACC pointed.out-PAST

‘John had praised the student who proposed a new hypothesis, and Mary pointed out a defect of the (new) hypothesis.’

Now, here is an important question: Do all DHRCs obligatorily engage in a disambiguation function? I propose that they do. So, by defining the DHRC’s discourse function as disambiguation, my point is not merely that DHRCs are appropriate for such a disambiguation role but are required to play that role.⁸ Consider, in this regard, examples (16a, b).

(16) a.?*[Yuzi-ga susiya-de hataraitai-ru] sono Yuzi-ga human-o
 Y-NOM sushi.place-at working.be-PRES that Y-NOM complain-ACC
 morasitei-ru.
 express-PRES

(‘Intended: Yuji, who is working at a sushi restaurant, is complaining.’)

b.?*Boku-wa [Yuzi-ga susiya-de hataraitai-ru] sono Yuzi-o sittei-ru.
 I-TOP Y-NOM sushi.place-at working.be-PRES that Y-ACC know-PRES

(‘Intended: I know Yuji, who is working at a sushi restaurant.’)

The oddity with these DHRC examples is due to the fact that here there is only one potential argument that could serve as its IH and EH. In such a case, there is nothing to disambiguate. In (16a, b), the DHRC construction is used “illegally,” resulting in their odd status. These empirical facts thus legitimize the claim that the discourse function of DHRCs is disambiguation. And, if disambiguation by the DHRC format is necessary for meaningful discourse, then that format cannot be just redundant as claimed in G&H (2019, (7c, d)).

⁸ This claim is based on the behavior of DHRCs with overt EHs. If G&H’s proposed maximally reduced DHRCs exist, I take the default assumption to be that they too should obligatorily play a disambiguation function.

As noted correctly by G&H (2019:17) – for the first time in literature as far as I know – this disambiguation function of DHRCs even defies Shimoyama’s (2001: Chapter 3) dictum that “the IH of an IHRC plays a thematic role in an eventuality that is described by a sentence internal to the relative clause.” The following pair discussed by G&H demonstrates the phenomenon in question:

- (17) a. IHRC (G&H 2019: 4, (4); cast in the format of Kitagawa 2019):
 #[Taro-ga zibun no musume_i no hitori no susi_i-o kyaku-ni dasi-ta] no [*pro*_i]-o
 T-NOM self ’s daughter ’s one ’s sushi-ACC guests-to offer-PAST *no*]-ACC
 kyaku-ga suguni home-ta.
 guests-NOM right.away praise-PAST
 ‘Taro offered to guests a plate of sushi that one of his daughters made, and the guests praised the (quality of) sushi right away.’
- b. DHRC (G&H 2019: 17, (33)):
 [Taro-ga zibun no **musume**_i no hitori no susi-o kyaku-ni dasi-ta] sono
 T-NOM self ’s daughter ’s one ’s sushi-ACC guests-to offer-PAST] that
musume_i]-o kyaku-ga suguni home-ta.
 daughter-ACC guests-NOM right.away praise-PAST
 ‘Taro offered to guests a plate of sushi that one of his daughters made, and the guests praised the (quality of) sushi right away.’

All in all, G&H’s suggestion cited in (5b) (i.e., the constructions such as (1) and (6) “allow two parses, one as IHRCs and one as reduced DHRCs”) is not only empirically unsustainable but also fails to take into account the specific discourse function of DHRCs (i.e., disambiguation). Accordingly, Kitagawa’s (2019) critique of the basic claim advanced by Grosu, Hoshi, and Landman concerning Japanese IHRCs must stand unaffected.

6. DHRC’s discourse function in the context of gapless light-headed EHRCs

In this section I show that the DHRC’s disambiguation function is not limited to IHRCs but applies as well to gapless light-headed EHRCs. Grosu & Hoshi (2016: 6, (13)) note that the bracketed constituent in (18a) “is an unambiguous gapless light-headed EHRC,” in which “the connection between the EH and the relative clause is always established by contextually or lexically licensed extensions, since in gapless EHRCs in general, there is not only no gap but also no nominal expression within the relative clause that can be construed as restricting the denotation of the complex DP” (here recast in our own format with pronominal *pro*). (18a) is an instance of a gapless light-headed EHRC, and (18b) is its DHRC version.

- (18) a. Gapless light-headed EHRC:
 [[Sally-ga orenzi-o sibottekure-ta] (oisisoona) no [*pro*]-wa John-ga itadai-ta.
 S-NOM orange-ACC squeeze-PAST delicious-looking one-TOP J-NOM have-PAST
 ‘(As for) the (delicious-looking) (orange) juice such that Sally squeezed oranges [*to obtain it*], John drank it.’
- b. Its DHRC counterpart:
 [[Sally-ga orenzi-o sibottekure-ta] sono (oisisoona) (orenzi) zyuusu]-wa
 S-NOM orange-ACC squeeze-PAST that delicious-looking orange juice-TOP
 John-ga itadai-ta.
 J-NOM have-PAST
 ‘(As for) the (delicious-looking) (orange) juice such that Sally squeezed oranges [*to obtain it*], John drank it.’

As G&H note, the incontrovertible gapless light-headed EHRC felicitously allows adjectival modification of *no*. It is important to note that gapless light-headed EHRCs such as (18a) typically exhibit a unique characteristic about which Grosu, Hoshi, and Landman have so far made no comment, namely, that the requisite property of the EH *pro* is that it serves as a receptor – and not as an anaphor – for the salient entity to be contextually appropriate. It thus resembles a “part-whole anaphor” in Schwarz’s (2009) sense (e.g., I got into a car. The steering wheel was broken. Car → steering wheel), which uses the weak definite article in German. In Schwarz’s analysis, this type of bridging is non-anaphoric. The EH *pro* of gapless light-headed EHRC (18a), therefore, is a non-anaphoric definite.

Now, back to the discourse function of DHRCs, consider (19a). In this gapless light-headed EHRC, it is not exactly clear what the non-anaphoric definite *pro* stands for: Does it stand for apple juice, orange juice, or both? In DHRC (24b, c, d) there is no such ambiguity.

- (19) a. Gapless light-headed EHRC:
 Yuuzi-wa [[Haruko-ga ringo-o, sosite Akiko-ga orenzi-o, sibot-te,
 Y-TOP H-NOM apple-ACC and A-NOM orange-ACC squeeze-and
 oiteat-ta] no [*pro*]-o hitokuti non-de hakidasi-ta.
 leave-PAST ’s stuff-ACC a.mouthful swallow-and spit.out-PAST
 ‘(As for) the stuff Haruko had squeezed, apples, and Akiko, oranges, and left out, Yuji took a mouthful and spat it out.’
- b. The corresponding DHRC version (i):
 Yuuzi-wa [[Haruko-ga **ringo**-o, sosite Akiko-ga orenzi-o, sibot-te
 Y-TOP H-NOM apple-ACC and A-NOM orange-ACC squeeze-and
 oiteat-ta] sono **ringo** no zyuusu]-o hitokuti non-de hakidasi-ta.
 leave-PAST that apple ’s juice-ACC a.mouthful swallow-and spit.out-PAST
 ‘Haruko had squeezed apples and left it out, and Yuji took a mouthful of that apple juice and spat it out.’

- c. The corresponding DHRC version (ii):
 Yuuzi-wa [[Haruko-ga ringo-o, sosite Akiko-ga **orenzi**-o, sibot-te
 Y-TOP H-NOM apple-ACC and A-NOM orange-ACC squeeze-and
 oiteat-ta] sono **orenzi** no zyuusu]-o hitokuti non-de hakidasi-ta.
 leave-PAST that orange 's juice-ACC a.mouthful swallow-and spit.out-PAST
 'Haruko had squeezed apples, and Akiko oranges, and left it out, and Yuji took a
 mouthful of that orange juice and spat it out.'
- d. Yuuzi-wa [[Haruko-ga **ringo**-o, sosite Akiko-ga **orenzi**-o, sibot-te,
 Y-TOP H-NOM apple-ACC and A-NOM orange-ACC squeeze-and
 oiteat-ta] sono **ringo to orenzi** no zyuusu-o hitokuti non-de
 leave-PAST that apple and orange 's juice-ACC a.mouthful drink-and
 hakidasi-ta.
 spit.out-PAST
 '(As for) what Haruko had squeezed, apples, and Akiko, oranges, and left it out, Yuji
 took a mouthful and spat it out.'

These discussions show that both IHRCs and gapless light-headed EHRCs have their own DHRC versions, and that in either case the DHRC's discourse function is the same, namely, disambiguation. Again, if disambiguation by the DHRC format is necessary for meaningful discourse, then that DHRC format cannot be just redundant.⁹ This fact gives further evidence of the lack of credibility in G&H's claim that parallel to a given IHRC there exists the homophonous "maximally reduced" DHRC taking the identical surface form with that IHRC (G&H 2019: 15).

Let me now turn to one other relevant issue. G&H (2019: 5, (11)) give infelicitous example (20a) concerning "the skeleton of a shogun" (the emphasis is added by the present author):

- (20) a. #[[[syoogun-ga koros-are-te zutto hootis-are-tei-ta kekka
 shogun-NOM kill-PASS-and for.a.long.time put-PASS-being-PAST result
 hakkotukasite-simat-ta] **mizimena**] no]-o kasin-ga hisokani
 become.skeletonized-end.up-PAST miserable one-ACC vassal-ACC secretly
 maisoosi-ta.
 bury-PAST
 'A vassal secretly buried the miserable object [resulting from the fact] that the shogun
 was killed a long time ago and his body has become skeletonized.'

⁹ I am indebted to one of the reviewers for this point, as her/his comment on an earlier version of this paper led me to consider the issue raised here. It should be noted that disambiguation is compatible with redundancy. In the DHRC examples in (12) and (19), for example, the EH is redundant. Redundancy of the EH, however, is not a requirement of DHRCs.

- b. [[syoogun-ga koros-are-te zutto hootis-are-tei-ta kekka
 shogun-NOM kill-PASS-and for.a.long.time put-PASS-being-PAST result
 hakkotukasite-simat-ta] **massiro-na**] **no**]-o kasin-ga hisokani
 become.skeletonized-end.up-PAST pure.white.-be one-ACC vassal-ACC secretly
 maisoosi-ta
 bury-PAST
 ‘A vassal secretly buried the pure white object [resulting from the fact] that the was
 killed a long time ago and his body has become skeletonized.’

Adding to G&H’s (20a), I provide (20b), which is parallel to G&H’s (20a) except for the different modifying adjectival phrase preceding *no*. Note that this (20b) is reasonably felicitous. So, what is going on with (20a)? G&H here subscribe to the commonly held notion that the “pronominal *no*” projects a derogatory sense when applied to a human being. This is, however, a misconception, as pointed out in Kitagawa (2005: 12–18). The correct generalization should be given as is (21) (Kitagawa 2005: 18, (33)).

- (21) The sense of deference cannot be read into *pro* if it represents an arbitrary reference.

The reason (20a) is odd, therefore, is not due to the misuse of “pronominal *no*.” For, the acceptability of the sentence would improve if a different modifying adjective that is pragmatically linked to the context is used as in (20b). The simple fact is that there is no such thing as “pronominal *no*.” The *no* in question is generated in the position directly preceding the non-anaphoric definite *pro* discussed above by the pre-nominal modification (MOD) rule in Japanese (see fn. 2), providing an appropriate context for which (21) applies.

Predictably, then, the following gapless light-headed EHRC (cf. Kitagawa 2019:11, (19)) is felicitous, where the EH *pro* that is a non-anaphoric definite can, for instance, be interpreted as *itai* ‘corpse’ among other possibilities, the *pro* still retaining the sense of respect and love by the villagers:

- (22) Murabitotati-wa [[keiaisu.ru sontyoo-ga terrorist-ni naburigorosi.ni.s-are-tesimat
 villagers-TOP beloved village.chief-NOM terrorist-by torture.to.death-PASS-end.up
 -ta] **no** [*pro*]] **no** hitugi-o kuruma-de kyookai-e hakon-da.
 -PAST *no* *no* coffin-ACC car-by church-to carry-PAST
 ‘The village chief, whom the villagers loved and respected, was tortured and murdered
 by terrorists, and the villagers took the (*pro*’s) coffin by car to the church.’

The DHRC version of (22) makes what the coffin contains more specific, and the two lexical items, *sontyoo* ‘village chief’ and *nakigara* ‘corpse’, maintain a “whole” and “part” relation in the sense of Schwarz (2009) referred to above.

7. Different types of *pro*'s

What the discussions so far reveal is that there are two types of *pro*'s involved, one appearing in the IHRC and the other in the gapless light-headed EHRC, as illustrated in the following:

(23) a. IHRC:

[[Sally-ga **ringo**_i-o mui-ta] sono oisisoona no [**pro**_i]-wa John-ga
S-NOM apple-ACC peel-PAST that delicious-looking *no*-NOM J-NOM
itadai-ta.
have-PAST

‘(As for) the delicious-looking apples that Sally peeled, John ate them.’

b. Gapless light-headed EHRC (cf. (23a)):

[[Sally-ga ringo-o sibotte.kure-ta] sono oisisoona no [**pro**]-wa
S-NOM apples-ACC squeeze-PAST that delicious-looking *no*-TOP
John-ga itadai-ta.
J-NOM have-PAST

‘(As for) the (delicious-looking) (apple) juice that Sally squeezed apples [*to obtain it*], John drank it.’

In IHRC (23a), the EH *pro* is an E-type pronoun, which, as discussed in detail in Kitagawa (2019: 12–14), is an anaphoric definite. In the gapless light-headed EHRC, on the other hand, it is non-anaphoric definite in the sense of Schwarz (2009).

On a slightly different issue, consider (22) again. I conjecture that it may be interpreted as an instance of the IHRC if one can possibly inject a sense of a spiritual presence in the figure of the village chief even after he died. In that case, its DHRC version would be (24b).

(24) a. IHRC:

Murabitotati-wa [[keiaisu.ru **sontyoo**_i-ga terrorist-ni
villagers-TOP beloved village.chief-NOM terrorist-by
naburigorosi.ni.s-are-tesimat-ta] no [**pro**_i] no hitugi-o kuruma-de kyookai-e
torture.to.death-PASS-end.up-PAST *no no* coffin-ACC car-by church-to
hakon-da.
carry-PAST

‘The village chief, whom the villagers loved and revered, was tortured and murdered by terrorists, and the villagers took the coffin containing him by car to the church.’

b. The DHRC version of IHRC (25a):

Murabitotati-wa [[keiaisu.ru **sontyoo**-ga terrorist-ni naburigorosi.ni.s-are-
villager-TOP beloved village.chief-NOM terrorist-by torture.to.death-PASS-
tesimat-ta] sono **sontyoo**] no hitugi-o kuruma-de kyookai-e hakon-da.
end.up-PAST that village.chief 's coffin-ACC car-by. church-to carry-PAST

‘The village chief, whom the villagers loved and revered, was tortured and murdered by terrorists, and the villagers took the coffin containing him by car to the church.’

For those to whom such an interpretation is possible, including the present author, the EH *pro* in IHRC (24a) is an E-type pronoun, which is an anaphoric definite. And the EH *sono sontyoo* in its DHRC version (24b) clarifies what the *pro* in (24a) stands for.

To reiterate, IHRCs, DHRCs, and gapless light-headed EHRCs may be structurally represented as in (25a, b, c).

- (25) a. IHRC: $[_{DP/IHRC} \dots [_{CP} \dots NP_i \dots V] no [_{DP} [_{NP} pro_i] D]]$
 b. DHRC: $[_{DP/DHRC} \dots [_{CP} \dots NP \dots V] [_{DP} sono [_{NP} EH] D]]$
 c. Gapless light-headed EHRC: $[_{DP/GPLE} \dots [_{CP} \dots NP \dots V] no [_{DP} [_{NP} pro] D]]$

Two types of *pros* are involved:

- (26) a. The external head *pro* of IHRC (26a) is an anaphoric definite; and
 b. The external head *pro* of gapless light-headed EHRC (26c) is a non-anaphoric definite.

8. Concluding words

Kitagawa (2019: 19) presents his analysis of IHRC as follows: (i) an IHRC requires a formal link between its IH and the EH *pro*; (ii) the IH isolated in a syntactic island makes the establishment of the formal link difficult; (iii) given the makeup of a Japanese IHRC as understood in the framework of the *pro*-head analysis as in Kitagawa (2019), a “repair” is possible based on the notion of “coreference” as defined in Reinhart (1983). The disambiguation of an IHRC by means of a DHRC has the effect of making this “repair” unnecessary precisely because the IHRC’s EH *pro* is replaced by the lexical item in the DHRC, to disambiguate any possibly misinterpretation of the *pro*. This is the sort of operation that G&H’s operator movement analysis cannot be equipped to do, the fact of which leads them to resort to the redundancy requirement route. G&H claims that “the *prima facie* allowable violation of island constraints involved with the apparent IHRCs is completely accounted for by the thesis that they are in fact not IHRCs but homophonous ‘reduced’ DHRCs” (G&H 2019: 20), because “DHRCs are insensitive to the CNCP and AJIC” (G&H 2019: 15).

The objective of this paper was three-fold. The first and foremost is to disprove G&H’s (2019: 19) claim that apparent IHRC constructions, such as (1) and (6), “allow two parses, one as an IHRC and one as a reduced DHRC.” The empirical validity of this claim is questioned in Section 3. The second objective is to point out G&H’s misconception concerning the discourse function of DHRCs, critically reviewing in Section 4 their “redundancy” thesis repeated here as (27).

- (27) The EH of a DHRC is subject to the semantic and pragmatic redundancy requirement (G&H 2019: 14) and, hence, the semantics of a DHRC will be unaffected if the redundant information in the EH is suppressed altogether, and if *sono* ‘that’ is replaced with a null definite D, which is independently needed for IHRCs; “we suggest that such maximally ‘reduced’ DHRCs exist” (G&H 2019: 19).

Thirdly, this paper explicates the nature of the interrelationship among three construction types: IHRCs, DHRCs, and gapless light-headed EHRCs.

All together, these arguments point to the conclusion that G&H's critique of Kitagawa (2019) is unsustainable.

Editor's note

Chisato Kitagawa passed away at a Seattle hospital on January 14, 2022, after a long illness. He was 89 years old. His wife, Mary, and children and grandchildren were with him.

Chisato was an inspiring teacher, a thoughtful mentor, a wonderful colleague, and a caring friend to so many people. He received his Ph.D. in linguistics from the University of Michigan, and taught at the University of Massachusetts, Amherst, and the University of Arizona. He had published widely on Japanese linguistics, including on the case marker 'no' with Claudia Ross, on zero pronouns, and on head-internal relative clauses.

A devout Christian, he had received a Master of Theology from the Episcopal Divinity School in Cambridge, Massachusetts, prior to starting his Ph.D. studies in linguistics, and served as a minister throughout his career.

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Competing interests

The author has no competing interests to declare.

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