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# English *if (not)*-stripping Constructions: A Direct Interpretation Approach\*

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Jong-Bok Kim (corresponding author) Professor, Dept. of English Language and Literature, Kyung Hee Univ. Tel: 02) 961-0892 E-mail: jongbok@khu.ac.kr **ABSTRACT** 

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English if-stripping has at least two subtypes: if-stripping and negative if-stripping. As in the typical stripping, its remnant can be either a lexical or phrasal remnant, and it receives a sentential interpretation. The paper reviews sentential analyses that capture the propositional meaning of the stripped clause through movement-cum-deletion operations. The paper discusses attested corpus data that challenge the postulation of sentential sources and argues for a direct interpretation approach that directly generates if (not)-stripping and assigns the propositional meaning through discourse-based proper resolution processes.

## **KEYWORDS**

if-stripping, Bare Argument Ellipsis, subordinate clauses, direct interpretation, discourse

<sup>\*</sup> Part of this paper is taken from Park's (2022) dissertation. Earlier versions of this paper were poster-presented at the 46th annual Penn Linguistics Conference (PLC 46) on March 19, 2022, and paper-presented at the 14th annual meeting of the Illinois Language and Linguistics Society (ILLS 14) on February 25, 2022. We thank the audiences at the conferences and anonymous reviewers for their valuable feedback. Any remaining errors are solely our responsibility.

#### 1. Introduction

The following examples illustrate typical if(not)-stripping:

(1) a. John likes to drink whiskey. **If scotch**, I'll pour him an Islay. (Myers and Yoshida 2018: (1a)) b. Enscombe was gracious - gracious in fact, **if not in word**. (Kjellmer 1975: 140)

The constructions include a subordinate conjunction if and a fragmental element with a linear order of 'if + a fragmental X(P)'. Also in the negative if-stripping (henceforth, if not-stripping), a negation operator 'not' appears as 'if + not + a fragmental X(P)'. The remnants of if-stripping and if not-stripping constructions receive a sentential interpretation, while other components in the putative source do not appear in the surface structure, as illustrated in the following repeated examples:

- (2) a. ... If he likes to drink scotch, ... b. ... if he was not gracious in word ...
- In (2), while the parallel meanings of the antecedents in the putative sources of the remnants are understood in the if-clauses, the remnants of if (not)-stripping and their corresponding correlates are in the contrastively focused relations. Moreover, the negative operator 'not' functions as a sentential negation in the putative source clause, even though it modifies the following remnant in the stripped clause. Meanwhile, the ellipsis of if (not)-stripping is not obligatory, which is distinct from the typical stripping.

This paper discusses some key properties of *if* (*not*)-stripping, referring to the literature as well as the attested data from the corpus from COCA engine (Corpus of Contemporary American English). It then critically reviews previous sentential approaches that employ movement-cum-deletion operations. The paper then looks into the attested data in detail to see how the construction is used in real-life. Based on these empirical data, this paper sketches a direct interpretation (DI) approach that could account for the flexibility of its usages (see Culicover and Jackendoff 2005, Ginzburg and Sag 2000, among others).

## 2. Basic Grammatical Properties

## 2.1 Distributional Properties

The first property of if(not)-stripping concerns variations in the syntactic category of the remnant:

- (3) a. Did she dislike him personally, or was it a generalized dislike of what he stood for? **If** [NP **the former**], there was little hope of a reconciliation. (1996 FIC)
  - b. The sulphurous fumes cause and threaten damage on so considerable a scale to the forests and vegetable life, **if not** [PP **to health**], within Georgia. (1996 MAG)
- (4) a. Do you favor or oppose the U.S. war in Iraq? If [v oppose]: Which comes closer to your view? (2012 WEB)
  - b. The couple would leave with a patron or two exiting right behind, if not [p with], them. (2012 BLOG)

As observed from the data here, not only a variety of phrases but also lexical expressions can serve as the remnant, but they still can induce a propositional meaning. In particular, examples in (4) show the high flexibility of the remnant type in *if*-stripping. Having only the head verb 'oppose' in (4a) and only the preposition 'with' in (4b) are not expected in typical fragment constructions.

Furthermore, a wh-phrase can also be the remnant of if (not)-stripping, as in the following examples<sup>1</sup>:

- (5) a. A: If he's yours, I'll leave it be. B: If who? You mean Mr. Larabee? (1998 TV)
  - b. You will know where to go to get your son. If not how. (1993 FIC)

In (5a), the wh-element 'who' in if-stripping does not seem to refer to something in the antecedent or preceding utterance in the dialogue. Rather, it asks back whether A is mentioning 'Mr. Larabee' in order to make a correction or an affirmation. On the other hand, another wh-remnant 'how' in (5b) refers to 'you do not know how to go to get your son' from the putative source clause, since it shows a contrast interpretation with its wh-correlate 'where' in the antecedent clause.

In addition, a polarity particle such as 'yes' or 'no' or a negation marker 'not' can be the remnant as well, as follows:

(6) a. [Do I really need it]? **If yes**, move it back into the room. **If no**, put it into one of three piles. (2012 WEB) b. [They are made to last longer]. Because **if not**, manufacturers would lose money. (2012 MOV)

In this case, both types of the remnants refer to a proposition in the bracketed antecedent clause. Especially, note that the remnant 'not' in (6b) is not a negative *if*-stripping, but it refers to the propositional correlate with its opposite polarity with a sentential negation reading like 'if they are not made to last longer'. Regarding the negator remnant, Kim (2020) suggests that when 'not' appears as a sole remnant, it functions as a propositional anaphor which refers to a clausal antecedent provided in the context<sup>2</sup>. Likewise, the remnants 'yes' and 'no' in (6a) can be construed as 'if I need it' and 'if I do not need it' respectively with a contrast polarity.

Most of the if(not)-stripping constructions appear in the matrix context of the if-clauses. However, the following corpus data in (7) suggest that if-stripping may be embedded under a predicate like see, know or wonder with similar distributions as in sluicing in (8).

- (7) a. Ask Gov to fact check JCPL's statements to see if true. (2012 BLOG)
  - b. COURIC: Were you surprised when you got it?
    - Ms-WINOKUR: I don't know if surprised. (2002 SPOK)
  - c. People have jobs and bills to pay. I can't help but wonder if happened.
- (8) They were hoping you might *know* **who**. (Slucing)

<sup>&</sup>lt;sup>1</sup> The remnant is henceforth boldfaced, and the correlate (the corresponding expression of the remnant) is wavy-underlined. Also, when the remnant has its antecedent in the surrounding context, it can be bracketed, throughout this paper.

<sup>&</sup>lt;sup>2</sup> Kim (2020) also proposes the examples of the negated fragments which refer to the negation functioning as a propositional anaphor. The corresponding examples are extracted from the attested corpus data as follows:

<sup>(</sup>i) a. Should you do that? Maybe not. (2012 TV)

b. Could you maybe come back later? Afraid not. (2013 MOV)

One thing worth noting here is that such an embedded environment is not available in the typical stripping as in (9a) (Yoshida et al. 2015) or even in *if not*-stripping as in  $(9b)^3$ .

- (9) a. \*John was eating natto, but I think (that) not sushi. (Yoshida et al. 2015: 326)
  - b. \*I don't know if not surprised.

Those examples provide evidence that *if*-stripping has its own idiosyncratic distributional requirements, which may be distinct from its related constructions.

#### 2.2 Correlates and Discourse Antecedent

With the distributions of if(not)-stripping, a remnant stands in a contrastive focus relation to its correlate in the antecedent clause. To be more specific, a linguistic element as the correlate may appear overtly with a contrastive meaning with the remnant as in (10a), or it can be repeated to the remnant with the same expression as in (10b). Also, the remnant can refer to the correlate in the antecedent with the anaphoric meaning as in (10c). The following examples illustrate this point with the wavy underlined correlates:

- (10) a. Trading with the Orient has become <u>arduous</u>, **if not dangerous**. (1992 FIC)
  - b. Do you favor or oppose this plan? "If oppose:" If you had to choose, would you rather see ... (2012 WEB)
  - c. For a moment the wild thought came to him that he might be able to kill Fanning and escape, and that if so, he could pull a double coup if he returned to Miles with strategic information. (2005 FIC)

Especially, the proform remnant so in (10c) refers to the sentential correlate 'he (might be able to) kill Fanning and escape', thus the stripping can have the anaphoric interpretation.

However, the remnant in fact may also have a covert correlate in the antecedent clause. For instance, the remnant 'slowly' in (11a) has no explicitly expressed linguistic correlate in the antecedent, but we can easily conjecture the meaning of the stripped clause since the remnant refers to '(even) if Asian populations continued to grow slowly'. This indicates that the remnant contains its covert correlate which can be provided by the given context.

- (11) a. Asian populations continued to grow, if slowly. (1991 MAG)
  - b. [Jeff Sluman], a guy renowned for his practical jokes, but who [clearly takes the game], **if not himself**, will be the first to tell you he's not the best player in the game-then or now. (1996 MAG)

Similarly, in (11b), the remnant 'himself' in *if not*-stripping does not have its overt correlate, but this also can be reconstructed based on the antecedent as '(even) if Jeff Sluman does not take the game himself', though the corresponding antecedent clause is bracketed discontinuously. Both remnants in (11a) and (11b) function as the adjunct based on the putative source clauses.

<sup>&</sup>lt;sup>3</sup> In the previous literature, Yoshida et al. (2015) and Kim (2017) suggest that there is a special type of stripping, which is so-called *why*-stripping. This construction exclusively appears with an interrogative *wh*-remnant 'why' and may also occur in the embedded context, as follows from attested data:

<sup>(</sup>i) A beautiful giraffe sweater? You could see why, maybe I would wonder why giraffes. (2000 MOV)

Furthermore, a remnant can have an exophoric antecedent established by the situational or surrounding context as shown in  $(12)^4$ .

(12) Art Market buys name and time, so what would happen **if an artist**. He went so far as to fake his death... (2014 MOV)

In (12), the remnant 'an artist' can be understood as 'if an artist sell his/her name', even though no specific expression is provided in the context. Hence, it is assumed that the antecedent can be resolved from the extralinguistic materials (Hankamer and Sag 1976, Miller and Pullum 2013).

It is important to keep in mind that when the remnant has its overt or covert correlate, if(not)-stripping does not allow an implicit argument in the source sentence as suggested in the previous literature (Merchant 2001, Myers and Yoshida 2018).

- (13) a. A: They will serve the guests.
  - B: If (\*it is) whiskey, his teetotaler mother will be upset. (Myers and Yoshida 2018: (12a))
  - b. A: They will serve the guests.
    - B: Not (\*it is) whiskey. (Myers and Yoshida 2018: (12b))

This argument can also be applicable to the extracted corpus examples when they are found to have an overt or covert correlate, as in (14a) and (14b), respectively.

(14) a. Trading with the Orient has become arduous, if (\*it is) not dangerous. (1992 FIC)b. Jeff Sluman who takes the game, if (\*it is) not himself, will be the first to tell you ... (1996 MAG)

## 2.3 Connectivity Effects

As a remnant in if(not)-stripping captures the parallel behaviors with the presence of its corresponding correlate and antecedent, the remnant of if(not)-stripping displays some syntactic connectivity effects with the antecedent clause. A piece of evidence can be found by the following example in which only a part of the idiomatic meanings presents as a remnant, while the whole idiomatic meaning is likely to be preserved.

(15) If you are in a superior position give them anything you would want **if their shoes**. Treat them as you would want to be treated. (2012 WEB)

In (15), the idiomatic meaning of the remnant 'their shoes' can be retrieved as 'if you are in their shoes' from the adjacent context, since the preceding antecedent represents an expression such as 'if you are in a superior position'. Moreover, the same meaning of the idiomatic expression is offered from the following sentence 'treat them as you would want to be treated'.

Another piece of evidence comes from the existence of a preposition. Consider the following dialogue:

<sup>&</sup>lt;sup>4</sup> Regarding the term 'exophoric', Hankamer and Sag (1976) suggest that the external nonlinguistic context is established by the hearer in the discourse. The exophoric element can also be referred to as 'deitic' or 'pragmatically controlled'.

(16) A: "Winnie. I didn't mean to unload <u>on you</u>."

B: "If not me (= if you did not mean to unload on me), who?" (2014 FIC)

The remnant with an accusative case in (16B) seems to be stranded from its host PP in the putative source with a preposition 'on'. Thus, the remnant and its anaphoric correlate 'you' are shown to exhibit the matching cases. In the analysis of preposition stranding (P-stranding) structures, if the ellipsis site and its antecedent clause are identical, the remnant is assumed to be extracted out of the prepositional object in the underlying structure (Huddleston and Pullum 2005, Maling and Zaenen 1985, a.o.).

On the contrary to this, the remnant of the following example 'him' in (17) has its correlate with the same syntactic category PP preserving its preposition identity, and the preposition 'to' is lexically selected by the verb 'refer' from the putative source clause.

(17) The words "through grace" may either refer to Apollosi, or to the Christians who had believed. **If to him**i, it means that he was enabled by grace to strengthen the brethren there. (2012 WEB)

This could follow from the Merchant's P-stranding generalization in that the remnant PP with a focus or the stranded NP undergoes movement by eliding the remaining clause (Merchant 2001, 2004).

Meanwhile, the following repeated example also shows evidence for connectivity effect with respect to Binding Condition A:

(18) [Jeff Sluman<sub>i</sub>], a guy renowned for his practical jokes, but who [clearly takes the game], **if not himself**<sub>i</sub>, will be the first to tell you he's not the best player in the game-then or now. (1996 MAG)

The example (18) suggests that a reflexive anaphor 'himself' as the remnant is bound by its antecedent 'Jeff Sluman', which can be considered as the anaphor connectivity effect (Merchant 2004, Stjepanović 2008).

#### 2.4 Interpretations

Along with the distributional properties, if(not)-stripping constructions express at least three different interpretations: conditional, concessive, and embedded interrogative readings. Above all, if(not)-stripping is eligible to have a conditional reading in the subordinate structure, as shown in the following examples:

- (19) a. We contended for this honor by submitting a piece of our own work, poetry if the guest was a poet, fiction **if a novelist**. (2006 FIC)
  - b. Taking a hint from the forlorn tent tossing in the tumult below, we reconsider bivouacking here. But **if not here**, where? (1996 MAG)
  - c. Ask Gov to fact check JCPL's statements to see if true. (2012 BLOG)

In (19a), a conditional reading in *if*-stripping can be understood as 'if the guest was a novelist', and another presumed reading as 'a piece of our own work would be fiction' can provided from the preceding conditional clause with the parallel structure. Also, in (19b), the remnant stands for an anaphoric reading with the correlate which is understood as 'if we do not bivouack here, where would we?'. As such, the conditional interpretation may be regarded as the most prevalent one throughout our corpus data.

In addition, there are cases in a contrastive focus relation between a remnant and its correlate, since the two constituents mostly denote concessive readings. The following examples illustrate this point:

(20) a. We found clerks to be <u>helpful</u>, **if a bit spacey**. (1998 NEWS) b. "I'll see you on Friday then, **if not before**," Rose said to Marjory. (2014 FIC)

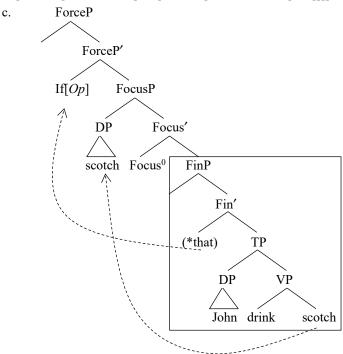
In (20a) and (20b), each remnant has an interpretation introduced by a concessive connective such as 'even if', 'even though', 'although', or 'though'. As indicated by Huddleston and Pullum (2005) and Quirk et al. (1987), the event denoted by the main clause is contrary to the expectation in terms of what is said in the concessive expression.

## 3. Previous Analyses

Myers and Yoshida (2018) have suggested that *if* (*not*)-stripping undergoes a clausal ellipsis to capture the propositional meaning of the stripped clause. In their analysis, 'if' stands for a complementizer in the stripped clause and a fragmental remnant moves to the specifier of FocusP in a SplitCP model, and then *if*-stripping undergoes a clausal ellipsis of lower CP projection (FinP), rather than TP. The following linear and tree structures illustrate the process:

(21) a. John likes to drink whiskey. If scotch, I'll pour him an Islay.

b. [ForceP If [FocusP scotch [FinP [TP John [VP drink scotch] ... ]]]]]



Supporting their arguments, it concerns with some syntactic connectivity effects such as binding condition, preposition stranding, and island sensitivity constraints. Several lines of evidence propose that *if* (*not*)-stripping has the identical syntactic structure with the putative source clause. The following examples account for this point:

- (22) (Binding Condition A)
  - a. A: John<sub>i</sub> is criticizing someone. B: **If himself**<sub>i</sub>, it is unfair.
  - b. A: John,'s friends are criticizing someone. B: \*If himself, it is unfair. (Myers and Yoshida 2018: (14))

In (22), the reflexive pronoun 'himself' is interpreted as a bound variable with its antecedent 'John'. Since the target source of the extraction must c-command its putative source, it can be assumed with a clausal source like 'John is criticizing himself'. In addition, as shown in (23), Binding Condition C is also a good illustration in which the R-expression 'Mary' cannot acquire its antecedent 'she' which c-commands it.

- (23) (Binding Condition C)
  - a. She; was selling some pictures. \*If of Maryi, her mother will be upset.
  - b. Her; sister was selling some pictures. If of Mary, her mother will be upset. (Myers and Yoshida 2018: (17))

As such, the grammatically associated relation between a remnant and its antecedent also seems to be provided by corpus findings with the following Binding Condition A example:

(24) He<sub>i</sub> can motivate others if not himself<sub>i</sub>. (1995 MAG)

This argument seems to be supported by the previous research. However, some extracted corpus data challenge such a sentential analysis. Especially, previous studies with focus movement and a clausal ellipsis have not dealt with syntactic mismatch cases between the remnant and its antecedent, which would cast doubt on the postulation of the sentential source for if(not)-stripping.

In the sections that follow, some further complications will be suggested especially in terms of the locality restrictions and idiosyncratic distributions. Resolving such empirical challenges to distributional and structural issues, we propose a direct interpretation (DI) analysis with a construction-based account in section 6 (Culicover and Jackendoff 2005, Ginzburg and Sag 2000).

## 4. Corpus Findings

#### 4.1 Data Distributions with Variables

To identify the authentic usages of *if* (*not*)-stripping, we investigated the web-based corpora COCA (Corpus of Contemporary American English). Searching strings for data collection was conducted with two construction subpatterns: *if*- and *if not*-stripping. The constructions are basically composed of a subordinating conjunction *if* or *if* with a negator *not* and a fragmental remnant with optional punctuation marks.

```
(25) a. (PUNC) if [remnant X(P)] (PUNC) b. (PUNC) if not [remnant X(P)] (PUNC)
```

For the data analysis of if(not)-stripping constructions, approximately 450 tokens of randomly selected examples were obtained from various kinds of registers including fiction, news, academic, etc. The data set consists of 284

if not

9 (2.2%)

414 (100%)

tokens of *if*-stripping cases and 135 tokens of *if not*-stripping instances<sup>5</sup>. After collecting data, syntactic, semantic, or discourse variables were tagged on each example based on its form and function considering the real-life usages. This annotation process is the most important phase so that we look into the data with their internal and external relations between a remnant and its antecedent or context.

As noted earlier, various forms of the remnant were observed as a kind of variables depending on their syntactic categories. The most frequently observed category type was the phrasal NP in both *if-* and *if not-*stripping, as can be found in the following table:

	Syntactic category of remnants					
	AP	NP	VP[pass]	VP[(es)]	VP[ing]	VP[bse]
if	75 (18.1%)	77 (18.6%)	24 (5.8%)	5 (1.2%)	6 (1.4%)	4 (1%)
if not	13 (3.1%)	65 (15.7%)	4 (1%)	0 (0%)	2 (0.5%)	1 (0.2%)
	V	V[aux]	NP[wh]	AdvP[wh]	Adv(P)	Adv[neg]
if	4 (1%)	21 (5%)	2 (0.5%)	0 (0%)	32 (7.7%)	12 (2.9%)
if not	15 (3.6%)	0 (0%)	0 (0%)	2 (0.5%)	7 (1.7%)	0 (0%)
	PP	Prep	Part	proform	quantifier	TOTAL
if	5 (1.2%)	2 (0.5%)	3 (0.7%)	6 (1.4%)	0 (0%)	

Table 1. The Distributions of Remnants' Syntactic Categories of *if-* and *if not-*stripping (raw frequencies (%))

After NP, AP represents the second most frequent type and is followed by verbal forms. The three types of examples labeled with the syntactic category are exemplified in (26).

0(0%)

(26) a. ... they give me plenty of credit if [NP no money] NP. (2012 BLOG)

7 (1.7%)

- b. This place you're living sounds charming, if [AP primitive] AP. (2010 FIC)
- c. Families were disrupted, **if not** [VP[en] **destroyed**] VP[EN], reputations ruined, homes and belongings lost. (2012 WEB)

3 (0.7%)

3 (0.7%)

Also, the lexical types such as a bare verb, a bare preposition, a particle, and a quantifier were found, as provided in the table above with the overall distributions of remnants' syntactic categories of *if-* and *if not-*stripping.

Along with the distributions of the remnants, their corresponding correlates can also be observed with syntactic categories to identify their syntactic (mis)matching relations. Consider the relations in the following examples:

- (27) a. Darth Maul, my crosswalk buddy, was probably a very <u>nice</u> AP guy, **if possibly overtalkative** AP. (2009 FIC)
  - b. For a moment the wild thought came to him that he might be able to kill Fanning and escape s and that if so PROFORM, ... (2005 FIC)

In (27a), the remnant's syntactic category AP matches with the correlate's one, since *if*-stripping can be reconstructed as 'if Darth Maul was possibly an overtalkative guy'. In (27b), however, the remnant appears as a

<sup>&</sup>lt;sup>5</sup> The result with more tokens found in *if*-stripping than *if not*-stripping is due to the fact that we additionally included cases with predicational remnants while extracting data, which will be discussed in the subsequent sections.

clausal proform such as 'so' which can refer to a propositional meaning of the correlate, even though their syntactic forms do not match. In this respect, syntactic categories of the correlates provide a bit distinct distributions in that S is most highly ranked instead of VP compared to the distributions of remnants in *if*-stripping, as in the following table<sup>6</sup>:

Table 2. The Distributions of Correlates' Syntactic Categories of *if-* and *if not-*stripping (raw frequencies (%))

	Syntactic category of correlates						
=	AP	NP	VP[pass]	VP[(es)]	VP[ing]	VP[bse]	VP[inf]
if	29 (10.7%)	40 (14.8%)	1 (0.4%)	14 (5.2%)	1 (0.4%)	2 (0.7%)	2 (0.7%)
if not	11 (4.1%)	60 (22.2%)	2 (0.7%)	0 (0%)	2 (0.7%)	14 (5.2%)	3 (1.1%)
	V	V[aux]	NP[wh]	AdvP[wh]	Adv(P)	Adv[neg]	PP
if	0 (0%)	1 (0.4%)	0 (0%)	0 (0%)	6 (2.2%)	1 (0.4%)	8 (3%)
if not	1 (0.4%)	0 (0%)	2 (0.7%)	1 (0.4%)	6 (2.2%)	0 (0%)	14 (5.2%)
	Prep	Part	SC	S	quantifier	TO	ΓAL
if	1 (0.4%)	2 (0.5%)	3 (1.1%)	44 (16.3%)	0 (0%)	270 (100%)	
if not	4 (1.5%)	1 (0.4%)	0 (0%)	3 (0.7%)	3 (1.1%)		

One interesting thing here is that the correlates in *if not*-stripping have relatively low frequencies in S, but instead they show comparatively high frequencies in NP. This could be due to the finding that most of *if not*-stripping cases may have a contrastive relation with the correlate, which will be mentioned again in the following Table 5.

A relation between a remnant and its correlate can also be relevant to their positions in a sentence or with the antecedent. The following Table 3 indicates that both *if*- and *if not*-stripping may occur in sentence-initial, medial, or final position or even as a fragmental use independently in the context. However, it is interesting that *if not*-stripping occurs in the medial position with higher frequencies, and it may be due to the fact that when *if not*-stripping is in a contrastive relation with its antecedent, it tends to be more adjacent to the correlate immediately following it<sup>7</sup>.

Table 3. The Distributions of Positions of *if-* and *if not-*stripping in a Sentence and with the Antecedent (raw frequencies (%))

	Position in a sentence					
	initial	medial	final	fragmental	Total	
if	74 (27.7%)	69 (25.8%)	117 (43.8%)	7 (2.6%)	267 (100%)	
if not	27 (20.8%)	71 (54.6%)	30 (23.1)	2 (1.5%)	130 (100%)	
		Posi	tion with the antece	dent		
	preceding	following	interpolating	exophoric	Total	
if	15 (5.4%)	208 (75.4%)	18 (6.5%)	35 (12.7%)	267 (100%)	
if not	7 (5.3%)	94 (71.2%)	28 (21.2%)	3 (2.3%)	132 (100%)	

<sup>&</sup>lt;sup>6</sup> Note that we limited to the cases where the correlate is overtly presented in the data when observing the following table of distributions.

<sup>&</sup>lt;sup>7</sup> The total number of tokens according to the position both in a sentence and with the antecedent may differ due to the circumstance that there are some hard cases where the examples do not fall into any category.

More generally, typical stripping is assumed to follow its antecedent in the non-initial position. However, *if* (*not*)-stripping may appear in the sentence-initial, medial, or independently fragmental position, while they can precede, interpolate, or follow the antecedent, or even the antecedent can be contextually-given, which is the so-called 'exophoric antecedent'. Especially, most of the exophoric antecedent cases can be found in *if*-stripping. With the classifications, annotations for the position in a sentence and with the antecedent can be given to the examples, as follows:

## (28) If not I, another will manage to spread my word. INITIAL PRECEDING (2005 FIC)

Along with the syntactic distributions, *if* (*not*)-stripping can be understood with various interpretations: conditional, concessive, or embedded interrogative. Consider the following examples:

- (29) a. Hopefully that damage won't include your home, but **if does**, there are steps you can take to ensure that... CONDITIONAL (2012 BLOG)
  - b. The listed amperage is the best, if still imperfect, indicator of power. CONCESSIVE (1991 MAG)
  - c. A lot of people will come back, but we don't know **if everybody**. EMBEDDED-INTERROGATIVE (2005 SPOK)

One thing to point out here is that the embedded interrogative reading occurs only when *if*-stripping functions as a complementizer not a conjunction, due to the distributional restriction of *if not*-stripping, which can be observed in the following table with the interpretation distributions.

Table 4. The Distributions of Interpretations of if- and if not-stripping (raw frequencies (%))

	Interpretation			
•	conditional	concessive	embedded interrogative	Total
if-stripping	187 (60.3%)	106 (34.2%)	17 (5.5%)	310 (100%)
if not-stripping	73 (54.9%)	60 (45.1%)	0 (0%)	133 (100%)

The difference between *if*-stripping and *if not*-stripping observed in Table 4 is that one-thirds of the former have a concessive reading, whereas almost the half of the latter can be read with a concessive reading. The higher frequencies observed in *if not*-stripping with concessive readings could be attributed to the contrastive relation between the remnant and its antecedent.

#### 4.2 Data Distributions with Reconstruction

Based on the variables and reconstructions of if(not)-stripping, the structural relations between a remnant and its antecedent can be identified according to their syntactic match or mismatch in the following Table 5 and the following examples with the variable tags in (30).

Table 5. The Distributions of Correlates	s' Overtness between	<i>if</i> - and <i>if not</i> -stripping	(raw frequencies (%))
--	----------------------	--	-----------------------

		if-stripping	if not-stripping
M	Match	60 (13.3%)	105 (23.2%)
Merger	Mismatch	69 (15.3%)	23 (5.1%)
G .:	Match	15 (3.3%)	4 (1.9%)
Sprouting	Mismatch	29 (6.4%)	0 (0%)
Exophoric		145 (32.1%)	2(0.4%)
T-4-1		318	134
Total		452	(100%)

- (30) a. "Fifty percent brain-panned?" Mike asked. "If that." MERGER MISMATCH
  - b. Asian populations continued to grow, if slowly. SPROUTING MATCH
  - c. I don't know what to do. Please help if any advice. EXOPHORIC N/A

From the table above, it is apparent that the mismatch cases of *if*-stripping show relatively higher frequencies than the ones of *if not*-stripping. Furthermore, we can see that exophoric antecedent cases in *if*-stripping are significantly higher than merger or sprouting cases. On the other hand, the exophoric type was hardly found in *if not*-stripping. Those observations were due to the fact that *if (not)*-stripping has cases with implicit arguments or discourse antecedent. In this case, the exophoric cases are not relevant to the variable with the syntactic mismatch. Thus, the tag named N/A (not applicable) can be given to the corresponding cases.

To be more specific with the merger type, the remnant's overtly represented correlate can be shown as a contrastive, repeated, or anaphoric relation with the remnant, as in the following repeated examples with the variable tags.

- (31) a. Trading with the Orient has become arduous, if not dangerous. CONTRASTIVE
  - b. Do you favor or oppose this plan? "If oppose:" If you had to choose, would you rather see ... REPEATED
  - c. The wild thought came to him that he might be able to kill Fanning and escape, and that if so, he could pull a double coup... ANAPHORIC

Data from the following table describe the examples in (31), which show that most of the remnants in *if not*-stripping has a contrastive relation with their correlates.

Table 6. The Distributions of Merger Types of Correlates between *if-* and *if not-*stripping (raw frequencies (%))

		if-stripping	if not-stripping
	Contrastive	62 (49.2%)	102 (79.5%)
Merger	Repeated	27 (21.8%)	14 (11%)
	Anaphoric	36 (29%)	12 (9.5%)
Total		125 (100%)	128 (100%)

Thus far, we have seen various distributional factors according to the relations between a remnant and its correlate or the antecedent in several respects such as correlate overtness, remnant functions, positional restriction, syntactic

mismatches, and reconstruction issues. In what follows, we will look into the issues that arise from the authentic data and how the factors can affect and resolve the constructions.

#### 5. Data Discussion

#### 5.1 Syntactic and Semantic Mismatch

In the previous researches, we have seen that syntactic connectivity effects support the clausal ellipsis analysis of *if* (*not*)-stripping. In spite of the supporting corpus examples, some corpus data question the postulation of a sentential source with syntactic mismatches between a remnant's source clause and its target clause. For instance, with the utterance of the discourse in (32a), the correlate of the remnant NP has a passive form of VP which the remnant refers to. Also in *if not*-stripping example in (32b), while the correlate appears as a PP 'until tomorrow', the remnant forms an AdvP of which the putative source is understood as 'if he can not wait longer'.

(32) a. And if something does flare up, there's combat pay. Automatic. "Fifty percent brain-panned?" Mike asked. "If that." (2008 FIC)

b. ... he wrote from Mexico about a thing that can wait until tomorrow, if not longer. (2019 FIC)

The syntactic mismatch also frequently occurs with cases between a remnant and its correlate. In (33), the remnant with an accusative case 'her' or 'him' respectively refers to the correlate which has a nominative case in the antecedent<sup>8</sup>.

- (33) a. It's possible [she could bite another child]. We may have to isolate her, **if her** (= if she bites another child) ... (1996 FIC)
  - b. While working with Nik to solve the mystery, Mikayla has come to realize that [Maddix wasn't the killer]. But **if not him** (= if he was not the killer), who was? (2011 MAG)

Another possible mismatch may occur with voice. Consider the following conversation:

(34) FIEGER: [What is a jury going to give to this guy?] VAN-SUSTEREN: I'm not disturbed and I don't know if... I mean, I don't know **if he**. (2007 SPOK)

In the dialogue, answering Fieger's question with an active voice with the verb 'give', Van-Susteren's utterance includes *if*-stripping with a nominative pronoun remnant 'he' who refers to 'this guy' from the antecedent in Fieger's question. Thus, the remnant involves a meaning as 'if he is given the sentence by a jury', which can be interpreted with a passive voice.

<sup>&</sup>lt;sup>8</sup> Yoshida et al. (2015) argue for an accusative pronoun DP in stripping as the Default Case which functions as a subject in a coordinate structure. They also conclude that connectivity effects with Case are not possible especially in English.

<sup>(</sup>i) John and me will be late. (Yoshida et al. 2015: 330)

Another issue concerning modality mismatch between the putative source and its antecedent can be easily found, as in (35).

(35) a. [What I do, my job, might have an impact on your life], but even **if does**, it will be small. (2012 BLOG) b. **If not I**, [another will manage to spread my word]. Someone always does. (2005 FIC)

For example, in (35a), the remnant has the present verb form 'does' which refers to a proposition 'what I do, my job, has an impact on your life', whereas its correlate VP has a modal auxiliary verb 'might' in the antecedent. Also, in (35b) with *if not*-stripping, even though the remnant and its correlate represent NP, we can understand the remnant with a present tense reading such as 'if I do not manage to spread my word'.

One more interesting finding is related to the polarity mismatch. Consider the following example where the remnant functions as a negative polarity item (NPI):

(36) If Michele threw up water when the EMTs did CPR, that meant Martin, the doctor, hadn't done it properly, if at all. (2018 SPOK)

In (36), *if*-stripping can have a reversed polarity reading like '(even) if Martin, the doctor, did it properly at all', even though the antecedent of the remnant is negated.

To sum up, there are cases where the understood part of the remnant in *if* (*not*)-stripping cannot be fully reconstructed and it needs to be modified for a paraphrase due to the mismatch. In what follows, we will see how syntactic locality or distribution issues can be accounted for with the authentic corpus data.

## 5.2 Locality: Island Constraints

Generally, stripping is assumed to be island-sensitive in that when the correlate is embedded inside a relative clause or an adjunct clause as in (37), stripping is not acceptable (Depiante 2000, Reinhart 1991, a.o.).

(37) a. \*John loves [NP a girl who is learning <u>Italian</u>], but not Spanish.
b. \*John left [Adjunct because Mary invited <u>David</u>], but not Bill. (Yoshida et al. 2015: 344)

Likewise, if the correlate is contained within the same kinds of island in the antecedent, if(not)-stripping is not allowed, as provided in the following examples:

(38) a. \*John loves [NP a girl who is learning <u>Italian</u>], if not Spanish. b. \*John left [Adjunct because Mary invited <u>David</u>], if not Bill.

However, some island effects seem to be insensitive in if(not)-stripping, which is allowed in Complex Noun Phrase Constraint (CNPC) and Left Branch Constraint (LBC), as in (39) and (40) respectively.

(39) (Complex Noun Phrase Island) He did not have the look of [NP] a man who had done this kind of thing often, **if ever before**. (2018 FIC)

- (40) (Left Branch Island)
  - a. The listed amperage is [NP the best, if still imperfect, indicator of power]. (1991 MAG)
  - b. Historian Lloyd Gardner offers [NP a good, **if not complete**, answer] that's also faintly consoling. (2010 MAG)

If if(not)-stripping results from a sentential source in which the correlate is contained within an island, then those examples would violate the island constraints. This suggests that movement-and-deletion operations may not be applied to account for the ellipsis site of if(not)-stripping.

#### **5.3 Sentential Source**

From the corpus data, the evidence that a fragmental remnant of if(not)-stripping has a sentential interpretation can be easily found. For instance, sentential adverb expressions such as 'possibly', 'perhaps', or 'unfortunately' which modify a proposition-denoting clause can convey a *message* (see Ginzburg and Sag 2000: 303).

- (41) a. Darth Maul, my crosswalk buddy, was probably a very nice guy, if possibly overtalkative. (2009 FIC)
  - b. Regular, **if perhaps ironic**, references to Bernick's happy family and its importance to the town, ..., reinforce the family's significance. (1997 ACAD)
  - c. The house and the Court are currently, if unfortunately, controlled by the GOP. (2012 WEB)

In (41), a preverbal propositional adverb may appear with an AP or NP remnant or solely as a remnant, modifying a propositional putative meaning of *if-* or *if not-*stripping.

Another piece of evidence can be found from the fact that negation of *if not*-stripping scopes over the entire clause. For example in (42), the remnant 'complete' has a contrastive relation with its correlate 'good' within the left branch island, whereas the interpretation of the remnant has a clausal negation as '(even) if Historian Lloyd Gardner does not offer a complete answer'.

(42) Historian Lloyd Gardner offers a good, **if not complete**, answer that's also faintly consoling. (2010 MAG)

A somewhat different example, however, can be found in the examples with VP Ellipsis in the stripped clause. An auxiliary verb can appear in *if*-stripping as in (43a). In this case, the ellipsis and its antecedent have a polarity mismatch interpretation. One unanticipated finding was that this type of VPE remnants is not found in *if not*-stripping, but it can be observed with the negated auxiliary verb form as in (43b).

- (43) a. Hopefully that [damage won't include your home], but **if does**, there are steps you can take to ensure that repairs can begin in a quick, safe and responsible manner. (2012 BLOG)
  - b. If [we get this far], we'll do what we have planned, but **if don't**, we won't and you'll never know. (1992 SPOK)

Despite the evidence that a remnant in if(not)-stripping has a clausal putative source, our corpus investigation will challenge the remnant of a clausal-ellipsis operation in the subsequent section.

## 5.4 Implicit Argument

As stated in the basic properties, when the remnant has its corresponding overt or covert correlate, it does not allow an implicit argument in the putative source, as in the following examples:

```
(44) a. Trading with the Orient has become <u>arduous</u>, if (*it is) not dangerous. (Merger) b. Jeff Sluman who takes the game, if (*it is) not himself, will be the first to tell you ... (Sprouting)
```

Especially, since a remnant 'himself' in (44b) has a covert correlate in the antecedent, it functions as an adjunct serving as a semantic argument in the putative source. This may be relevant to the argument that the remnant cannot introduce an implicit argument.

Note that, however, certain forms of the remnant such as an adjectival or passive predicate may take its implicit argument with a copula verb, in which there exists no corresponding correlate in the antecedent clause. Consider the following examples:

```
(45) a. The dictum, even if artificial, seemed to work. (1993 FIC)b. Rest for 30-60 seconds, if needed, then repeat entire circuit. (2005 MAG)
```

In (45), the predicational remnants need additional elements to be fully reconstructed such as a deictic subject pronoun 'it/they/(s)he' referring to the specific antecedent from the context, which can be represented in (46).

```
(46) a. if artificial = if it (this/that) is artificial b. if needed = if it (this/that) is needed
```

Regarding the subject pronoun in the putative source with a predicational fragment, Merchant (2004) suggests a 'Limited ellipsis' analysis with the following generalization and corresponding examples:

```
(47) 'Limited ellipsis' analysis (Merchant 2004):
```

A demonstrative pronoun like *this/that* or expletive subject *it* and the copula verb are elided in some fragment answers in certain discourse contexts, allowing *this* is in discourse-initial position.

(48) a. [Responding to a puzzled glance at an unfamiliar person] Some guy she met at the park.

```
b. [Holding up a cup]
From Germany. (Merchant 2004: 716)
```

With the appropriate context or given situation in (48), a speaker utters a predicational fragment making a deictic gesture, and this can have an underlying structure in which the fragmental phrase undergoes movement out of the putative source clause. In the ellipsis site, a deictic subject pronoun and a copula verb 'be' can validate the deletion, as in the following Merchant (2004)'s analysis:

```
(49) a. [FP some guy she met at the park<sub>1</sub> [FP he's t_1] b. [FP from Germany<sub>2</sub> [FP this is t_2] (Merchant 2004: 724)
```

## 5.5 Embedded If-stripping

Canonically, stripping has been identified as occurring in the matrix clause, as can be observed in the following unacceptable context.

```
(50) A: Who left?
B: *I wonder if Bill.
```

Interestingly, from the extracted corpus data, certain remnants with an adjectival or passive form were observed in the embedded contexts when it appears as a complementizer *if* under the predicates like *see*, *know* or *imagine*.

```
(51) a. Ask Gov to fact check JCPL's statements to see if true. (2012 BLOG)b. COURIC: Were you surprised when you got it?Ms-WINOKUR: I don't know if surprised. (2002 SPOK)
```

However, such examples seem to contradict Wurmbrand (2017)'s 'Embedded Stripping Generalization (ESG)' with the following generalization, since such remnants are understood as a clausal source with an implicit argument in the copula clause.

(52) Embedded Stripping Generalization:
Stripping of embedded clauses is only possible when the embedded clause lacks a CP. (Wurmbrand 2017: 345)

In this case, an implicit argument has a thread of connection to the CP with a complementizer 'if', since there is no corresponding correlate of the predicational remnant in the embedded *if*-stripping as well. Consider the following interpretations with an implicit argument:

```
(53) a. Ask Gov to fact check JCPL's statements to see if <it is> true. (2012 BLOG) b. I don't know if <it is> surprised.
```

In addition, this assumption that *if*-stripping appears in the embedded environment can be cross-linguistically supported by German data suggested by Konietzko (2016). In German, stripping occurs in a reduced subordinate clause with a complementizer 'ob' which is equivalent to English complementizer 'if'.

```
(54) In Europa hat sich
                         David Cameron mit seinem Veto isoliert. Ob er sich
                                                                                  mit seinem Veto
    in Europe has himself David Cameron with his
                                                    veto
                                                           isolated. if he himself with his
    auch
          in seinem land,
                              isoliert hat darüber wurde in London im
                                                                       Parlament
                                                                                   gestritten.
                     country, isolated has this
                                                  was in London in
                                                                       parliament discussed
    'In Europe David Cameron has isolated himself with his veto. if also in his country, this was discussed
    in parliament in London.' (Tagesthemen, 12.12.2011 cited in Konietzko 2016: (45))
```

In the example, *ob*-stripping appears in a left-dislocated stripped clause, and the correlative adverb 'darüber' (a clausal proform 'this' in English) refers to a propositional entity which is the clausal source of the remnant.

Therefore, it suggests that the structure of the embedded *ob*-clause in (54) appears to be identical to stripping with a PP remnant 'in seinem land' accompanied with a sentential adverb 'auch'.

## 6. Construction-based Analysis

#### **6.1 Discourse Information**

Considering various distributions of if(not)-stripping, it seems that the remnant can be affected by the context-based environment. This can be illustrated briefly by the following examples where no plausible antecedent exists, but the surrounding context provides a putative source:

- (55) a. Krenek said patiently, the men reacted worse than the women. I believe they were wondering what they would do **if their wives** (= if their wives disappear). (1994 FIC)
  - b. Art Market buys name and time, so what would happen **if an artist** (= if an artist sell his name and time). (2014 MOV)

In (55a), the context did not offer an exact explanation of why the men wondered how they would feel, but the situation provides a possible putative source. Also in (55b), even though the preceding clause gives the exact source clause like 'Art Market buys name and time', the context evokes a selling situation, yielding the remnant to be resolved such as 'if an artist sell his name and time'.

Such examples tell us that a semantic resolution crucially depends on discourse. In particular, we accept the view that the interpretation of a fragmental remnant depends on the notion of QUD (question under discussion) in the dialogue (Ginzburg 1996, Roberts 2012). Addressing a QUD can be the current topic of discourse either by implicitly answering it or by raising an implicit question that could be answered to the QUD. As an implicit answer to QUD, the remnant of *if* (*not*)-stripping can have the appropriate DGB (dialogue game board) information, in which the contextual parameters of the utterance are anchored and there is a record of the given conversational situation (see Ginzburg 2012). In this sense, the fragmental remnants can be represented as non-sentential utterances (NSUs), which function as salient utterances (SAL-UTT), and this may be dealt with the contextual parameters of the DGB (DGB-PARAMS). In the feature-structure based system, DGB monitors the contextual information with at least two attributes, SAL-UTT and MAX-QUD (maximal question-under-discussion) (Ginzburg 2012, Ginzburg and Sag 2000). Consider the following Attributed-Value Matrices (AVM):

Especially, DGB observes which questions are currently under discussion based on the relevant context of the interpretation from fragments representing MAX-QUD, and accordingly uttering a *wh*-question can evoke the following information:

(57) FORM (What is John drinking?) SYN S
$$SEM \lambda_x[drink(j,x)]$$

In the contextual information, when a fragmental remnant is represented as a salient utterance, it matches with the proper answer to the *wh*-question represented as QUD.

(58) 
$$\left[ \text{DGB} \left[ \begin{array}{l} \text{MAX-QUD } \lambda_x \Big[ drink(i,x) \Big] \\ \text{SAL-UTT} \left\{ \left[ \begin{array}{l} \text{SYN} \mid \text{CAT NP} \\ \text{SEM } x \end{array} \right] \right\} \right] \right]$$

In what follows, we will look into more detailed information adopting the discourse-based Direct Interpretation approach.

#### 6.2 Direct Interpretation Approach

Distinct from movement-cum-deletion mechanism, as noted, we assume the meaning of the unpronounced materials without underlying syntactic structures, and adopt a nonstructural Direct Interpretation (DI) approach (Ginzburg and Sag 2000, Culicover and Jackendoff 2005, Sag and Nykiel 2011, Kim 2015a, Kim and Abeillé 2019). When a remnant in if(not)-stripping is mapped into the non-sentential utterance (NSU) with a DI approach, this leads to a sentential interpretation directly instantiated from the following Head-Fragment Construction (Ginzburg and Sag 2000, Kim and Sells 2013, Kim 2015b).

#### (59) Head-Fragment Construction:

Any category can be projected into a NSU (non-sentential utterance) and function as a salient utterance (SAL-UTT).

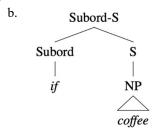
The generalization of the Head-Fragment Construction rule can be formalized within the HPSG feature system, as in the following feature structure:

## (60) Head-Fragment Construction:

$$\begin{bmatrix} hd\text{-}frag\text{-}cxt \\ \text{SYN S} \\ \\ \text{DGB} \begin{bmatrix} \\ \text{SAL-UTT} \end{bmatrix} \\ \begin{bmatrix} \\ \text{SYN} & [\text{CAT} & \boxed{1} \\ \\ \text{SEM} & [\text{IND} & i] \end{bmatrix} \end{bmatrix} \end{bmatrix} \rightarrow \begin{bmatrix} \\ \text{SYN} & [\text{CAT} & \boxed{1} \\ \\ \text{SEM} & [\text{IND} & i] \end{bmatrix}$$

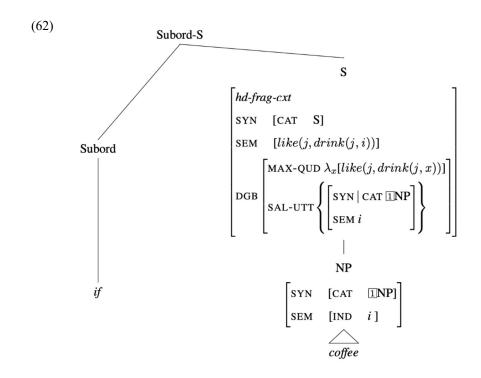
Within the DI approach, there is no underlying syntactic structure at the ellipsis site, and a fragmental remnant of if(not)-stripping stands for a sole daughter of an S-node. In other words, a remnant instantiates non-sentential XP and receives a sentential interpretation corresponding to the sentential putative source. An example of this can be carried out in the following tree structure:

(61) a. John likes to drink tea. If coffee, I'll make him an espresso.



In the example with its merger correlate in (61), the NP remnant 'coffee' in *if*-stripping percolates up into an S and is combined into a subordinate clause with a subordinate connective 'if'. As this approach clearly demonstrates, it is important that the DI structure accounts for the direction that once the fragmental remnant is directly generated into an S-node, no island-sensitive operations nor filler-gap dependency are involved.

Here is an important aspect to identify the discourse information. When there is a context like (61a), the remnant NP 'coffee' can serve as a proper answer to one of the implicit *wh*-questions such as 'what is John drinking?', as in (57). In *if* (*not*)-stripping, since a fragmental remnant is a focus-establishing constituent (FEC), it is linked to the salient utterance of DGB in order that this can be projected into a head-fragment construct with its proper contextual information. This can be represented with the feature structure (FS) in the tree structure in (62), where the remnant NP is a sole daughter of the S-node as a head-fragment construct by the Head-Fragment Construction rule.



To be specific, the Head-Fragment Construction rule requires the category value of the remnant to be matched to the value of the SAL-UTT. In this process, the salient utterance NP matches with the NP of the wh-question which is evoked as QUD. Especially, the meaning of the question ' $\lambda x[like(j, drink(j, x))]$ ' is a function that leads to a proposition when applied to the meaning of the answer '[like(j, drink(j, x))]'. In other words, the remnant of an S-node is coindexed with the SAL-UTT semantically, and it receives the widest scope of a propositional meaning within the value of MAX-QUD (maximal question-under-discussion), which represents the content of the dialogue at a given point.

Furthermore, regarding the ellipsis in the remnant site, Hardt and Romero (2004) suggest an ellipsis resolution that requires the parallelism condition with the following generalization:

(63) Parallelism matching condition (Hardt and Romero 2004):

Ellipsis requires that there be some phrase E containing the ellipsis and some antecedent phrase A in the discourse, such that [A] is or contextually implies a member of F(E).

Ellipsis involves a focus assignment to an expression and the ellipsis resolution leads to certain 'parallelism' or 'identity' between the ellipsis site and its antecedent clause, thereby displaying syntactic and semantic parallelism with the anchors (see Kehler 2000, Kobele and Merchant 2016, Stockwell 2018). This further accounts for why the contrastive remnant of *if* (*not*)-stripping is a salient-utterance (or focus establishing constituent) in the following examples:

(64) a. John likes to drink <u>tea</u>. **If coffee**, I'll make him an espresso. b. \*John likes to drink tea. If tea, I'll make him an espresso.

In such contexts, only when the remnant is contrastively focused, the remnant can be a salient-utterance for the ellipsis site. Since the context requires the remnant to be contrastive with the corresponding correlate, the remnant in (64b) is not involved in the sufficient condition to fulfill the requirement. This proposes a further explanation with the interpretation of ellipsis site.

(65)  $[[John likes to drink TEA]]_{S1} \in F([John likes to drink COFFEE]_{S2})$ 

Therefore, since the ellipsis is licensed in the remnant site, the focus value in ellipsis offers a parallel propositional meaning (Kim and Runner 2022).

Another significant aspect to look into the structure is *if not*-stripping. As we have already assumed that the negator 'not' combines with NSU percolated from the remnant, *if not*-stripping forms the sentential negation which refers to the propositional anaphor. Consider the following example:

- (66) a. I knew John was going to lose the game, if not his life.
  - b. Subord-S

    Subord S

    if Adv S

    not AP

As can be found in (66b), an NP remnant 'his life' in *if not*-stripping percolates up into an S, and a sentential negator 'not' modifies this S. Consequently, they can be combined into a well-formed sentence in the subordinate clause. During the process, the meaning resolution can be provided with QUD information as follows:

(67) a. MAX-QUD:  $\lambda x[knew(I,lose(j,x))]$ 

b. Meaning of the remnant: [knew(I,lose(j,l))]

c. Meaning of the negated NSU:  $\neg[knew(I,lose(j,l))]$ 

As such, the negator 'not' functions as a sentential operator which takes S with NSU.

Let us consider the following repeated sprouting example in (68) in which no overt correlate is explicitly present:

(68) Asian populations continued to grow, if slowly.

From the discourse structure, uttering a sentence like (68) also can introduce a QUD as well as SAL-UTT information. In this case, the antecedent clause 'Asian populations continued to grow' introduces a (MAX)-QUD taking the remnant 'slowly' as its semantic argument. And the adjunct 'slowly' serves as the focus establishing constituent which is the SAL-UTT. With the utterance, DGB also evokes two relevant attributes SAL-UTT and MAX-QUD with the following contextual information structure:

(69) 
$$\begin{bmatrix} \text{DGB} & \begin{bmatrix} \text{MAX-QUD} & \lambda_x [grow(ap, x)] \\ \text{SAL-UTT} & slowly \end{bmatrix} \end{bmatrix}$$

So, with these contextual information, we can update the resolution of the understood part and activate the compositional meaning in the scope of DGB.

(70) 
$$\lambda_x [grow(ap, x)] = \lambda_x [grow(ap, slowly)]$$

However, distinct from the sprouting or merger cases we have discussed thus far, a remnant with its exophoric antecedent does not have the given correlate, even in the interpretation. Let us consider the following repeated example with its exophoric antecedent:

(71) I don't know what to do. Please help if any advice. (2012 WEB)

Since there is no linguistic antecedent in the context to form the sentential source of the remnant 'any advice', more than one possible putative source for the fragment can be suggested in the reconstructions, as follows:

(72) a. if <you have> any adviceb. if <you have> any advicec. if <you can think of> any adviced. ....

By adopting DI approach, however, this case can point out an implicit QUD in the propositional meaning and the remnant 'any advice' serves as its semantic argument and the suggested MAX-QUD represents its possible antecedent. The following DGB describes the exophoric case:

(73) a. 
$$\begin{bmatrix} \text{DGB} & \begin{bmatrix} \text{MAX-QUD} & \lambda_x [have(you, x)] \\ \text{SAL-UTT} & any advice \end{bmatrix} \end{bmatrix}$$

b.  $\lambda x[have(you, x)] = have(you, any advice)$ 

As can be found in (73a), the salient utterance, which is the remnant, can be simply applied to the possible antecedent in the compositional meaning in (73b) so that the remnant can serve as the argument and this leads to receiving its interpretation within the scope of any possible QUD.

## 7. Conclusion

We have seen that distinct from other types of stripping constructions, the remnants of if(not)-stripping share some properties with sluicing and fragments. Previous approaches have suggested that if(not)-stripping undergoes a clausal ellipsis to capture the propositional meaning with supporting arguments such as connectivity effects and island constraints. However, our corpus investigation yields some data that challenge such a sentential analysis and question the postulation of a sentential source with syntactic mismatches, Complex Noun Phrase or Left-Branch Island conditions, or lexical remnants such as a bare verb or a bare preposition.

Resolving the empirical challenges to distributional and structural issues, we adopt a Direct Interpretation (DI) approach, in which a remnant in *if* (*not*)-stripping can be directly mapped into a non-sentential utterance. This approach, licensing any salient expression to be realized as an NSU, implies that once the remnants are directly generated, no island-sensitive operations nor filler-gap dependency are involved. In addition, the non-sentential utterance (NSU) projected from the remnant conjoins with the negated operator 'not' in *if not*-stripping, and it leads to the well-defined negated propositional meaning. Furthermore, with the contextual information SAL-UTT

and MAX-QUD, the contextual parameter DGB offers a potential solution to the various distributions including sprouting, exophoric, and implicit argument cases we could observe in this stripping construction.

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Examples in: English

Applicable Languages: English Applicable Level: Tertiary