Background Deletion: The Syntax of Clausal Ellipsis in Hindi/Urdu

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Abstract

This thesis explores the syntax of subsententials in Hindi/Urdu (H/U), with an empirical focus on sluicing and fragment answers. Such phenomena represent instances where all clausal material is unpronounced, except for a (*wh*-)phrase (e.g., ***A:*** *Who did John see?* ***B:*** *Mary.*). With evidence from various connectivity effects, I argue that a non-structuralist analysis of such configurations, which does not assume the presence of tacit material, is untenable. Rather, subsententials in this language warrant a structuralist solution, according to which the surfacing remnant base-generates in an underlying clause whose morpho-syntax is reduced at PF. Most structuralist proposals of clausal ellipsis, including those on H/U, assume PF-deletion targets a syntactic constituent (TP), forcing the remnant to escape the ellipsis site it is born in (e.g., ***A:*** *Who did John see?* ***B:*** *Mary$_i$ ~~John saw t_i~~.*, where strikethroughs = PF-deletion). I argue against this conventional view, given the conceptual and empirical issues it raises (chiefly, exceptional movement). I alternatively suggest that non-pronunciation freely affects morpho-syntactic material surrounding the remnant, allowing it to remain *in situ* (e.g., ***A:*** *Who did John see?* ***B:*** *~~John saw~~ Mary.*), as has been argued elsewhere (Morgan 1973; Kimura 2010, 2013; Bruening 2015; Abe 2015; Ott and Struckmeier 2018; Sato et al. 2018; Griffiths 2019; among others). Although PF deletion is not sensitive to syntactic constituency from this perspective, morpho-syntactic material that does PF-delete must constitute the propositional background of the elided clause to ensure recoverability of unspoken content, reducing clausal ellipsis in H/U to background deletion. I then propose to extend this analysis to correlativization in H/U, wherein a left-peripheral relative clause is associated with a correlate in the host clause (HC) (e.g., *The girl who is standing$_i$, she$_i$ is tall*). Correlatives (CRs) in this language bear discordant characteristics: on the one hand, CRs display properties that point to their connectivity with the HC (e.g., reconstruction effects) and, on the other, features that point to their extra-sentential status (e.g., the lack of a gap in the HC and prosodic separation of CR–HC). Following recent work on Romance/Germanic left-dislocation (Ott 2014, 2015), which presents a similar paradox, I propose that CRs are not syntactically dependent on their HC; conversely, they are relatives that are part of a separate root clause which is juxtaposed in discourse with the HC and is reduced at PF under identity with it (e.g., *The girl who is standing$_i$ ~~is tall~~. She$_i$ is tall.*). Connectivity effects of CRs are argued to be ellipsis-mediated, given that such effects are likewise observed in sluicing and fragment answers. In reconciling the contradictory properties of CRs, this novel proposal has an explanatory edge over existing accounts that assume syntactic integration of CR–HC and that rely on either movement or base-generation.

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils…

—William Wordsworth
Daffodils

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[1] I still don't know if I shrunk to fit into a sheet of white paper or if I was in a massive white room while I traversed that syntax tree, my desperate motions reflecting movement whose cessation risked a crash, I later deduced.

rejoicing in those little victories with me that were few and far in between, and for letting me vent when I needed to the most. I look forward to reading your dissertation and likely being too dense to understand it. My gratitude towards my sister, Shazia, is unending. I'm lucky you were there to lift me too many times to count and appreciate the faith you had in me even when I didn't. You supported me in every way imaginable, and I'll never forget that. I could not have asked for a better housemate in the writing portion of this endeavor; thank you for putting up with all that came with that. I thank my brother Fahd for his warm reassurance whenever I expressed my doubts to him and for his willingness to patiently listen to me struggle to express the contents of this work. I especially appreciate your role as devil's advocate during those conversations on UG. I also look forward to reading your dissertation and likely being too dense to understand it. Thanks also goes to my brother-in-law, Yaşar (whose dissertation I have yet not read for fear of being too dense to understand it), and to my sister-in-law, Olyvia, for their support and invaluable advice along the way. To my sweet nephew, Talib, and precious niece, Yara: thank you for those moments of happiness you peppered along the way. I am eternally thankful to my parents, Khalid and Safina, for the sacrifices they made to ensure my siblings and I had a better life; I can only hope it was worth it. For your enthusiastic participation whenever I pestered you for grammaticality judgments, for those home-cooked meals when I just didn't have the time or energy, and for everything else in between and beyond: thank you. To all of you and from the deepest depths of my heart: shukriya.

Black box

To my wonderful little black box: whatever can I say of you?
You fountained allaying transcendence, for which I will always be beholden to you.
Here, we walked along Aquitaine bricks marred by the black plague,
and slayed Fenyx's mythical beings of origins vague.
Guided by our creed, we traversed Graeco-Roman imbrices and tegulae.
We were humans that fell flat after Gotham-sky gliding,
and were hired 47s that stalked our prey in bushes, hiding.
Redemption was sought, etching our moral compass in the unforgiving Wild West,
only to bask in modern capitalism's grand wickedness.
Ne'er was forgotten one's epic calls of duty,
neither the paradox of many an armed halo's ugliness and beauty,
nor still Alice's ventures, especially that lovely tea party.
We got lost in Japan for quite a few decades,
with the beginning of our odyssey set in a retro economy
whose bubble further inflated,
and late-night Tokyoite sake-soaked seats were serenaded.
How glorious were those tombs we raided!
From frozen Siberian peaks,
to the sweltering jungle thickets of lost Paititi,

our escapades enraged organized freaks.
Though rooted in familiar ground, we were ironically a fry cry from home,
just watch dogs exploiting digitized cities that are hacking-prone.
Payne was happily re-embodied, imbuing nostalgia,
while neon lights danced the streets of cyberpunk's ominous dystopia.
We obediently greased the gears of outer-galactic war,
and juggled dubious acts with oaths a Hong Kongonese once swore.
Constancy became oddly unreliable,
teaching us that the unbreakable was indeed breakable.
Toying with temporal stutters, we broke quantum logic,
and from our Castle Wolfenstein, morphed history beyond catastrophic.
Moral debates with rogue AI will haunt for eternity,
as will those Turing tests that shall emerge in perpetuity.

For you

"When I was a kid," Orr replied, "I used to walk around all day with crab apples in my cheeks. One in each cheek."

…"Why?" [Yossarian] found himself forced to ask finally.

…"Because they're better than horse chestnuts," he answered. …"When I couldn't get crab apples, …I used horse chestnuts. Horse chestnuts are about the same size as crab apples and actually have a better shape, although the shape doesn't matter a bit."

"Why did you walk around with crab apples in your cheeks?" Yossarian asked again. "That's what I asked."

"Because they've got a better shape than horse chestnuts," Orr answered. "I just told you that."

"Why," swore Yossarian at him approvingly, "you evil eyed, mechanically-aptituded, disaffiliated son of a bitch, did you walk around with *anything* in your cheeks?"

"I didn't," Orr said, "walk around with *anything* in my cheeks. I walked around with crab apples in my cheeks. When I couldn't get crab apples I walked around with horse chestnuts. In my cheeks."

…Yossarian made up his mind to keep his mouth shut and did. Orr waited. Yossarian waited longer.

"One in each cheek," Orr said.

—Joseph Heller
Catch-22

Contents

"Begin at the beginning," the King said, very gravely,
"and go on till you come to the end: then stop."

—Lewis Carroll
Alice in Wonderland

Chapter 1

Introduction

This thesis explores the syntax of *sluicing* (1) and *fragment answers* (2), with a primary focus on Hindi/Urdu (henceforth, H/U).

(1) A: Talib=ne kisi=ko aam diya thaa.
Talib=ERG someone=DAT mango gave be.3SG.PAST.M
'Talib gave a mango to someone.'
B: Kis=ko?
who=DAT
'Who did Talib give a mango to?'

(2) A: Talib=ne kis=ko aam diya thaa?
Talib=ERG who=DAT mango gave be.3SG.PAST.M
'Talib gave a mango to someone.'
B: Safiina=ko.
Safina=DAT
'Talib gave a mango to Safina.'

Such subsententials represent two types of *clausal ellipsis* which will constitute the empirical scope of this discussion. I will adopt the following terminology throughout. The *wh*-phrase and non-*wh*-phrase in (1B) and (2B) are *remnants*. They are associated with a *correlate* in the antecedent clause, namely, the indefinite and *wh*-phrase above, respectively.

In investigating such phenomena, I seek to address the following research questions: (i) Is there underlying structure that such subsententials are born in, and if so, how much? (ii) If short forms are indeed derived via ellipsis, does said deletion target a syntactic constituent? (iii) What information do speakers rely on to recover the meaning of unspoken content? To answer these questions, I will compare the morpho-syntactic and interpretive behaviour of subsententials with their fully pronounced counterparts (3)–(4).

(3) Talib=ne kis=ko aam diya thaa?
Talib=ERG who=DAT mango gave be.3SG.PAST.M
'Who did Talib give a mango to?'

(4) Talib=ne Safiina=ko aam diya thaa.
Talib=ERG Safina=DAT mango gave be.3SG.PAST.M
'Talib gave a mango to Safina.'

Chapter 2 provides a critical overview of the state of the art. Here, we will see that subsententials have to date received a non-structuralist or a structuralist treatment. The former approach, which suggests short forms have no underlying structure, is untenable given the presence of various connectivity effects, such as binding effects (5).

(5) A: Who does Dutch$_i$ admire?
B: Himself$_i$.
B′: Dutch$_i$ admires himself$_i$.

In the fragment answer of (5), the reflexive remnant is necessarily interpreted as being bound by the DP *Dutch* in the antecedent clause. This strongly supports the presence of an underlying isomorphic source that functions as the binding domain and contains the binder, just as it does in non-elliptical contexts (5B′). Of the structuralist accounts, I will show that Merchant's (2001, 2004) 'move-and-delete' approach, which assumes PF-deletion targets TP, is problematic as it forces the remnant to escape the ellipsis site it is born in. This frequently produces infelicitous non-elliptical counterparts (6).

(6) A: Who does Arthur despise?
B: Micah.
B′: #Micah$_i$ Arthur despises t_i.

Thus, the MDA enforces exceptional movement just in the case of ellipsis. Conversely, an *in situ* approach, which suggests deletion freely targets material surrounding the remnant, avoids this issue of exceptional movement (7).[1]

(7) ~~Arthur despise~~ Micah.

We will further see that Merchant's (2001) focus condition in (8) is problematic as it presupposes deletion of a syntactic constituent, raising the above-mentioned issue of exceptional movement.

(8) *Focus condition on IP ellipsis:*
A constituent α can be deleted only if α is e-GIVEN.
(Merchant 2001:38)

This chapter concludes with a brief examination of the issue of licensing clausal ellipsis, which concerns the grammatical distribution of such elliptical phenomena. One widely adopted solution in this regard is Merchant's (2001) E(llipsis)-feature approach, according to which ellipsis is only licensed in the complement of an E-bearing functional head. While this account is descriptively adequate, it does no more than re-state the problem. Conversely, we will see that alternative approaches which suggest ellipsis is licensed by a constraint couched in a question-driven model of discourse (à la Roberts 1996, 2012) make the correct general prediction that clausal ellipsis should only ever be licensed in *wh*-questions and answers; however, the empirical coverage of this account remains unclear.

Chapter 3 introduces sluicing and fragment answers in H/U. It begins by arguing for a structuralist analysis

[1] Here, and throughout, strikethroughs represent PF-deletion.

that involves PF-deletion of a full underlying clause on the basis of various connectivity effects. This is exemplified by the binding effect in (9).

(9) A: Raam$_i$ kis=ko pasand karta hai?
Ram who-DAT like does be3SG.PRES
'Who does Ram like?'

B: apne-aap$_i$=ko.
self-self=DAT
'Himself.'

B′: Raam$_i$ apne-aap$_i$=ko pasand karta hai.
Ram self-self-DAT like does be3SG.PRES
'Ram likes himself.'

In (9), the reflexive *apne-aap*, which generally must be bound by a local antecedent, can function as a fragment answer, once again corroborating the presence of an underlying source that functions as the binding domain and contains the binder.

I further argue that the grammar of this language is incompatible with a theory of clausal ellipsis which treats PF-deletion as targeting a syntactic constituent, *pace* existing accounts of H/U clausal ellipsis (Bhattacharya and Simpson 2012; Manetta 2011, 2013; Bhatia and Iyer 2018; Mishra 2022, 2024). Although these proposals differ in their technical implementation, they all assume deletion targets a syntactic constituent, in line with the MDA. This is shown in (10) for the fragment answer in (2).

(10) #Safiina=ko$_i$ ~~Talib=ne~~ t_i ~~aam~~ ~~diya thaa~~.
Safina=DAT Talib=ERG mango gave be3SG.PAST.M
Intended: 'Talib gave a mango to Safina.'

Much like with the English example in (6), we will see that while such movements are independently possible, crucially, they cannot feed the remnant's displacement, as doing so negatively affects the information structure/interpretation of the underlying clause. In this way, such approaches must likewise assume exceptional movement, rendering them dubious.

Chapter 4 presents my analysis of clausal ellipsis in H/U. I suggest that non-pronunciation, rather than targeting a syntactic constituent, affects morpho-syntactic material surrounding the remnant freely and maximally. As shown in (11) for (1) and (2), conceptualizing PF-deletion in this way has important ramifications for the underlying syntax of short forms in that it allows the remnant to remain *in situ*.

(11) ~~Talib=ne~~ kis=ko ~~aam~~ ~~diya thaa~~?
Talib=ERG who=DAT mango gave be3SG.PAST.M
'Talib gave a mango to someone.'

(12) ~~Talib=ne~~ Safiina=ko ~~aam~~ ~~diya thaa~~.
Talib=ERG Safina=DAT mango gave be3SG.PAST.M
'Talib gave a mango to Safina.'

I adopt the view that recoverability of unspoken content is sensitive to the propositional *background* of the remnant and that of its antecedent (à la Weir 2018, Griffiths 2019). This is shown below for the examples in (1) and (2).

(13) a. Background of antecedents: λx. Talib gave x a mango
b. Background of remnants: λx. Talib gave x a mango

I assume that the background constitutes discourse-Given content that is present in the interlocutors' common ground. It thus excludes any discourse-new material, contrastive foci, and extra-propositional content that does not enter into the calculation of truth conditions (Ott and Struckmeier 2018). We will see that to ensure recoverability of unspoken content, the background of both the remnant and its antecedent must match, as is the case in (13). That is to say, although PF-deletion from this vantage point is not sensitive to syntactic constituency, if what gets deleted is not a part of the background, recoverability will be blocked. In this way, clausal ellipsis in H/U is reduced to *background deletion*.

I further show that this proposal has the potential to capture various other properties of clausal ellipsis in this language, including the the obligatory retention of post-positions. This is illustrated in (14) where in elliptical contexts, the remnant must appear with (the same) post-position that its correlate bears.

(14) A: Shiraz=ne kis=par bharosa rakha thaa?
Shiraz=ERG who=on dependence put be.3SG.PAST.M
'Who did Shiraz depend on?'

B: Neha*(=par).
Neha=on
'Shiraz depended on Neha.'

B′: Shiraz=ne Neha=par bharosa rakha thaa.
Shiraz=ERG Neha=on dependence put be.3SG.PAST.M
'Shiraz depended on Neha.'

I argue that P-retention under clausal ellipsis does not evidence underlying movement of the remnant (*pace* Merchant 2001, 2004). To account for such facts, I alternatively claim that what is deleted in the PF component is a prosodic constituent (Bruening 2015) that corresponds with the propositional background via givenness-marking, or G-marking (à la Sauerland 2004). In this way, obligatory retention of such post-positions in elliptical contexts is nothing more than P^0 encliticizing to the (non-G-marked) lexical remnant, just as it would in non-elliptical contexts. This is schematized in (15) for (14), where the non-G-marked prosodic word (ω), which forms its own phonological phrase (ϕ), contains the post-position *par*; this ω is necessarily spared from PF-deletion since, not being G-marked, it is not part of the clausal background.

(15) $(_\phi(_\omega$ ~~Shiraz ne~~$))_G$ $(_\phi(_\omega$ Neha par$))$ $(_\phi(_\omega$ ~~bharosa~~$)$ $(_\omega$ ~~rakha~~$)$ $(_\omega$ ~~thaa~~$))_G$
Shiraz ERG Neha on dependence put be.3SG.PAST.M

Although *in situ* analyses of clausal ellipsis exist in the literature (Kimura 2007, 2010, 2013; Abe and Tancredi 2013; 2012; Bruening 2015; 2016; Ott and Struckmeier 2018; Sato et al. 2018; Griffiths 2019; Onea and Ott 2022; Griffiths et al. 2023; among others), such an approach has to date not been applied specifically to H/U, whose grammar

has implications for a theory of such phenomena. For instance, this language has traditionally been described as a *wh*-in situ one where, as demonstrated above, the *wh*-phrase typically obtains matrix scope from its base position. As we will see, the proposal of clausal ellipsis I offer not only complements such aspects of H/U's grammar but is potentially generalizable to other natural languages.

In Chapter 5, I provide a novel paratactic ellipsis analysis of correlativization in H/U (16).

(16) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

In such configurations, a left-peripheral correlative (CR) is associated with a demonstrative/pronominal correlate (ϕ) in the host clause (HC). I argue that CRs in H/U showcase conflicting properties that echo a paradox found in Romance/Germanic left-dislocation (Cinque 1990). The latter represents a similar process where a left-peripheral constituent (Σ) is associated with a correlate (ϕ) in the HC (17).

(17) [$_{\Sigma}$ Den Peter], [$_{HC}$ den$_{\phi}$ habe ich gestern gesehen].
the Peter.ACC him.ACC have I yesterday seen
'I saw Peter yesterday.' (German; Ott 2014)

Specifically, I show that both phenomena, on the one hand, exhibit properties that suggest the dislocated constituent finds its derivational origin in the HC (e.g., binding effects) and, on the other hand, those that point to its extra-sentential status (e.g., the fact that the dislocated XP must precede fronted operators and its prosodic separation from the HC). Existing accounts of correlativization in H/U (Srivastav 1991, Dayal 1996, Mahajan 2000, Bhatt 2003a) assume CR–HC are syntactically integrated constituents, as suggested in (18).

(18) [$_{CP}$ [$_{IP}$ jo laRkii khaRiii hai vo$_{\phi}$ lambii hai]]
which girl standing is that tall is

I argue against such proposals on the basis of their inability to capture all of the facts straightforwardly. For instance, analyses that assume the relative clause base-generates as an IP adjunct of the HC (Srivastav 1991, Dayal 1996) struggle to capture the binding effects such configurations display. Moreover, both base-generation and movement-based analyses, which propose that the relative is born inside the HC and subsequently displaces to its left periphery, have no straightforward explanation for the extra-sentential properties such correlatives display. Furthermore, existing proposals have no natural explanation for why ϕ must be a definite phrase.

Following recent accounts of Romance/Germanic LD (Ott 2014, 2015), I alternatively propose that the CR in (16) is a relative clause that is born in a separate elliptical clause (EC) which is parenthetically juxtaposed to its HC (19) (see also Motter 2023).

(19) [$_{EC}$ [$_{CR}$ jo laRkii khaRiii hai] ~~lambii hai~~] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is tall is that tall is

This proposal immediately captures the definite nature of ϕ, given only such pronominals resume existing discourse referents in the language. Not only does this account further handle the local binding effects of CRs, where such effects are established within EC, but treating correlativization as parataxis also provides a natural explanation for the extra-sentential properties of CRs, giving it an explanatory edge over its available analyses. Moreover, I show that CRs, unlike left-dislocated constituents in Romance/Germanic, generally must dislocate and cannot appear HC-internally. I argue that this is so due to a categorial mismatch. Case markers in H/U are post-positional and require a nominal host (Mohanan 1994, Butt and King 2004), which is crucially not what CRs are: CRs are bare CPs (following Dayal 1996). Said categorial mismatch effectively 'kicks' the CR out of the HC from this vantage point. I show that this claim is independently supported by the fact that when no overt case morphology is at stake, CR may appear HC-internally, on a par with left-dislocation in Romance/Germanic languages. Post-positional case marking of CR in EC is suggested to be repaired by ellipsis, given its adjacency to the ellipsis site (An 2016, 2019). This "last resort" repair process does not apply to DP/PP remnants in the language given that in these instances, there is nothing to repair: such categories may be morphologically case-marked.

Chapter 6 summarizes the thesis, highlighting remaining questions for future work to resolve.

I was of three minds,
Like a tree
In which there are three blackbirds.

—Wallace Stevens
Thirteen Ways of Looking at a Blackbird

Chapter 2

Clausal ellipsis: the state of the art

Subsententials raise the following fundamental questions:

1. Is there unpronounced material in short forms? (i.e., does their derivation involve PF-deletion?)
2. What is the relation between the unspoken content of a subsentential and its antecedent?
3. What licenses clausal ellipsis?

Question (1) addresses the possible presence of an underlying source. Does the grammar generate short forms 'as is', yielding a reductionist 'What You See Is What You Get' analysis, or is there underlying structure within which short forms are born that ultimately remains unpronounced? In capturing the anaphoricity of subsententials, the goal of question (2) is to formulate a necessary and sufficient condition that captures speakers' recovery of silent content in relation to the latter's antecedent. Do we require morpho-syntactic isomorphism between both the antecedent clause and the tacit content, or does semantic(/pragmatic) congruence take precedence? Or, perhaps a hybrid approach incorporating both morpho-syntactic and meaning equivalence is a requisite for capturing the facts. Finally, question (3) aims at explaining the grammatical distribution of elliptical phenomena at the sentential level. These non-trivial questions have garnered much attention in the current literature not least because utterances of this type that are cross-linguistically omnipresent thwart the traditionally assumed form–meaning correspondence that underpins linguistic analysis: here, we are faced with utterances that are far richer in meaning than in form. Researchers concerned with the above questions have offered various answers for each over the years, instituting fruitful debates along the way. As a background of this thesis, whose research questions directly relate to those above, this chapter provides a critical overview of the most prevalent answers to these core questions.

2.1 Non-structural approaches

There are two general schools of thought regarding the syntax of subsententials such as (1)–(2): non-structural and structural approaches.

(1) Sophia saw someone, but I don't know who.

(2) A: What did Cyrus buy? B: Tea.

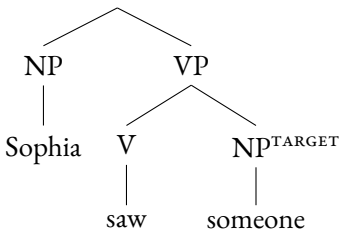
Proponents of the former (see Ginzburg and Sag 2000 and Culicover and Jackendoff 2005, among others) suggest that the morpho-syntax of such abbreviated expressions is largely limited to their PF output. There is no clausal material to PF-delete from this perspective: 'What You See Is What You Get' (henceforth, WYSIWYG). Nevertheless, the interpretation of a subsentential must be richer than its PF realization in order to obtain its correct interpretation.

Building on the work of Ginzburg and Sag (2000), Culicover and Jackendoff (2005) offer a structurally minimalistic solution that stems from their *Simpler syntax hypothesis* (henceforth, SSH), stated in (3), which exhibits an overall preference for syntactic theories that presuppose the minimum structure necessary.

(3) *Simpler syntax hypothesis:*
The most explanatory theory is one that imputes the minimum syntactic structure necessary to mediate between phonology and meaning.
(Culicover and Jackendoff 2005:5)

They suggest that subsententials such as (1)–(2) represent "orphan" phrases that are indirectly licensed by their respective antecedents. The sluice in (1) is treated as an embedded question, but the question itself is not uttered. The *wh*-phrase refers to an argument in an unexpressed proposition, and the latter corresponds to the proposition that the antecedent expresses. The semantic and syntactic features of the orphan are indirectly licensed via its connection with the antecedent, giving us the structures in (4).

(4) a.



b.

In (4-b), the sluice is of category S which simply contains an orphan NP (*viz.*, the *wh*-phrase). The latter locates a target NP in the antecedent clause (S^{ANT}) from which it receives its semantic and syntactic features by indirect licensing (S^{IL}); it is spelled out, however, as *who*. The interpretation of sluices under this approach is as represented in (5).

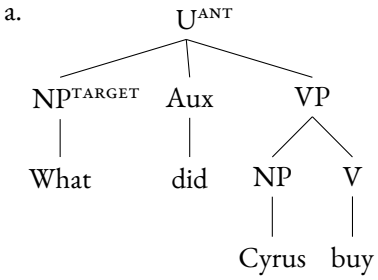
(5) *Sluicing:*
Syntax: $[_S$ *wh*-phrase$_i^{ORPH}]^{IL}$ Semantics: $Qx[\mathscr{F}(x_i)]$
(Culicover and Jackendoff 2005:270)

Since the *wh*-phrase is bound by a question operator (Qx), the sluice is interpreted as an embedded question. It

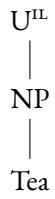
receives its propositional content ($\mathscr{F}$) via the discourse antecedent.

The authors' analysis of subsententials such as (2)—which they label as instances of "bare argument ellipsis" (henceforth, BAE)—minimally differs from that of sluices in that the orphan is dominated by the category U (6). The orphan is, once again, interpreted as being embedded in a larger utterance (for (2B), *Cyrus bought tea*), yet all that surfaces is the NP.

(6) a.



b.



BAE constructions, similar to sluices, receive their semantic and syntactic features from the antecedent and acquire their propositional content ($\mathscr{F}$) pragmatically (*viz.*, through indirect licensing) (7).

(7) *Bare argument ellipsis*
Syntax: $[_{U}\ XP_{i}^{ORPH}]^{IL}$ Semantics: $[\mathscr{F}(X_i)]$
(Culicover and Jackendoff 2005:265)

The WYSIWYG approach is analytically reductionist—the structural composition of a subsentential is by and large assumed to amount to what is actually expressed, despite the fact that it is "understood" as being embedded in a larger utterance. The onus is on indirect licensing to derive this tacit understanding.

2.2 Connectivity effects

The non-structuralist view of subsententials is *prima facie* the most economical and thus most desirable solution, for unnecessarily positing a richer-though-muted syntax flouts the law of parsimony (Ockham's razor), which bans the multiplication of (theoretical) entities beyond necessity: an adopted pillar of the Minimalist Program (Chomsky 1993, 1995) and the impetus for Culicover and Jackendoff's (2005) SSH. Whence a more structurally complicated alternative then? As Merchant (2018) notes, "detecting and arguing for such 'missing' structures is analogous to searching for and determining the properties of a black hole: one can tell it's there only by its effects on surrounding material" (p. 25). The type of effects we seek are those attributable only to a missing source. In other words, if a short form displays properties exclusively licensed by a given structure α in non-elliptical contexts, and α does not surface under ellipsis, then it is safe to assume α is tacitly present in elliptical environments. These are commonly referred to as 'connectivity effects' and are the bane of non-structuralism.

Ross's (1969) seminal work on sluicing first noted that remnants display a case-matching effect whereby the *wh*-phrase is obligatorily marked with the same case it receives in non-elliptical contexts. He illustrates this behaviour with the German contrast between *schmeicheln* 'flatter' which assigns dative case (8-a) and *loben* 'praise' which

licenses accusative case (8-b).

(8) a. Sie wissen nicht, *wer /*wen /wem er schmeicheln will.
they know not who.NOM who.ACC who.DAT he flatter wants
'They don't know who he wants to flatter.'

b. Sie wissen nicht, *wer /wen /*wem er loben will.
they know not who.NOM who.ACC who.DAT he praise wants
'They don't know who he wants to praise.' (German)

(Merchant 2001:89)

Likewise, in sluiced contexts (9)–(10), the *wh*-remnant must surface with the case licensed by the verb in the antecedent clause, strongly suggesting its underlying presence in the ellipsis site as well.

(9) Er will jemandem schmeicheln, aber sie wissen nicht, *wer /*wen /wem.
he wants someone.DAT flatter but they know not who.NOM who.ACC who.DAT
'He wants to flatter someone, but they don't know who.' (German)

(Ross 1969:253)

(10) Er will jemanden loben, aber sie wissen nicht, *wer /wen /*wem.
he wants someone.ACC praise but they know not who.NOM who.ACC who.DAT
'He wants to praise someone, but they don't know who.' (German)

(Ross 1969:254)

As Merchant (2004) subsequently showed, this effect is found cross-linguistically for various overt case-marking languages (including Greek, Russian, Polish, Czech, Slovene, Finnish, Hungarian, Basque, among many others) not only in sluicing contexts[1] but fragment answers[2] as well, illustrated below.

(11) Q: Pjos idhe tin Maria?
who.NOM saw the Maria
'Who saw Maria?'

a. A: O Giannis.
the Giannis.NOM

b. A: *Ton Gianni.
the Giannis.ACC

(Greek; Merchant 2004:676)

(12) a. A: O Giannis idhe tin Maria.
the Giannis.NOM saw the Maria.ACC
'Giannis saw Maria.'

b. A: *Ton Gianni idhe tin Maria.
the Giannis.ACC saw Maria.ACC
(Giannis saw Maria.) (Greek; Merchant 2004:676)

[1] See Merchant 2001:90 for more cross-linguistic examples.

[2] See Merchant 2004:676–678 for more cross-linguistic examples.

(13) Q: Komu pomogla Anna?
who.DAT helped Anna
'Who did Anna help?'

a. A: Ivanu.
Ivan.DAT

b. A: *Ivan/Ivana.
Ivan.NOM/Ivan.ACC

(Russian; Merchant 2004:678)

Non-structural approaches struggle to account for such case-matching effects, for if a silent case-licensor is absent, then the remnant's morphological case should display no rigidity, contrary to fact.

In addition to case matching, subsententials display binding effects that likewise hint at underlying structure, *pace* non-structuralists. As Morgan (1973, 1989) first identified and Merchant (2004) further discussed, relevant DP fragment answers showcase properties symptomatic of *Binding theory*'s Principles A, B, and C (Chomsky 1981) on a par with their non-elliptical counterparts.

Principle A requires reflexives and reciprocals to be bound (i.e., co-referred and c-commanded) by a local antecedent in non-elliptical constructions (14).

(14) a. Dutch$_i$ admires himself$_i$.
b. Charles$_i$ thinks that Dutch$_j$ admires himself$_{*i/j}$.
c. [John and Abigail]$_i$ like each other$_i$.
d. [John and Abigail]$_i$ think that [Arthur and Mary]$_j$ like each other$_{*i/j}$.

Such DPs also form licit fragment answers (15)–(16).

(15) A: Who does Dutch$_i$ admire? B: Himself$_i$.

(16) A: Who do [John and Abigail]$_i$ like? B: Each other$_i$.

Examples (17)–(18) additionally demonstrate the presence of locality restrictions on anaphors in subsententials (with the intended interpretations).

(17) A: Who does Charles$_i$ think that Dutch$_j$ admires?
B: Himself$_{*i/j}$.

(18) A: Who do [John and Abigail]$_i$ think that [Arthur and Mary]$_j$ like?
B: Each other$_{*i/j}$.

Principle B, which disallows pronominals to be bound by a local antecedent (19), seems also at play in elliptical contexts (20)–(21).

(19) a. *Arthur$_i$ kissed him$_i$.
b. Arthur$_i$ thinks Mary wants to kiss him$_i$.

(20) A: Who did Arthur$_i$ kiss? B: *Him$_i$.

(21) A: Who does Arthur$_i$ think Mary wants to kiss?
B: Him$_i$.

Finally, Principle C bans proper names or epithets ('R-expressions') from being bound by an antecedent (22).

(22) a. *He$_i$ is sleeping in Swanson$_i$'s tent.
b. *Micah$_i$ thinks that the poor bastard$_i$ is being betrayed.

Likewise, subsententials such as (23)–(24) are impermissible.

(23) A: Where is he$_i$ sleeping? B: *In Swanson$_i$'s tent.

(24) A: What does Micah$_i$ think?
B: *That the poor bastard$_i$ is being betrayed.

We can remedy the observed binding effects in elliptical contexts in one of two ways. If a non-structuralist approach is to be maintained, *Binding theory* must go back to the drawing board for an explanation of these data (if not rejected altogether). A less precipitous alternative would be to assume the presence of a silent source that functions as the binding domain and contains the (un)offending binder.

Another set of connectivity effects comes from scope parallelism facts between subsententials and their fully sentential counterparts (Chung et al. 1995). In the latter contexts, scope ambiguities arise with multiple quantification in a single clause and with bound pronouns, as shown in (25) and (26), respectively.

(25) Every person fed two horses.
→ Every person fed (a total of) two horses ($\forall > \exists$)
→ Every person fed two (individual) horses ($\exists > \forall$)

(26) Every man$_i$ pampers his$_i$ horse.
→ Every man pampers (a total of) one horse ($\forall > \exists$)
→ Every man pampers (an individual) horse ($\exists > \forall$)

These ambiguous interpretations are also present in fragment answers (27)–(28) (Merchant 2004:681).

(27) A: How many horses did every person feed?
B: Two. (✓$\forall > \exists$)
(✓$\exists > \forall$)

(28) A: What does every man$_i$ pamper?
B: His$_i$ horse. (✓∀ > ∃)
(✓∃ > ∀)

That such scope parallelism exists in both sententials and subsententials supports analogizing their syntactic configurations, *contra* the non-structuralist view.

The final connectivity effect we will consider relates to Merchant's (2001, 2004) *P(reposition)-stranding generalization* (henceforth, PSG), stated in (29).

(29) *Form–identity generalization II: Preposition-stranding*
A language *L* will allow preposition stranding under sluicing iff *L* allows preposition stranding under regular *wh*-movement.
(Merchant 2001:92)

The PSG is meant to capture the (dis)appearance of adpositions in elliptical contexts, which is assumed to be contingent on a given language's general P-stranding ability under movement. It is typically accepted as evidence for a particular version of the structuralist view, which forces the remnant's escape from the ellipsis site (as will be explicated in §2.3.2). For example, P-stranding languages, such as English and Norwegian, permit P-omission under sluicing (30)–(31).

(30) a. Peter was talking with someone, but I don't know (with) who.
b. Who was Peter talking with?
(Merchant 2001:92)

(31) a. Per har snakket med noen, men jeg vet ikke (med) hvem.
Peter has talked with someone but I know not with who
'Peter has talked with someone, but I don't know who.'
b. Hvem har Per snakket med?
who has Peter talked with
(Merchant 2001:93) (Norwegian)

Conversely, non-P-stranding languages, such as Czech (32) and Bulgarian (33), obligatorily retain adpositions under sluicing.[3]

(32) a. Anna mluvila s někým, ale nevím *(s) kým.
Anna spoke with someone but not.I.know with who
'Anna spoke with someone, but I don't know who.'

[3]See Merchant 2001:93–100 for a panoply of cross-linguistic (non-)P-stranding examples.

b. *Kým mluvila Anna s?
who spoke Anna with
'Who did Anna speak with?' (Czech)
(Merchant 2001:96)

(33) a. Anna e govorila s njakoj, no ne znam *(s) koj.
Anna AUX spoken with someone but not I.know with who
'Anna spoke with someone, but I don't know who.'

b. *Koj e govorila Anna s?
who AUX spoken Anna with
'Who did Anna speak with?' (Bulgarian)
(Merchant 2001:97)

Fragment answers display a similar pattern:

(34) A: Who was Peter talking with? B: (With) Mary.
(Merchant 2004:685)

(35) A: Hvem har Per snakket med?
who has Per talked with
'Who has Peter talked with?' (Norwegian)
B: Mary.
(Merchant 2004:685)

(36) A: S kým mulvila Anna?
with whom spoke Anna
'With whom did Anna speak?' (Czech)
B: S Jindřichem./*Jindřichem.
with Jindřichem./ Jindřichem.
(Merchant 2004:686)

(37) A: S koj e govorila Anna?
with who AUX spoken Anna
'With whom did Anna speak?' (Bulgarian)
B: S Ivan/*Ivan.
with Ivan/ Ivan.
(Merchant 2004:687)

The assumed logic under this approach is such that for those languages whose subsententials permit P-omission optionally strand their adpositions in the underlying structure that ultimately remains unpronounced, while subsententials of non-P-stranding languages necessarily 'pied-pipe' theirs during evacuation. However, as we will see in §2.3.2, this explanation hinges on the dubious assumption that generating subsententials necessarily involves deletion of syntactic constituents, forcing remnants to move in the narrow syntax. The data above thus constitute superficial evidence for a structuralist theory that perforce incorporates movement.

A separate though related connectivity effect can be sieved out of the PSG, despite its original motive for a movement-driven theory. Suspending the issue of displacement, we find effects of selectional restrictions on adpositions in subsententials and their sentential counterparts that crucially adduces some underlying structure (see Merchant 2004 for additional selectional effects). For instance, the English verb *depend* necessarily selects a PP headed by the preposition *on* (38).

(38) John's survival depends on/*in/*of Arthur's rescue.

Importantly, only this preposition can optionally surface in elliptical contexts (39)–(40), indicating the selecting verb's hidden existence.

(39) A: What does John's survival depend on?
B: (On/*in/*of) Arthur's rescue.

(40) A: John's survival depends on/*in/*of something.
B: (On/*in/*of) what?

Selectional effects of this kind remain a puzzle for the WYSIWYG view which incorrectly predicts any preposition will be freely available given the absence of a silent verb imposing selectional needs.

Connectivity effects, such as those discussed in this section, refute the WYSIWYG treatment of subsententials. Speaker B's responses in (39)–(40) do not constitute "orphan" morphemes of structurally phantom origin. Rather, these effects warrant a structural solution wherein such utterances are truly remnants of a clause that is rendered silent at PF. The next section reviews common responses to this call.

2.3 Structural approaches

The facts outlined in the previous section strongly support the presence of an underlying clause that is unpronounced, barring the surfacing remnant, as Ross (1969) pioneered. This alternative perspective immediately raises the following question: how much syntax does the ellipsis site house? In this section, we review different versions of the structuralist answer, each of which address this question in some way.

2.3.1 The LF-copying solution

One theoretical camp of structuralists argues for a tacit clause that solely dominates a null lexical element (*e*), rather than a full clause with a silenced syntax. This is illustrated in (41-a) for the sluice in (41-b).

(41) a. Pearson saw someone, but I don't know who.
b. …I don't know [$_{CP}$ who [$_{TP}$ *e*]]

The null element (*e*) undergoes a copying operation at LF which involves a recycling of the antecedent TP's struc-

ture into the position the former occupies (see Williams 1977, Fiengo and May 1994, Chung et al. 1995, Arregui et al. 2006, Fortin 2007, among others) (42).

(42) …I don't know [$_{CP}$ who [$_{TP}$ Pearson saw]]

'Merger' is an operation that yields sluices such as (41-a) which consist of an overt correlate. This process adopts Kamp's (1981) and Heim's (1982) view of indefinites that proposes the latter introduce a variable with descriptive content that must be existentially bound at LF. Clausal recycling ensures that the copied indefinite is bound by the existential operator that binds the *wh*-remnant, likewise an indefinite endowed with a variable to be bound.

(43) a. …[$_{CP}$ who^{x} [$_{TP}$ someone^{x} saw]] After merger at LF
b. …λp[$\exists$x.[person(x,w$_o$) $\wedge$ p(w$_o$) $\wedge$ p = λw.saw(x,w)]]
(Merchant 2001:147)

'Sprouting' refers to a second mechanism responsible for deriving sluices with an implicit (adjunctive or argumental) correlate (44).

(44) a. Pearson ate, but I don't know what.
b. Pearson ate the stew, but I don't know with whom.

With the lack of an overt correlate, the variable introduced by the *wh*-phrase is assumed to be bound via $\overline{\text{A}}$-chain formation (*sans* movement), establishing a dependency with the element in Spec,CP.

(45) a. [$_{CP}$ [with whom]^{x} [$_{TP}$ Person ate the stew]] → *no variable in recycled TP*
b. [$_{CP}$ [with whom]^{x} [$_{TP}$ Person ate the stew PP^{x}]]

Similar to non-structuralist approaches to ellipsis, the LF-copying solution is debilitated by the various connectivity effects outlined in the previous section. For instance, it is unclear how case would be assigned to the *wh*-remnant if it is assumed to base-generate in Spec,CP.

Merchant (2001) argues that merger fails to handle sluices involving a *wh*-phrase and a correlate with discordant descriptive contents as in, for example, contrast sluices (46). Similarly problematic are sluices that involve quantificational correlates (47) that are not amenable to a Kamp–Heim treatment of indefinites (*viz.*, variable binding).

(46) a. She has five cats, but I don't know how many dogs.
b. Max has five Monets in his collection, and who knows how many van Goghs.
(Merchant 2001:150)

(47) a. More than three of the boys quit, but I can't remember which / who.
b. I counted fewer than six sorts, but I couldn't tell which.
(Merchant 2001:151)

It is perhaps due to such issues that the LF-copying approach, akin to non-structuralist proposals, has largely

fallen out of fashion. Contemporary structural analyses of clausal ellipsis typically do not assume an underlying clause that dominates a null element enriched via a 'copy-and-paste' mechanism. Rather, structural proponents generally assume a tacit clause that comprises customary morpho-syntactic properties throughout.

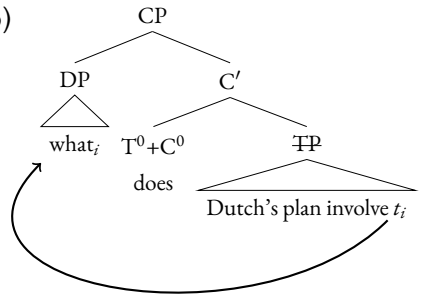
2.3.2 The 'move-and-delete' approach

Merchant (2001) devised what will be referred to as the 'move-and-delete' approach (henceforth, MDA) to clausal ellipsis, which predominates most current theorizing. Akin to the LF-copying approach, this proposal argues that subsententials (48) are born in a clausal constituent.

(48) A: Dutch's plan involves something. B: What?

However, the MDA assumes standard syntax permeates the derivation, as depicted in (49) for the tacit source of the sluice in (48B), rather than a clause simply dominating a variable pending interpretation. Said TP deletes at PF, forcing the surfacing remnant to move out of the unpronounced clause to some high escape hatch (here, Spec,CP).

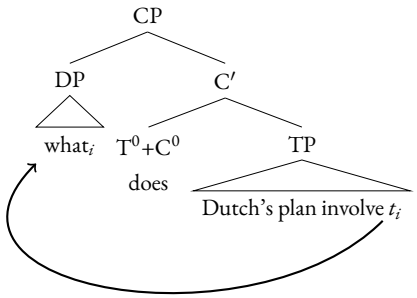
(49)



The remnant's movement under ellipsis is assumed to be fed by the *wh*-movement independently required to form content questions in languages such as English, as the tree in (51) shows for the non-elliptical question in (50).

(50) What does Dutch's plan involve?

(51)



This correlation between sluicing and *wh*-question formation was originally made in Ross 1969, where it was suggested that sluices are derived via the following order of transformations:

(52) Question Formation $\prec$ Sluicing

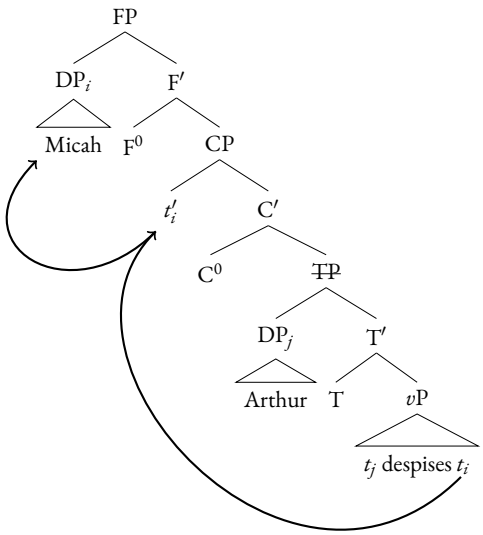
That is, a *wh*-question is formed, and then PF-deletion of the interrogative clause, excluding the *wh*-phrase, takes

place. This is rather intuitive. The questions in (48) and (50) are meaning-equivalent; one of these variants just happens to be expressed in an abbreviated way. To suggest that both questions have similar syntactic configurations with sluices stemming from non-elliptical *wh*-questions is thus a cogent suggestion. Merchant's (2001) resurrection of this intuition, as depicted in (49), may capture this phenomenon in Germanic languages—the empirical basis of this solution's first appearance in Ross 1969—that are otherwise of the *wh*-ex situ type.

Merchant's (2004) subsequent analysis of fragment answers (53) is similar to that of sluices, providing a unified theory for both types of clausal ellipsis: move the remnant to the left periphery and delete the embedded clause it is born in (54).

(53) A: Who does Arthur despise? B: Micah.

(54)



Specifically, fragment answers, which constitute non-*wh* foci, raise to the specifier of CP, then further traverse to the specifier of a F(ocus) P(hrase) immediately dominating CP. The TP sister of C^0 is subsequently deleted at PF.

There is an obvious and severe consequence of the MDA that ultimately renders this approach dissatisfying: clausal ellipsis will *always* entail underlying movement of the remnant, whether or not said movement is independently available or required. This is necessarily so in order for the remnant to be spared of the PF-deletion that the TP it is born in is subjected to. Consider, for instance, the underlying form of the fragment answer in (53), shown in (55) below.

(55) #Micah$_i$ Arthur despises t_i.

The oddness of this utterance illustrates that information foci generally do not front in English and thus must

exceptionally do so to derive the elliptical variant.[4]

Furthermore, while the MDA seemingly accounts for sluicing in Germanic languages that otherwise require *wh*-movement, problematically, a similar phenomenon is found in various *wh*-in situ languages. This is illustrated below for Japanese (see Inoue 1976, 1978; Takahashi 1994; Shimoyama 1995; Kuwabara 1996; Nishiyama et al. 1996; Kizu 2000; Abe 2015, 2016; among others).

(56) Boku-wa [kanojo-ga nani-o katta ka] wakaranai.
I-TOP she-NOM what-ACC bought Q know.not
'I don't know what she bought.'
(Takahashi 1994:266)

(57) Dareka-ga sono hon-o yon-da ga, watashi-wa dare ka wakaranai.
someone-NOM that book-ACC read-PAST but, I-TOP who Q know.not
'Someone read that book, but I don't know who.'
(Merchant 1998:94)

To avoid positing exceptional *wh*-movement for *wh*-in situ languages, Merchant 1998 provides an alternative 'pseudo-sluicing' solution for such elliptical expressions, which are proposed to merely resemble the *bona fide* sluicing found in languages like English. That is, sentences such as (57) are said to constitute 'sluicing-like constructions' (henceforth, SLCs) that comprise underlying clefts, with the focused constituent (i.e., the remnant) functioning as the pivot. This is schematized in (58), where 'C' marks the nominalizing complementizer *-no*, *-wa* is a topic marker (though the nominative *-ga* marker is often found in clefts instead), and *da* is a present tense copula.

(58) [$_{CP}$ [$_{IP}$ …__ …]-no] -wa [*pivot*] da
C -TOP copula
(Merchant 1998:92)

SLCs in Japanese are thus deemed masked instances of the independently available copula/*pro* drop.

Merchant (1998) suggests such pseudo-sluicing in Japanese is independently motivated by shared properties of clefts and SLCs. For instance, cleft pivots are resistant to case markers such as *-ga* (NOM) (59); SLCs in this language

[4]Merchant (2004) analogizes his treatment of fragment answers cross-linguistically to left-dislocation phenomena found in various Romance/Germanic languages, which we will return to in Chapter 5. Crucially, however, left-dislocated expressions generally differ information-structurally from fragment answers in that they are typically contrastive topics (López 2016) and never information foci, rendering such similitude dubious.

are also case-resistant (60).[5]

(59) Bungo-ni Aya-o syookaisita no-wa Kota(*-ga) da.
Bungo-DAT Aya-ACC introduced C-TOP Kota(-NOM) is
'It's Kota who introduced Aya to Bungo.'
(Merchant 1998:92)

(60) Dareka-ga sono hon-o yon-da ga, watashi-wa dare(*-ga) ka wakaranai.
someone-NOM that book-ACC read-PAST but, I-TOP who-NOM Q know.not
'Someone read that book, but I don't know who.'
(Merchant 1998:94)

Additionally, clefts are island-sensitive (i.e., extraction out of cleft constructions is prohibited) (61); this is also true of SLCs (62).

(61) *[Hanako-ga [Taroo-ga t_i katta atode] okotteiru no]-wa kuruma$_i$ da.
Hanako-NOM Taroo-NOM bought after is angry C-TOP car is
'It's a car that is something Hanako is angry after Taroo bought it.'
(Merchant 1998:93)

(62) *Taroo-ga [Hanako-ga nanika-o katta kara] okotteiru rasii ga, watashi-wa nani ka
Taroo-NOM Hanako-NOM something-ACC bought because is angry seems but I-TOP what Q
siranai.
know not
'It seems that Taroo is angry because Hanako bought something, but I don't know what.'
(Merchant 1998:94)

Finally, clefts in this language permit copulas (63); the SLCs above also allow (and in some instances require) the presence of a copula.

(63) Dareka-ga sono hon-o yon-da ga, watashi-wa dare datta ka wakaranai.
someone-NOM that book-ACC read-PAST but, I-TOP who was Q know.not
'Someone read that book, but I don't know who it was.'
(Merchant 1998:96)

However, while pseudo-sluicing may capture the availability of SLCs in Japanese, crucially, it fails to account

[5]Takahashi's (1994) analysis of sluicing in Japanese assumes a movement approach akin to (49) and, to avoid the issue of exceptionalism, assumes the movement feeding this phenomenon is scrambling: a displacement process that is otherwise available in the language. Problematically, *wh*-scrambling, unlike *wh*-remnants, generally obligates a case marker (i).

(i) … watashi-wa [dare*(-o)$_i$ [Taroo-ga t_i nagutta] ka] wakaranai.
I-TOP who-ACC Taroo-ACC hit Q know.not
'…I don't know who Taroo hit.'
(Merchant 1998:94)

for *bona fide* sluicing in other *wh*-in situ languages, such as Turkish, shown below.

(64) Ahmet-∅ kim-le konuş-uyor-∅?
Ahmet-NOM who-COM talk-PROG-3SG
'Who is Ahmet talking to?'
(İnce 2012:249)

(65) Hasan biri-ne para ver-miş-∅; ama kim-e bil-mi-yor-um.
Hasan-NOM one-DAT money give-PST-3SG but who-DAT know-NEG-PRES-3SG
'Hasan gave money to someone; but I don't know who (to).'
(İnce 2012:251)

The facts in Turkish are antithetical to those just observed for Japanese, whereby the properties of cleft constructions and those of sluices consistently disunite. For instance, cleft DPs can only bear nominative case in the language (66).

(66) [Suzan-a kitab-ı ver-en] Hasan-∅-dı.
Susan-DAT book-ACC give-COMP Hasan-NOM-PST
'It was Hasan who gave the book to Susan.'
(İnce 2012:256)

However, we find case connectivity in elliptical contexts (67).

(67) Ahmet-∅ biri-ne kitap-∅ ver-miş-∅, ama kim-e/*-∅ bil-mi-yor-um.
Ahmet-NOM one-DAT book-NOM give-PST-3SG but who-DAT/*-NOM know-NEG-PRES-3SG
'Ahmet gave the book to someone, but I do not know to who.'
(İnce 2012:257)

Moreover, clefts resist PP pivots (68); however, sluicing freely permits PP remnants (69).

(68) *Yaz-ıl-an-∅ oyun-∅ kim-∅ taraf-ın-dan?
write-PASS-REL-3SG play-NOM who-NOM side-POSS.3SG-ABL
('By whom was it that the play was written?')
(İnce 2012:258)

(69) Hasan-∅ bir ip al-mış-∅, ama kim-∅ için bil-mi-yor-um.
Hasan-NOM a rope buy-PST-3SG but who-NOM for know-NEG-PRES-1SG
'Hasan bought a rope, but I don't know for who.'
(İnce 2012:258)

Finally, clefts and sluices present a *wh*-adjunct asymmetry whereby such constituents cannot function as cleft pivots (70-a) but can serve as elliptical remnants (70-b).[6]

[6]See İnce 2012 for additional asymmetries between Turkish clefts and sluices.

(70) a. *Ali-nin git-tiğ-i Ankara-∅.
Ali-GEN go-COMP-POSS.3SG Ankara-NOM
'It's to Ankara that Ali went.'

b. Ali-∅ bir yer-e git-ti-∅, ama nere-ye bil-mi-yor-um.
Ali-NOM a place-DAT go-PST-3SG but where-DAT know-NEG-PRES-1SG
'Ali went somewhere, but I don't know where.'
(İnce 2012:259)

Thus, pseudo-sluicing is not a generalizable solution, leaving exceptional *wh*-movement in elliptical contexts for *wh*-in situ languages like Turkish the only choice for the MDA.

It must be stressed that Ross's (1969) original order of transformations to derive sluices (52) makes no reference to obligatory movement, albeit the empirical basis for his seminal work was limited to Germanic languages that independently require *wh*-movement. In other words, the proposal that sluicing involves *wh*-question formation followed by PF-deletion does not entail movement of the remnant—as the MDA later enforced—unless *wh*-movement is independently needed to form a content question in the language. More generally, the remnant will move in elliptical contexts if said displacement is typically necessary, with the implication that otherwise, it need not move. The crux of the MDA's problem of exceptional movement lies in its assumption that PF-deletion targets a syntactic constituent, forcing the remnant to escape the ellipsis site it is born in. Crucially, there is no independent justification for analyzing PF-deletion in this way. Cue Ockham's razor: we may alternatively conceptualize PF-deletion as targeting material that does not constitute a syntactic constituent and thus does not obligate movement.

2.3.3 The *in situ* alternative

An alternative view of clausal ellipsis, familiarly known as the *in situ* approach, stems from a hypothesis by Chomsky and Lasnik (1995), who suggest to treat ellipsis as a purely PF phenomenon, being an instance of optional non-pronunciation of otherwise deaccented material (see also Tancredi 1992 for similar discussion). The correlation between a constituent's focus–Given status and its prosodic properties in Germanic languages such as English is well-known (see Tancredi 1992; Schwarzschild 1999; Krifka 2006, 2008; Fox 1999a; Abe and Tancredi 2013; among others). Here, Given discourse content refers to material that is entailed by the common ground, as will be explicated in §2.5.2, with focus being its complement (Schwarzschild 1999, Krifka 2008). Foci generally receive more prosodic prominence[7] relative to Given content, where the latter tends to be deaccented. This is illustrated by the example in (71) below, where the focus "John" is most naturally pronounced with greater prosodic prominence (represented in all caps) relative to the Given content of this exchange (represented in italics).

(71) A: Who did John's mother vote for? B: *She voted for* [JOHN]$_F$.
(Schwarzschild 1999:142)

Wh-phrases, which are inherently focused (see Horvath 1986, Eckardt 2007, among others), typically bear analo-

[7] Where the correlates of prosodic prominence in English are pitch, intensity, and duration.

gous prosodic properties in the presence of a salient antecedent (72).

(72) A: John's mother voted for someone. B: [WHO]$_F$ *did she vote for*?

Clausal ellipsis may thus simply 'piggy-back' on said pre-existing deaccentuation, as shown below for the optional subsentential variants of the assertoric response and *wh*-question above, respectively.

(73) a. ~~*She voted for*~~ [JOHN]$_F$. b. [WHO]$_F$ ~~*did she voted for?*~~

It is important to note, as we will also see in §2.5.2, that though they appear in overlapping environments, we need distinct conditions on deaccenting and deletion, with the latter being more stringent. Furthermore, not all languages display similar prosodic correlates of focus–Given content (Cruttenden 2006), and accordingly, such 'piggy-backing' may not be plausible in said languages. Regardless, the general thrust of Chomsky and Lasnik's (1995) proposition, namely that "a wide class of elliptical constructions is formed within the phonological component, not by operations of the overt syntax" (p. 126), arguably holds even for such languages, with the apparent common denominator being the focus–Given status of morpho-syntactic material.

Subsequent *in situ* analyses of subsententials (Kimura 2007, 2010, 2013; Abe and Tancredi 2013; Abe and Hornstein 2012; Bruening 2015; Abe 2016; Ott and Struckmeier 2018; Sato et al. 2018; Griffiths 2019; Griffiths et al. 2023; among others) attempted to formalize this suggestion. Though they differ in their technical implementation, theories belonging to this view share with the MDA the postulation that clausal ellipsis involves PF-deletion of tacit structure that the remnant is born in, as independently corroborated by connectivity effects. Crucially, however, since ellipsis is viewed as a process that is entirely exogenous to the narrow syntax, the remnant need not undergo ellipsis-specific $\overline{\text{A}}$-movement underlyingly and may remain in its canonical position, with non-pronunciation targeting material surrounding it, as shown in (73).

Despite its name, the *in situ* approach typically assumes a remnant will move in the narrow syntax if such displacement is independently attested, as in, for example, sluicing in *wh*-ex situ languages, which entails underlying *wh*-movement (see (73-b)).[8] On the other hand, fragment answers like (73-a), where such foci generally do not front in English, and sluices in *wh*-in situ languages that are not amenable to a pseudo-sluicing analysis, such as Turkish, do not. This perspective on ellipsis consequently remains more faithful to Ross's (1969) original intuition regarding sluicing: the *wh*-question is formed, be it via an *ex situ* or *in situ* mechanism, then everything except for the *wh*-phrase is PF-deleted.

A number of empirical arguments in support of this proposal and against the MDA have been noted in the literature (den Dikken et al. 2000, Valmala 2007, Abe and Tancredi 2013, among others). This includes, for instance, the behaviour of negative polarity items (henceforth, NPIs) in elliptical contexts:

(74) A: What DIDN'T John buy?
B: ?(He didn't buy) any wine.
(den Dikken et al. 2000:45)

[8] Though Abe's (2015) proposal suggests *wh*-remnants always remain *in situ* underlyingly. Similar to the MDA, one must ask of such an alternative why something would *not* move just in the case of ellipsis when it otherwise would.

(75) A: What didn't Max want to read?
B: Anything / Any mystery novels.
(Valmala 2007:7)

(76) A: What does no one expect?
B: That John will ever come.
(Valmala 2007:26)

The schemata in the (a) variants below represent the MDA's treatment of said data, whereby the NPI, in its traversal to the left clausal edge, illicitly appears outside the scope of its negative licensor. The (b) variants alternatively represent the *in situ* solution, in which the NPI, not being subjected to obligatory movement just in the case of ellipsis, remains within the scope of negation as it would in non-elliptical contexts and is thus licensed at LF.[9]

(77) a. *Any wine ~~he didn't buy t_i~~. b. ~~He didn't buy~~ any wine.

(78) a. *Anything$_i$ / Any mystery novels$_i$ ~~Max didn't want to read t_i~~.
b. ~~Max didn't want to read~~ anything / any mystery novels.

(79) a. ??[That John will ever come]$_i$ no one expects t_i.
b. ~~No one expects~~ that John will ever come.

That degree modifiers can likewise function as fragment answers (80) despite their general aversion to fronting (81) further supports the *in situ* approach and is problematic for the MDA.

(80) A: Was he upset? B: Very / Somewhat.

(81) A: Somebody mentioned that Tim was a bit upset.
B: *No, very$_i$ / somewhat$_i$ he was t_i upset.
(Valmala 2007:8)

Treating ellipsis as a form of prosodic reduction also does not enforce a reordering of multiple remnants in the way that the alternative MDA does. For instance, Ott and Struckmeier's (2018) discussion focuses on the following

[9]Note that the MDA cannot appeal to reconstruction (Chomsky 1977) of the NPI at LF to a position below the licensing negation, as NPIs typically do not reconstruct (i), with the only exception to this being expressions such as (ii).

(i) *Anything$_i$ Phil would not give me t_i.
(de Swart 1998:179)

(ii) A doctor who knew anything about acupuncture was not available.
(Uribe-Echevarria 1994:17)

Cases such as (ii) differ from (i) in that it is the entire NP (which contains the NPI) that reconstructs. An alternative account of NPI fragments for the MDA comes from Weir 2014, which assumes PF movement of fragment answers out of the ellipsis site, leaving the LF of such sentences undisturbed. We will return to this general approach and its shortcomings in Chapter 3.

modal particles (henceforth, MPs) in German:

(82) a. Peter hat *wohl* / *ja* ein paar Leute eingeladen.
Peter has MP MP a few people invited
'{Probably/As you know}, Peter invited a couple of people.' (German)

b. Wer hat *denn* die Leute eingeladen?
who has MP the people invited
'Who invited the people?'
(Ott and Struckmeier 2018:396)

They note that MPs are used to express information related to speaker attitude or commitment to the expressed proposition and are thus modifiers of illocutionary force (Grosz 2020). MPs are unaccented and occupy a fixed position in the middle field (*viz.*, above *v*P but below TP). Furthermore, they are immobile, being averse to fronting (83-a) and extraposition (83-b).

(83) a. **Wohl* / *ja* hat Peter *t* ein paar Leute eingeladen.
MP MP has Peter a few people invited

b. *Peter hat *t* ein paar Leute eingeladen *wohl* / *ja*
Peter has a few people invited MP MP
(Ott and Struckmeier 2018:396)

Crucially, MPs may function as unaccented secondary remnants in elliptical contexts. This is shown for the sluice in (84), where the MP *denn* necessarily follows the primary *wh*-remnant.

(84) A: Peter invited a couple of people.
B: WEN *denn*?
who MP
B′: **Denn* WEN?
'Who?'
(Ott and Struckmeier 2018:397)

On the other hand, the linear order of MPs and primary non-*wh* remnants is flexible (85).

(85) A: Who did Peter invite?
B: Seine FREUNDE *wohl*.
his friends MP
B′: *Wohl* seine FREUNDE.
'Probably his friends.'
(Ott and Struckmeier 2018:397)

It is important to note, as Ott and Struckmeier (2018) do, that the primary and secondary remnant in such constructions are not separated by a prosodic break, independently substantiating the assumption that the two are indeed clausemates. Moreover, both remnants do not form a constituent, ruling out a movement analysis that

presupposes MPs pied-pipe with the primary remnant. This is illustrated by the ungrammatical V2 configurations in (86), where both elements co-occur in sentence-initial position.

(86) a. *[WEN *denn*] hat er eingeladen?
who MP has he invited

b. *[Seine FREUNDE *wohl* / *Wohl* seine FREUNDE] hat er eingeladen.
his friends MP MP his friends has he invited
(Ott and Struckmeier 2018:397)

Ott and Struckmeier (2018) argue that the data in (84)–(85) are problematic for the MDA, not only because MPs are generally immobile and cannot be focused but because of the observed linear order of the primary and secondary remnants. A movement analysis of such elliptical constructions would somehow need to preserve the linear order of *WH* $\prec$ MP in the case of sluicing while simultaneously allowing for the flexible linear order of primary non-*wh* remnants and MPs.

On the other hand, such facts are easily accounted for under the *in situ* approach with no additional stipulations: the elliptical forms in (84)–(85) are simply derived from their non-elliptical counterparts. In non-elliptical contexts, *wh*-phrases in German front obligatorily, while focused NPs front optionally. Thus, the sluice in (84) reflects the fixed linear order in (87), while the flexible order of primary–secondary non-*wh* remnants in (85) is derived from their corresponding non-elliptical forms in (88).

(87) a. WEN hat er *denn* eingeladen?
who has he MP invited

b. *Denn* WEN hat er eingeladen?
'Who did he invite?'

(88) a. Seine FREUNDE hat er *wohl* eingeladen.
his friends has he MP invited

b. Er hat *wohl* seine FREUNDE eingeladen.
(Ott and Struckmeier 2018:398)

Fixed-order effects of this kind thus remain a challenge for the MDA but receive a natural explanation from a theory of ellipsis that does not obligate the remnant's movement. Note that such effects likewise receive no natural explanation from antipodal *in situ* proposals that suggest remnants never move underlyingly (Abe 2015).

The *in situ* approach raises important questions,[10] paramount of which is its opposition to the standard assumption that grammatical operations can only target constituents. There are rebuttals here: although it may not be that ellipsis targets syntactic constituents, it may very well be that it targets prosodic ones (à la Bruening 2015) or constituents in the information-structural domain (i.e., propositional backgrounds) that may or may not correspond with prosodic ones (à la Ott and Struckmeier 2018).

Another important question that this perspective raises is the obligatory 'all-or-nothing' manner in which PF-

[10] We will return to these issues in Chapter 4.

deletion occurs, with partial deletion being impossible. In this regard, Ott and Struckmeier (2016:231) tentatively suggest that the *in toto* quality of PF-deletion may be captured using Heim's (1991) notion of *Maximize Presupposition!*. It is worth highlighting that the maximality of deletion is not so straightforward for alternative constituent-deletion analyses either. From this perspective, it is not obvious why morpho-syntactic material within TP cannot be exempt from deletion, which, as we will see in §2.6, has been argued for (see Griffiths 2019 and Stigliano 2022).

2.4 Interim summary

So far, we have seen that various connectivity effects discount non-structural analyses of subsententials. Of the structural alternatives, the MDA and the *in situ* approach are avenues that continue to be explored. Since its imposition, the MDA has garnered a considerable degree of attention despite its conceptual and empirical flaws. Though less prevalent, the *in situ* alternative more accurately reflects Ross's (1969) intuitive suggestion, whereby sluicing—and, perhaps, clausal ellipsis more generally—need not entail syntactic operations beyond what the language already requires.

2.5 The nature of the identity condition

In this section, we review two solutions to the identity puzzle, which concerns the nature of the relation between PF-deleted material and its antecedent. The first suggests that the identity condition requires truth-conditional equivalence between the elided IP and that of its antecedent. By inherently presupposing PF-deletion affects a syntactic constituent, this approach faces the challenges outlined in §2.3.2. The second proposes that recoverability is merely sensitive to the inquisitive content of the elided material and that of its antecedent, being compatible with the *in situ* approach to PF-deletion and thus showing the most promise.

2.5.1 Stating the identity condition over IPs

One approach to ellipsis identity forgoes the need for strict morpho-syntactic isomorphism between the elided clause and its antecedent and alternatively states the identity relation purely over semantic representations (Hankamer and Sag 1976; Sag and Hankamer 1984; Dalrymple et al. 1991; Hardt 1993, 1999; Ginzburg and Sag 2000; Culicover and Jackendoff 2005; Merchant 2001, 2004; among others).[11] One solution in this domain of ellipsis inquiry is Merchant's (2001) focus condition in (89).

(89) *Focus condition on IP ellipsis:*
A constituent α can be deleted only if α is e-GIVEN.
(Merchant 2001:38)

[11] Non-structural analyses of subsententials (see §2.1) *ipso facto* espouse a semantic identity relation, given their assumption that there is no underlying syntactic representation.

where "e-GIVENness" is defined as follows:

(90) *e-GIVENness:*
An expression E counts as e-GIVEN iff E has a salient antecedent A and, modulo ∃-type shifting
(i) A entails F-clo(E), and
(ii) E entails F-clo(A)
(Merchant 2001:26)

Merchant's (2001) proposal is inspired by Rooth's (1992) and Schwarzschild's (1999) theories of focus and definition of Givenness. According to Schwarzschild (1999), if a constituent α is not F(ocus)-marked, α must be Given, whereby an expression counts as Given iff it has a salient antecedent in the discourse that semantically entails the F-closure of the Given material. As discussed in §2.4.3, this Given content is prosodically deaccented, and F-marked elements are attributed with greater prosodic prominence. The identity condition on deaccentuation requires a one-way entailment relation between the Given content and its antecedent, where the meaning of the latter entails the former. This captures, for example, the (in)felicity of VP deaccenting in (91)–(92).

(91) a. Abby was reading the book while BEN *was reading*.
b. Abby ate a sandwich after BEN *ate*.
c. Abby called Chuck an idiot after BEN *insulted him*.
d. Abby ate a sandwich after BEN *had lunch*.
(Merchant 2001:15)

(92) a. *Abby was reading the book while BEN *was coughing*.
b. *Abby ate a sandwich after BEN *coughed*.
c. *Abby called Chuck an idiot after BEN *coughed*.
d. *Abby ate a sandwich after BEN *coughed*.
(Merchant 2001:16)

The identity condition on ellipsis considers Givenness a necessary but not a sufficient condition. As noted in §2.4.3, the constraints governing non-pronunciation are more strict than those mediating deaccentuation, in that ellipsis additionally requires the tacit material to entail the F-closure of its antecedent. This two-way entailment relation for ellipsis captures the fact that the salient interpretations of, for example, the VP-elided portions in (93) do not equate those of (91); rather, they seem to be meaning-equivalent to their antecedent. This applies *mutatis mutandis* to instances of clausal ellipsis.

(93) a. Abby was reading the book while BEN was.
b. Abby ate a sandwich after BEN did.
c. Abby called Chuck an idiot after BEN did.
d. Abby ate a sandwich after BEN did.
(Merchant 2001:17)

To illustrate, the calculation of e-GIVENness for the subsententials in (94)–(95) is depicted in (96), where both the elided and antecedent clauses trivially entail one another, ensuring recoverability.

(94) A: Someone was exiled. B: Who?

(95) A: Who was exiled? B: Napoleon.

(96) a. F-clo(IP_A) = $\exists x.x$ was exiled b. F-clo(IP_E) = $\exists x.x$ was exiled

This can be contrasted with the ungrammatical sluice in (97), wherein the F-closure of the elided clause does not entail that of its antecedent, i.e., *she insulted x* $\not\models$ *she called x an idiot* (98).

(97) *I know how many politicians she called an idiot, but I don't know WHICH (politicians)$_i$ ~~she insulted t_i~~.
(Merchant 2001:32)

(98) a. F-clo(IP_A) = $\exists x$.she called x an idiot b. F-clo(IP_E) = $\exists x$.she insulted x
(Merchant 2001:32)

One piece of evidence in favour of semantic identity under ellipsis comes from elliptical configurations that permit morpho-syntactic mismatches between the elided clause and its antecedent (Dalrymple et al. 1991). This includes instances of Principle C violations (99), which are straightforwardly captured assuming Merchant's (2001) notion of e-GIVENness (100).

(99) They arrested Alex$_i$, though he$_i$ thought they wouldn't ~~arrest him$_i$~~.
(Merchant 2001:24)

(100) a. F-clo(IP_A) = $\exists x.x$ arrest Alex b. F-clo(IP_E) = $\exists x.x$ arrest him
(Merchant 2001:28)

Assuming both *Alex* and the pronoun above refer to the same entity, the F-closures of both the antecedent and elided clauses in (99) are truth-conditionally equivalent (100), ensuring recoverability of the tacit material.

Additional evidence for a semantic identity condition comes from mismatches in tense, finiteness, and modality under ellipsis. This is exemplified by the sluice in (101), whose infinitive source corresponds with a gerundive antecedent.

(101) Decorating for the holidays is easy if you know how!
a. $\neq$ …*how [decorating for the holidays]
b. = …how [to decorate for the holidays]
(Merchant 2001:22)

Likewise, the sluices below show that certain modals can be equivalent to an imperative (102) or a subjunctive form of the verb. The latter is illustrated by the German sluice in (103), where the subjunctive *würden* 'would' appears to be equivalent to *sollten* 'should'.

(102) A: Amuse me! B: With what ~~should I amuse you~~?
(Lipták 2015:165)

(103) Politiker würden gern helfen, aber sie wissen nicht wie ~~sie~~ ~~helfen~~ ~~sollten~~.
politicians would.SUBJ PRT help.INF but they know.INF not how they help.INF should
'Politicians would like to help, but they don't know how.' (German)
(Lipták 2015:165)

Such data reflect morpho-syntactic mismatches at the clausal level that support an identity condition stated over semantic representations. For instance, Lipták (2015:165) suggests that the imperative–deontic modal mismatch above intuitively expresses the shared meaning component of both elements, namely, they both impose obligation (see Portner 2007). Such facts give semantic identity conditions, such as Merchant's (2001), an edge over alternative proposals that strictly require morpho-syntactic isomorphism between material in the ellipsis site and that of its antecedent (Williams 1977, Fiengo and May 1994, Chung et al. 1995, Fortin 2007, among others).

A crucial problem of Merchant's (2001) e-GIVENness is that it presupposes deletion of a syntactic constituent, namely, IP. This of course is at odds with the facts observed in §2.4.3, which alternatively seem to suggest that PF-deletion should not be envisioned in this way. It is worth noting that Merchant's (2001) focus condition essentially isolates the clausal background, which is the proposition obtained from removing the focus and existentially binding the trace of the remnant. However, the German MPs discussed in the previous section demonstrate that this take is insufficient. Being otherwise immobile elements whose meaning contribution is extra-propositional, the availability of MPs in elliptical contexts shows that isolating the clausal background via movement is untenable and that it is not solely focus that needs to be abstracted.

2.5.2 Recoverability is sensitive to inquisitive content

Recent work has argued for an alternative identity condition that is sensitive to the inquisitive content of the elided material and its antecedent (AnderBois 2010, 2011, 2014; Weir 2014, 2018; Barros 2014; Kotek and Barros Kotek and Barros 2018; 2019; Onea and Ott 2022; Griffiths et al. 2023; among others). For instance, AnderBois (2010, 2011, 2014) suggests that beyond truth-conditional equivalence, clausal ellipsis requires isomorphism of the *issues* raised by the elided clause and its antecedent. That is, their inquisitive content, as defined within the framework of inquisitive semantics (Groenendijk 2007, Groenendijk and Roelofsen 2009, Ciardelli et al. 2018, among others), must be congruent to ensure recoverability. Empirical evidence in support of such a proposal come from instances where the antecedent and elided material are truth-conditionally equivalent, yet recoverability is blocked. Take, for instance, the sluice in (104-a) which, despite the truth-conditional vacuity of double negation—rendering it on a par with its minimally different non-negated antecedent—is infelicitous.

(104) a. #It's not the case that Bill didn't bring a dish, but I don't know which (one).
b. It's not the case that Bill didn't bring a dish $\models$ Bill brought a dish.
(AnderBois 2014:888)

Additional empirical support for an identity condition that is sensitive to inquisitive content comes from various 'inheritance-of-content' effects present in elliptical expressions such as sluicing and fragment answers but not necessarily their non-elliptical counterparts. Such phenomena reflect the fact that subsententials necessarily inherit restrictions imposed on their antecedent (Ginzburg 1992; Chung et al. 1995; Romero 1998; Barros 2013, 2014; Weir 2014, 2018; Jacobson 2016; Vicente et al. 2021; among others). This is exemplified by the exchange in (105) (for relevant sluicing examples, see Chung et al. 1995 and Barros 2013).

(105) A: Which Brontë sister wrote *Emma*?
B: #Jane Austen, you idiot.
B′: Jane Austen wrote *Emma*, you idiot.
(Weir 2014:66)

The example in (106) likewise elucidates the presence of such inheritance effects, with these facts demonstrating the infelicity of a given continuation rather than the remnant proper. Once again, such a continuation is coherent in non-elliptical contexts.

(106) A: Which mathematics professor left the party at midnight?
B: Jill, #but she's not a mathematics professor.
B′: Jill left the party at midnight, but she's not a mathematics professor.
(Jacobson 2016:342)

Merchant's (2001) notion of e-GIVENness fails to handle such facts, as it falsely predicts that the fragment answer in (105) is perfectly felicitous, given mutual entailment of the unpronounced IP's F-closure and that of its antecedent (107).

(107) F-clo(IP_A) = $\exists x.x$ wrote *Emma* $\Leftrightarrow$ F-clo(IP_E) = $\exists x.x$ wrote *Emma*
(Weir 2014:66)

Furthermore, it remains a mystery from the perspective of e-GIVENness why the continuation in (106) is odd under ellipsis, despite the truth-conditional equivalence of the elided IP and its antecedent, nor is it clear why the infelicitous remnants/continuation above are strictly limited to elliptical contexts, being perfectly fine in their non-elliptical counterparts.

In establishing an identity condition that incorporates the inquisitive content of the antecedent and elided material in order to capture these data, recent analyses of ellipsis identity (see works cited at the beginning of this section) typically adopt the 'question-under-discussion' (henceforth, QUD) framework offered in Roberts 1996, 2012. From this vantage point, discourse is driven by QUDs that are addressed to update the common ground and are organized in a pushdown stack. The most salient or at-issue question is often referred to as the 'Maximal QUD' (henceforth, MaxQUD) and is the top-most member of the stack. Questions can enter the QUD stack explicitly (e.g., posing a question q explicitly makes q the MaxQUD) or implicitly (e.g., lexical items such as indefinites/disjunctives invoke salient questions that enter the MaxQUD). Assertions are a set of alternatives proffered by

a question that, if accepted by the participants as felicitous resolutions to the MaxQUD, are added to the common ground. QUDs are governed by (i) conventional rules (syntactic and semantic constraints, etc.) and (ii) conversational rules (e.g., Grice's (1989) maxims).

Weir's (2018) ellipsis identity condition in (108), as developed in Griffiths 2019 to capture both sluices and fragment answers, is one formalization that factors in inquisitive content using the QUD framework.

(108) *Background-matching condition on clausal ellipsis*:
Given a question q in the MaxQUD with background Q and a clause α with background A, clausal ellipsis is recoverable in α iff $A \sqsubseteq Q$.
(Griffiths 2019:10)

Building on work by Krifka (2006), this solution to ellipsis identity assumes a structured-meaning approach[12] to interpreting foci and questions (Jacobs 1983, von Stechow 1990, among others), according to which such constructions are viewed as structured propositions that are arguments of speech act operators, such as QUEST(ION) and ANS(WER). This is shown in (109) for the example in (105).

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[12] Weir (2018) argues for adopting a structured-meaning approach given the behaviour of cointensional questions in elliptical contexts, such as the following:

(i) A: How many signals did the machine send?
  a. B: It sent TWO signals. B′: Two signals.
  b. B: ?It sent a signal TWICE. B′: *Twice.

(ii) A: How many times did the machine send a signal?
  a. B: ?It sent TWO signals. B′: *Two signals.
  b. B: It sent a signal TWICE. B′: Twice.
  (Weir 2018:1289)

Below are the focus–background structures for the explicit MaxQUDs and corresponding answers in (i) and (ii), respectively.

(iii) A: QUEST($\langle$NUMBER, λx.the machine sent x signals$\rangle$)
  a. B: ANS($\langle$TWO, A, λx. the machine sent x signals$\rangle$)
  b. B: ANS($\langle$TWICE, A, λt. the machine sent a signal at interval x $\rangle$)

(iv) A: QUEST($\langle$TIME, λt. the machine sent a signal at interval x $\rangle$)
  a. B: ANS($\langle$TWO, A, λx. the machine sent x signals$\rangle$)
  b. B: ANS($\langle$TWICE, A, λt. the machine sent a signal at interval x $\rangle$)
  (Griffiths 2019:10)

Importantly, only the background of the answer in (iii-a) matches that of the MaxQUD in (iii), and only the background of the answer in (iv-b) matches that of the MaxQUD in (iv). Weir (2018) claims that an identity condition which does not presuppose a structured-meaning approach (*viz.*, one based on alternative semantics (Hamblin 1973, Rooth 1992)) would erroneously predict that both of the elliptical answers in (i) and (ii) are felicitous, since their underlying forms are cointensional (i.e., the set of worlds in which the machine sends two signals is the same set of worlds in which it sends the signal twice). The important question as to whether this prediction would still arise assuming an alternative semantics framework with structurally defined alternatives (Fox and Katzir 2011) remains open. I thank Naomi Francis (p.c.) for bringing this to my attention.

(109) a. $[\![$which Brontë sister wrote *Emma*$]\!]$ = QUEST($\langle$PERSON, λx. x wrote *Emma*$\rangle$)
where PERSON is the alternatives the question word can range over
b. $[\![[$Jane Austen$]_F$ wrote *Emma*$]\!]$ = ANS($\langle$Jane Austen, A, λx. x wrote *Emma*$\rangle$)
where A is the alternative to the focus (e.g., A = `alt`($[\![$Jane Austen$]\!]$) = {Sophia, Cal, …})

The lambda terms above (i.e., the last members of the ordered pairs) represent the clausal "background"; this is often referred to as the *presupposition skeleton* (à la Jackendoff 1972), which represents information that is not included in the common ground, or information that is not discourse-Given. It excludes any discourse-new material, contrastive foci, and extra-propositional content that does not enter into the calculation of truth conditions, such as the German MPs introduced in §2.4.3 (see also Ott and Struckmeier 2018). In the representations above, the members that precede the background are collectively considered the focus. Such representations are known as focus–background structures.

Weir (2018) explains that the $\sqsubseteq$ relation in (108) denotes generalized entailment over functions, as expressed in (110).

(110) $A \sqsubseteq B \iff \forall x.A(x) \rightarrow B(x)$
(Weir 2018:1303)

In terms of set theory and understood extensionally as sets, "background-matching" is thus defined as instances where the propositional background of a remnant under ellipsis is a subset of or equal to the MaxQUD's background.

Crucially, we now have sufficient munition in our arsenal to capture the facts in (104)–(106). AnderBois (2014:888–889) explains that sluices such as (104) which involve double negation are infelicitous since negation in the antecedent clause rejects the set of alternatives the MaxQUD denotes, thereby eliminating its inquisitive content and precluding recoverability. Fragment answers such as (105B) are likewise infelicitous because the set of propositions denoted by the MaxQUD Speaker A explicitly poses is restricted to alternatives that are 'Brönte sister' entities. Thus, the proposition 'Jane Austen wrote *Emma*' is not included in this set. Importantly, the denotation of Speaker B's fragment answer *does* include this proposition. Thus, the background of the fragment answer and that of its antecedent do not match, preventing recoverability (111).

(111) *Infelicitous fragment answer in (105):*
Background of MaxQUD: λx. the Brönte sister who is x wrote *Emma*
Background of fragment answer: λx. Jane Austen who is x wrote *Emma*
(Weir 2018:1304)

Weir (2018:1304) argues that the complete felicity of the non-elliptical version of this fragment answer underscores the stricter interpretation of elliptical variants relative to their non-elliptical counterparts; thus, such fragment answers cannot be dismissed as mere incoherence of the answer itself but truly as a consequence of some constraint intrinsic to subsententials (see also Fox 1999a on the stricter interpretation of elliptical constructions). The condition on clausal ellipsis in (108), which subjects the interpretation of a subsentential to whatever restrictions are

imposed on its MaxQUD, arguably constitutes said constraint.

The oddness of continuations such as that in (106) under ellipsis also follows naturally from this view. Since the assumed identity condition essentially states that an elliptical form presupposes its antecedent's background (being either a subset of or equal to it) to ensure recoverability, when Speaker B utters the elliptical version of her answer, this constraint forces the latter to commit to the belief that Jill is a professor (i.e., the set of propositions denoted by her elliptical answer is restricted to alternatives that are 'professor' entities). If she follows up such a fragment answer with an expression that directly refutes this belief, then this leads to a contradiction. Since the condition in (108) is non-operative in non-elliptical contexts, her fully pronounced answer does not make such a commitment, and she is free to challenge the presupposition that Jill is in fact a professor (i.e., the set of propositions denoted by her non-elliptical answer is not restricted to alternatives that are 'professor' entities), capturing the asymmetry in felicity of such continuations in non-elliptical vs. elliptical contexts cogently.

Importantly, the identity constraint in (108), unlike Merchant's (2001) focus condition, does not presuppose deletion of a syntactic constituent, thereby forcing the remnant to move and isolating the background, and merely requires recoverability to be sensitive to the inquisitive content of both the (potentially non-contiguously) elided material and its antecedent. This approach to ellipsis identity is thus compatible with *in situ* approaches to clausal ellipsis (see §2.4.3), which assume discontinuous PF-deletion, allowing the remnant to stay put.

2.5.3 The need for some morpho-syntactic isomorphism

Most contemporary identity conditions additionally assume some degree of morpho-syntactic isomorphism beyond meaning-equivalence to ensure recoverability (Chung 2006, 2013; van Craenenbroeck 2010; AnderBois 2010, 2011, 2014; Merchant 2013; Barros 2014; Thoms 2015; Wood et al. 2020; among others). For instance, Barros (2014) offers a hybrid solution, called the *Split identity condition* (112), which requires both a morpho-syntactic and a QUD-based meaning component to ensure recoverability.

(112) *Split identity:*

a. The remnant condition:
The remnant must have a syntactic correlate, which is a semantically identical XP in the antecedent.

b. The sluice condition:
The sluiced question and the Question under Discussion (QUD) made salient by the antecedent must have the same answer at any world of evaluation.
(Barros 2014:14)

Importantly, this hybrid constraint captures certain asymmetries that we find in (non-)elliptical contexts regarding structural alternations. For instance, Chung (2006) first noted that sprouting (as discussed in §2.3.1) deviates from sluicing in that it disallows P-stranding; in such contexts, the preposition cannot remain in the ellipsis site for overt *wh*-movement languages that otherwise permit P-stranding, such as English (113).

(113) a. They're reliant, but it's unclear [on who]$_i$ ~~they are reliant t_i~~.
b. *They're reliant, but it's unclear [who]$_i$ ~~they are reliant **on** t_i~~.

Such facts demonstrate the ellipsis site's intolerance to any 'new words' relative to its antecedent. Similarly, voice alternations found in non-elliptical contexts (114) are not present in clausal ellipsis (115).

(114) a. The Spartan persecuted the Athenian.
b. The Athenian was persecuted (by the Spartan).

(115) a. *Passive antecedent–active ellipsis:*
*The Athenian was persecuted, though we don't know who ~~persecuted the Athenian~~.
b. *Active antecedent–passive ellipsis:*
*Someone persecuted the Athenian, but we don't know who by ~~the Athenian was persecuted~~.

Moreover, object alternations are independently productive in languages such as English (116) but are disallowed under clausal ellipsis (117).

(116) a. They embroidered something with peace signs.
b. They embroidered peace signs on something.
(Merchant 2013:99)

(117) a. *They embroidered something with peace signs, but I don't know what on ~~they embroidered peace signs t~~.
b. *They embroidered something on their jackets, but I don't know with what ~~they embroidered their jackets t~~.
(Merchant 2013:100)

Such facts receive a straightforward explanation assuming the remnant condition in (112-a). According to Barros (2014), sluices such as (117) are ungrammatical, as in both instances, the syntactic category of the correlate and the remnant are different (DP vs. PP); to the extent that such categories differ semantically, the remnant thus does not have a meaning-equivalent syntactic correlate in either case. For sluices such as (113-b), Barros (2014) adopts the analysis in Fortin 2007, 2011 which suggests antecedents of sprouting constructions contain a silent syntactic correlate. Such sluices are said to consist of a tacit PP modifier in the antecedent whose semantics likewise clashes with that of the DP remnant. Active–passive voice mismatches under ellipsis (115) are likewise ruled out given the semantic differences they produce, specifically with regards to theta roles. An active remnant, which is an agent, requires a semantically identical correlate in the antecedent, i.e., one that is likewise an agent, to satisfy (112-a). It thus cannot be anaphoric to a passive correlate, which is thematically a patient. The same holds true for active correlate–passive remnant mismatches.

Since the remnant condition in (112-a) only makes reference to the surfacing material and its antecedent, it is blind to content in the ellipsis site. This provides enough wiggle room to let in structurally non-isomorphic sources

such as clefts that are semantically parallel with their antecedent, and necessarily so to account for sluices like (118), which clearly cannot be morpho-syntactically equivalent to their antecedent.

(118) Sally has a new boyfriend, guess who ~~it is~~!
(cf. #…guess who she has!)
(Barros 2014:7)

Morphological case mismatches such as those observed in §2.2 are thus ruled out given the lack of a meaning-equivalent source. By contrast, abstract Case mismatches such as (119) are generally allowed given such Case marking bears no semantic effects.

(119) a. She remembers someone meeting him, but she doesn't remember who.
b. She remembers someone meeting him, but she doesn't remember who met him.
c. I saw someone leave, but I didn't see who.
d. I saw someone leave, but I didn't see who left.
(Barros 2014:58)

As Barros (2014) explains, the sluices in (119) comprise an exceptional case marking (ECM) verb that assigns accusative case to the correlate, which functions as the subject of the embedded non-finite clause. The sluice, however, denotes a finite embedded question, in which the *wh*-remnant receives abstract nominative case from T^0. Importantly, the finite sources in (119-b) and (119-d) count as the only possible semantically equivalent though structurally non-isomorphic sources, deviating only from their antecedents in terms of necessary tense–finiteness mismatches. This can be contrasted with the ungrammatical German equivalent in (120).

(120) *Klaus hat jemanden weglaufen sehen, aber er hat nicht gesehen wer.
Klaus has someone.acc leave seen but he has not seen who.nom
'Klaus saw someone leave, but he didn't see who.' (German)
(Barros 2014:59)

In German, such sluices correspond to a morphological case mismatch, where an equivalent finite source licenses morphological nominative case that clashes with the overtly accusative-marked correlate. It thus seems that clausal ellipsis is only sensitive to morphological case marking and not abstract Case (see also Thoms 2015). To capture this, Barros (2014) offers the *Stubborn case matching* (henceforth, SCM) condition in (121).

(121) *Stubborn case matching:*
In sluicing, given a correlate, C, and a remnant, R, if C is a case-bearing category, R and C must have the same case morphology.
(Barros 2014:62)

Barros (2014) argues that contrary to standard assumptions, case matching under ellipsis is not a consequence of structural isomorphism between the elliptical clause and its corresponding antecedent; rather, structural equiv-

alency follows from the need to satisfy SCM, which is sensitive to morphological case but not abstract Case, as evidenced above. The condition in (121) thus lets in non-isomorphic (including cleft) sources when no overt case matching is at stake, accounting for (118)–(119), and rules out sluices such as (120), where structural non-isomorphism results in illicit mismatches in morphological case.

Since the remnant condition is indifferent to material in the ellipsis site as noted above, we need a way to rule out ill-formed constructions such as (122).

(122) *Someone left, but I don't know who ~~sang~~.
(Barros 2014:161)

Enter the sluice condition in (112-b): elliptical expressions like (122) are deemed impossible, as the implicit at-issue QUD of (122) (*Who left?*) and that of the embedded sluice denote sets of propositions that are incongruent, precluding recoverability.

There is thus strong evidence that independently supports the incorporation of some morpho-syntactic isomorphism to ensure recoverability. Hybrid identity conditions such as Barros's (2014) capture certain structural asymmetries in (non-)elliptical contexts. The SCM further accounts for why overt case morphology, and not abstract Case, on an elliptical remnant stubbornly matches that of its correlate, being limited to sources that license the overt case morphology of its antecedent.

2.6 Licensing clausal ellipsis

There are constraints on the grammatical contexts in which ellipsis can apply (Ross 1969, Lobeck 1995, Merchant 2001, among others). For instance, sluicing, which involves ellipsis of interrogatives (123-a), is neither possible in relative clauses (123-b) nor *yes/no* questions (123-c).

(123) a. John knows that somebody bought a book, but he doesn't know [$_{CP}$ who [$_{TP}$ ~~bought a book~~]].
b. *John knows that somebody bought a book, but he doesn't know the man [$_{CP}$ who [$_{TP}$ ~~bought a book~~]].
c. *John suggested that she bought a book, but I don't know [$_{CP}$ if [$_{TP}$ ~~she bought a book~~]].
(Murphy 2016:4)

To account for the distribution of (clausal) ellipsis, Lobeck's (1995) formative theory on licensing elliptical constructions such as sluicing emerged during the government and binding (henceforth, GB) era of syntactic theorizing (Chomsky 1981). She suggests that ellipsis is syntactically conditioned, whereby certain functional heads license ellipsis of their complements. As such, the C head licenses ellipsis of its TP complement in (124), which dominates

an empty category (*viz.*, *pro*).[13]

(124) We want to invite someone, but we don't know [$_{CP}$ who C [$_{TP}$ *pro*]]
(Lobeck 1995:20)

Treating ellipsis sites as empty categories in this way subjects the phenomenon to the typical requirements on said proforms, such as the *Empty category principle* (henceforth, ECP) (Chomsky 1981), which forces such elements to be properly governed by an X^0 category or an antecedent. To capture both the licensing requirement and the identity condition on ellipsis, Lobeck (1995) provided the condition in (125).

(125) *Licensing and identification of pro:*
An empty, non-arbitrary pronominal must be properly head-governed, and governed by an X^0 specified for strong agreement.
(Lobeck 1995:41)

The overlap between the ellipsis site in (124) and the complement position of the C head follows straightforwardly under this view that empty category *pro*s must be head-governed. No ellipsis-specific assumptions need be made. However, with GB's abandonment and the advent of the Minimalist Program (Chomsky 1995), Lobeck's (1995) theory of ellipsis licensing was relinquished. Under the purview of Minimalism, Merchant (2001) resuscitated her analysis and refashioned it via a feature-based approach. More precisely, he proposed an [E] (for 'ellipsis') feature on the relevant functional head; for both sluices such as (48) and fragment answers such as (53), repeated in (126) and (127), respectively, this feature is present on C^0 (128)–(129) (Merchant 2001, 2004).[14]

(126) A: Dutch's plan involves something. B: What?

(127) A: Who does Arthur despise? B: Micah.

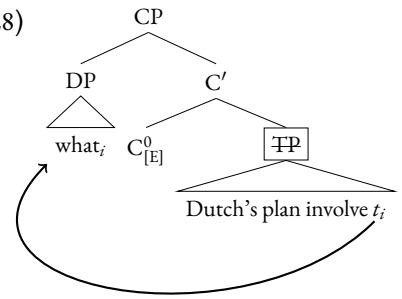
[13]Lobeck's (1995) analysis covers various forms of ellipsis, including VP and NP ellipsis (i) that are said to be licensed by the T and D heads, respectively.

(i) a. Because [$_{TP}$ Pavarotti [$_{T}$ couldn't] [$_{VP}$ *pro*]], they asked Domingo to sing the part.
b. Although John's friends were late to the rally, [$_{DP}$ Mary [$_{D}$ -'s] [$_{NP}$ *pro*]] arrived.
(Lobeck 1995:20)

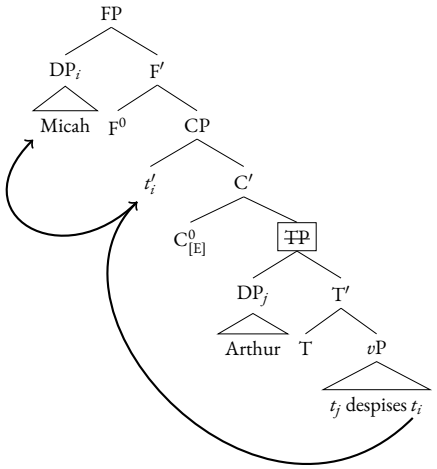
For similar approaches, see Zagona 1983 on VP deletion and Saito and Murasugi 1990 on N′ deletion in Japanese.

[14]To account for why the C head is not pronounced in (126B), Merchant (2001:84) proposes the *Sluicing–COMP generalization*, which stipulates that non-operators (i.e., any non-*wh* material) cannot appear in C^0 or Spec,CP. Sluicing thus bleeds *do*-support to prevent violating this condition.

(128)



(129)



The [E] feature warehouses requisite information regarding the syntax, semantics, and phonology of ellipsis (Merchant 2004:670). Its primary function is to flag the feature-bearing head's syntactic complement (i.e., TP in the trees above) for phonological suppression at PF, whence the remnant's necessary evacuation out of the ellipsis site.

To capture the correct distribution of sluices observed in (123), Merchant (2004) proposes that the lexical entry of [E] bears a set of features that are only licensed by particular C heads (130).

(130) The Syntax of E_S:
E_S [*u*wh*, *u*Q*]
(Merchant 2004:670)

Specifically, under sluicing, C^0 bears the interpretable features [*wh*, Q] that value and check the uninterpretable features [*u*wh*, *u*Q*] of [E]. The latter are strong, requiring such feature checking to take place in a local configuration (*viz.*, a head–head relation). The [E] feature has various manifestations, each with different syntactic specifications to other elliptical constructions (e.g., fragment answers, as well as VP and NP ellipsis); this is indicated by the 'S(luicing)' subscript in (130).[15] Furthermore, various forms of [E] must also be postulated in order to capture cross-linguistic differences within a class of elliptical constructions. For instance, van Craenenbroeck and Lipták (2013:511) suggest that sluicing in Hungarian is licensed by a strong [*u*Foc*] feature on a Focus or C head, as opposed to the [*u*wh*, *u*Q*] features of English [E].[16]

The feature matrix of [E] for fragment answers (131) minimally differs from that of [E_S] and ensures that [E] and C^0 are locally positioned; however, [E] need not move to F^0 to check the weak *u*F feature, as Agree (Chomsky 2000) will apply to satisfy this need.

[15] This raises an important question: how many versions of [E] is the lexicon burdened with?

[16] For similar focus-fronting approaches to licensing sluicing, see Toosarvandani 2008 on Farsi and İnce 2012 on Turkish.

(131) The SYNTAX of E_f:
E_f [*u*C*, *u*F]
(Merchant 2004:707)

As expected, the phonological consequence of the [E] feature is that it triggers non-pronunciation of its TP complement (132).

(132) PHONOLOGY OF E:
$\varphi_{TP} \rightarrow \varnothing$ / E ___
(Merchant 2004:671)

From this perspective, there is no *syntactic* operation or rule of deletion (e.g., 'Delete α') that is responsible for non-pronunciation. Rather, deletion takes place entirely in the PF domain and reflects a type of morphological syncope of a larger prosodic unit triggered by [E]. Deletion itself is thus a PF process here.

It is worth mentioning that the E-feature approach to ellipsis licensing and *in situ* proposals of PF-deletion are not mutually exclusive, and indeed this feature is assumed by some proponents of the *in situ* approach as well. For instance, Griffiths (2019) proposes the PF-deletion rule in (133).[17]

(133) *PF rule of clausal ellipsis:*
$[_{HP}\ H_{[E]} \ldots (MP) \ldots Y \ldots] \rightarrow [_{HP\varnothing} \ldots (MP_{\varphi}) \ldots Y_{\varphi} \ldots]$
(Griffiths 2019:15)

According to (133), a designated phrase (Y) containing a *wh*/non-*wh* element that is within the scope of the E-bearing head (H) may be phonologically realized (φ); thus, material in the scope of E may be exempt from non-pronunciation ($\varnothing$) and thus need not move prior to PF-deletion.

Stigliano (2022) adopts a similar perspective. Her proposal follows a line of ellipsis research that alternatively treats non-pronunciation as blocking post-syntactic Vocabulary Insertion under a Distributed Morphology framework (Halle and Marantz 1993). That is, ellipsis does not involve 'PF-deletion' *sensu stricto* but rather prevents the implantation of Vocabulary Items (i.e., lexical material) in abstract syntactic terminal nodes (Bartos 2000, Nunes and Zocca 2009, Aelbrecht 2010, Saab 2010, Saab and Lipták 2016, Murphy 2016, among others).[18] Stigliano (2022) suggests clausal ellipsis is licensed in the complement of the E-bearing C head; every functional head in the comple-

[17] "MP" refers to the immobile modal particles in German that may surface under clausal ellipsis, as discussed in §2.4.3.

[18] Murphy (2016:6–7) notes that implementing an [E]-feature theory of ellipsis licensing in which [E] blocks Vocabulary Insertion would not be straightforward, as the latter operation is typically assumed to progress blindly from the root up; thus, the effects of [E] on C^0 would apply after Vocabulary Insertion has already adorned the ellipsis site with lexical content. He suggests that to circumvent this issue, an E-feature theory of ellipsis licensing would either have to make the dubious assumption that structurally lower heads have access to the features of higher ones or forgo the [E] feature altogether and adopt an alternative solution to the licensing puzzle (e.g., Murphy's (2016:26) *Total impoverishment* rule, which lexically inserts an Elsewhere '$\varnothing$' into a phrase (TP_E) whose features form a proper subset of an antecedent phrase (TP_A)). An alternative option, which Stigliano (2022) adopts, would be to stipulate that lexical insertion proceeds in a top–down fashion.

ment of $C^0_{[E]}$ is further marked with a "special feature", represented as [†] (following Müller 2011), whose assignment is constrained by (134).

(134) Assignment of [†]: Assign [†] to every head h in the complement of a head $z_{[E]}$ iff h is not dominated by an [F]-marked node.
(Stigliano 2022:1360)

Lexical material is not inserted at Spell-Out for those terminal nodes whose heads are [†]-marked. Thus, morpho-syntactic material within the scope of [E] may be exempt from non-pronunciation, allowing the remnant to remain *in situ* underlyingly.

Lobeck's (1995) original analysis benefited from its assumption that ellipsis sites house pronominals, as the licensing conditions on ellipsis were then explicable by independently supported restrictions on empty categories (*viz*., the ECP). Though descriptively adequate, Merchant's (2001) adaptation of Lobeck's (1995) account lost this cogency. There is no principled reason why only certain syntactic heads are capable of licensing ellipsis, both within and across languages, apart from merely stating that only those heads which bear this feature have the ability to do so. This is a general affliction that feature-based approaches proliferating the state of the art suffer from:

> One problem with these feature-based accounts is that they adopt the notion of a licensing head in a context where it has been denuded of its wider theoretical justification. The move to Minimalism has effectively rendered the licensing head an ellipsis-specific stipulative category […]. The elegance of Lobeck's account has thus been lost in transition […].
>
> (Thoms 2010:3)

As Murphy (2016:4) notes, the *circulus in probando* nature of the [E] feature is reminiscent of the contentious EPP feature (Chomsky 1981, 2000), the trigger for movement that is stipulated wherever movement is observed. Just as the EPP merely "[…] gives the problem a name, rather than fixing it" (Cecchetto and Donati 2015:92), so is the [E] feature affixed anywhere ellipsis is observed. Thus, despite its ubiquity, the E-feature approach to licensing clausal ellipsis lacks explanatory power.

Conversely, a QUD approach to ellipsis recoverability (see §2.5.2) seems to have the potential to explain the distribution of clausal ellipsis without additional stipulations, possibly allowing us to subsume the issue of ellipsis licensing under that of identity. Since recoverability is sensitive to the inquisitive content of the elided material and its antecedent from this vantage point, we make the correct general prediction that clausal ellipsis will only ever be licensed in *wh*-questions and answers.

For instance, Weir (2014:257–258) explains that sluicing cannot occur in relative clauses such as in (123-b), repeated in (135), due to a lack of recoverability.

(135) *John knows that somebody bought a book, but he doesn't know a man [$_{CP}$ who [$_{TP}$ ~~bought a book~~]].

Wh-relative pronouns name properties (in this case, of *the man*) and are not *wh*-questions. In other words, such *wh*-phrases do not denote a set of alternative propositions. This is of course at odds with the fact that the at-issue

question (*Who bought the book?*) does denote a set of alternatives. Sluicing is thus not licensed in relative clauses as such constructions are not of the right semantic type to participate in QUD equivalency, rendering such elliptical expressions unrecoverable (see also Boone 2014 for a similar explanation).

However, it is not obvious how such an approach would account for why clausal ellipsis is not licensed in contexts such as (123-c), repeated in (136).

(136) *John suggested that she bought a book, but I don't know [$_{CP}$ if [$_{TP}$ ~~she bought a book~~]].

To see what may make constructions such as (136) ungrammatical from a QUD perspective, compare this sentence with the grammatical sluice in (137).

(137) John suggested that she bought a book, but I don't know [$_{CP}$ which (book) [$_{TP}$ ~~she bought~~]].

I believe such minimal pairs may be captured under Sauerland's (2004) presuppositional account of givenness marking (henceforth, G-marking).[19] From this vantage point, it is G-marked material, not its complement, that imposes conditions on the context. For instance, consider the simple example in (138).

(138) a. Q: Which girl ate a cookie?
b. A: LINA [ate a cookie]-G
(Sauerland 2004:378)

Sauerland (2004) explains that the antecedent question in (138-a) determines the G-marking in (138-b), which gives rise to a presupposition. This presupposition is the existential closure of the background of (138-b), which is $\lambda x.$ *x* ate a cookie, or *Someone ate a cookie*, requiring the predicate in this case to be salient in the context. Similarly, the implicit antecedent MaxQUD for (136) and (137), as shown below, has the background $\lambda x.$ she bought *x*, whose existential closure gives rise to the presupposition *She bought something*.

(139) a. Which book did she buy?
b. $\lambda x.$ she bought *x*

G-marking in the elliptical clause in (137), as determined by this antecedent question, gives rise to the same presupposition, namely, *She bought something* (140). In this way, background matching in (137) is met, ensuring recoverability.

(140) a. …but I don't know which (book) [she bought]-G
b. $\lambda x.$ she bought *x*

For the ungrammatical sluice in (136), the implicit question establishes that the object *a book* is not G-marked in this context, since it is not part of the existential closure of the implicit question's background (see (139)). Hence, despite the fact that this constituent is not G-marked, in (136), it is elided. In other words, expressions such as (136)

[19] See Wagner 2012 for criticisms of this approach that are beyond the scope of this thesis.

are ruled out as in these instances, ellipsis does not target what would be rendered G-marked by the antecedent question.

However, it remains unclear how a QUD approach to ellipsis licensing would be able to capture cross-linguistic differences in the distribution of clausal ellipsis. For instance, unlike what we have seen for English, some languages seem to permit sluicing in *yes/no* questions (Erschler 2016), as demonstrated for Polish in (141).

(141) zosia coś ugotowała ale nie wiem **(czy) ryż czy kasz-ę**
Zosia something she.cooked but NEG know Q rice Q porridge-ACC
'Zosia cooked something, but I don't know if (she cooked) rice or porridge.' (Polish)
(Erschler 2016:189)

It is possible that factors independent of clausal ellipsis may be at the root of such cross-linguistic differences,[20] though it is not obvious what would be said intervening factor here.

Taking stock, it seems that QUD equivalency has an explanatory edge over alternative E-feature accounts of licensing clausal ellipsis, which effectively do no more than re-state the problem. By couching ellipsis recoverability in a question-driven model of discourse, we make the correct overall prediction that clausal ellipsis will only ever be possible in *wh*-questions and answers. While this solution to licensing subsententials thus shows potential for actually explaining why we find clausal ellipsis where we do, its empirical coverage remains far from clear. This account of licensing short forms thus requires more attention in future work.

2.7 Summary

This chapter critically reviewed responses to the central points of contention clausal ellipsis has engendered. The first of these concerns the possible presence of silent structure in which subsententials are born. The structuralist perspective involving PF-deletion of a tacit clause receives independent support from connectivity effects, *pace* non-structuralism and LF-copying approaches. Within PF-deletion theories of clausal ellipsis, the MDA and the *in situ* approach are avenues that continue to be explored, with the former burgeoning despite its non-trivial imperfections. What sets the two in opposition is their differing conceptualizations of PF-deletion: the MDA assumes non-pronunciation targets a syntactic constituent, and the *in situ* approach proposes morpho-syntactic material surrounding the remnant is freely deleted. Both solutions make critical predictions for elliptical constructions and their fully sentential counterparts that, especially from a cross-linguistic perspective, seem to support the *in situ*

[20] Much like how multiple sluicing of the following type is disallowed in languages like English where the *wh*-remnants are not overtly case-marked and thus not disambiguated.

(i) *Someone gave someone a book, but I don't know who who.

By contrast, such elliptical expressions are grammatical in languages that overtly case-mark the remnants (see Abels and Dayal 2023, among others), thereby disambiguating the grammatical relations that the remnants correspond with. Multiple sluices of this type are thus disallowed in languages like English not because of some factor inherent to clausal ellipsis but for independent reasons, namely, case marking.

solution. A related and significant issue that continues to perplex is how the identity condition that governs clausal ellipsis should be stated. In this regard, hybrid solutions incorporating QUD-meaning equivalency and some degree of morpho-syntactic isomorphism are promising and, unlike conditions on recoverability that presuppose constituent deletion (such as Merchant's (2001) focus condition), further complement the *in situ* approach. Finally, there is the widely held assumption that clausal ellipsis is licensed by a feature in the narrow syntax (*viz.*, [E]), which, according to the traditional MDA, is the impetus for constituent deletion. Despite its wide acceptance, the E-feature approach to ellipsis licensing does not explain the distribution of elliptical phenomena, merely re-stating the problem. Conversely, the QUD approach to recoverability seems to be on the right track towards an explanation of licensing subsententials; however, the empirical scope of this solution remains unclear.

A pair of wings, a different mode of breathing, which would enable us to traverse infinite space, would in no way help us, for, if we visited Mars or Venus keeping the same senses, they would clothe in the same aspect as the things of the earth everything that we should be capable of seeing.

—Marcel Proust
The Prisoner

Chapter 3

On the presence of tacit structure and movement

This chapter explores sluicing and fragment answers in H/U and begins by arguing for a PF-deletion analysis of such constructions based on various connectivity effects. I show that properties of subsententials and truncated clefts in this language are dichotomous, rendering a potential 'pseudo-ellipsis' analysis untenable and substantiating the presence of a full tacit clause (§3.1). Under the purview of PF-deletion, I argue against a movement approach to clausal ellipsis in H/U, which available treatments adopt. In assuming PF-deletion targets syntactic constituents, thereby forcing remnants to escape the ellipsis site, I argue that this perspective raises non-trivial conceptual and empirical issues that render it sub-optimal, at the forefront of which is exceptional movement (§3.3). A summary follows in §3.4.

3.1 Evidence for PF-deletion

In this section, we will see that subsententials in H/U display connectivity effects that warrant a PF-deletion analysis, *contra* the non-structuralist approach, as described in Chapter 2. We will also see evidence that strongly suggests the remnant is born in a full underlying clause.

3.1.1 Case connectivity

We saw in Chapter 2 that non-structural approaches to subsententials (Ginzburg and Sag 2000, Culicover and Jackendoff 2005) suggest that their syntax is largely limited to their PF output. In this section, we will see that H/U is not amenable to such a reductionist approach, with various connectivity effects strongly evidencing a silent syntactic source that deletes at PF. The first of these effects that we will consider is case connectivity, whereby remnants in this language are generally marked with the same case that they would receive in non-elliptical contexts. To illustrate, consider the following elliptical expressions.

(1) A: Talib=ne kisi=ko aam diya thaa.
Talib=ERG someone=DAT mango gave be.3SG.PAST.M
'Talib gave a mango to someone.'

B: kis=ko / *kaun / *kis=ne?
who=DAT who.NOM who=ERG
'Who did Talib give a mango to?'

(2) A: kis=ne aam khaya hai?
who=ERG mango ate be.3SG.PRES
'Who has eaten a mango?'

B: Safiina=ne / *Safiina / *Safiina=ko.
Safina=ERG Safina.NOM Safina=DAT
'Safina has eaten a mango.'

(3) A: Safiina kis chiiz=se aam kaat rahi hai?
Safina what thing=INSTR mango cut PROG be.3SG.PRES
'What is Safina cutting the mango with?'

B: chaaku=se / *chaaku.
knife=INSTR knife.NOM
'Safina is cutting the mango with a knife.'

(4) A: yeh chaku kisi=ka hai.
this knife someone=GEN be.3SG.PRES
'This knife is someone's.'

B: kis=ka / *kaun?
who=GEN who.NOM
'Whose knife is this?'

Below are the non-elliptical versions of these subsententials.

(5) a. Talib=ne kis=ko / *kaun / *kis=ne aam diya thaa?
Talib=ERG who-DAT who.NOM who=ERG mango gave be.3SG.PAST.M
'Who did Talib give a mango to?'

b. Safiina=ne / *Safiina / *Safiina=ko aam khaya hai.
Safina=ERG Safina.NOM Safina=DAT mango ate be.3SG.PRES
'Safina has eaten a mango.'

c. Safiina chaaku=se / *chaaku aam kaat rahi hai.
Safina knife=INSTR knife.NOM mango cut PROG be.3SG.PRES
'Safina is cutting the mango with a knife.'

d. yeh chaaku kis=ka / *kaun hai?
this knife who=GEN who.NOM be.3SG.PRES
'Whose knife is this?'

Crucially, that the remnants above necessarily surface with the same morphological case they bear in non-elliptical contexts strongly suggests the presence of an ellipsis site housing the relevant case licensor in the elliptical examples

on a par with their non-elliptical counterparts. This further implies some degree of morpho-syntactic isomorphism between the tacit material and its antecedent, whence the observed case matching between the correlates and remnants in the subsententials above. Alternative WYSIWYG proposals which assume no underlying structure, and thereby no silent case licensor, have no straightforward explanation for such case connectivity.

3.1.2 Binding effects

Sluices and fragment answers in H/U also display binding effects (Chomsky 1995) that are naturally explicable by assuming a tacit source that functions as the binding domain and contains the binder. With respect to Principle A and reflexive binding, there are two reflexive forms in this language: the monomorphemic 'self' reflexive, *apna*, and the morphologically complex *apne-aap* 'X-self' reflexive. The former permits long-distance antecedents when it appears in non-finite clauses (6-a) but is strictly bound by a local antecedent in finite contexts (6-b). The 'X-self' reflexive is only bound by a local antecedent in (non-)finite contexts (6-c).

(6) a. Siita=ne$_i$ Raam=ko$_j$ [PRO$_j$ apni$_{i/j}$ kitaabein parhne] dii.
Sita=ERG Ram=DAT self books to-read gave
'Sita allowed Ram to read his/her books.'

b. Siita=ne$_i$ kaha [$_{CP}$ ki Raam=ne$_j$ apni$_{*i/j}$ kitaab phenk] dii.
Sita=ERG said that Ram=ERG self book threw gave
'Sita said that Ram threw away his/her own book.'

c. Siita=ne$_i$ Raam=ko$_j$ [PRO$_j$ apne-aap=ko$_{*i/j}$ sambhalne]=ko kaha.
Sita=ERG Ram=DAT self-self=DAT to-control=DAT said
'Sita told Ram to control *herself/himself.'

(Kidwai 2000:83–87)

Importantly, both types of reflexives serve as licit fragment answers:

(7) A: Raam$_i$ kis=ko pasand karta hai?
Ram who=DAT like does be.3SG.PRES
'Who does Ram like?'

B: apne-aap=ko$_i$.
self-self=DAT
'Himself.'

B′: Raam$_i$ apne-aap=ko$_i$ pasand karta hai.
Ram self-self=DAT like does be.3SG.PRES
'Ram likes himself.'

(8) A: Siita=ne$_i$ Raam=ko$_j$ kis=ki kitaabein parhne dii?
Sita=ERG Ram=DAT who=GEN books read gave
'Whose books did Sita allow Ram to read?'

B: apni$_{i/j}$ kitaabein.
self books
'His/her books.'

B′: Siita=ne$_i$ Raam=ko$_j$ apni$_{i/j}$ kitaabein parhne dii.
Sita=ERG Ram=DAT self books read gave
'Sita allowed Ram to read his/her books.'

Additionally, the reciprocal *ek duusre* 'each other' prefers a local antecedent (9-a) but is also (marginally) bound across finite boundaries (9-b).

(9) a. voh$_i$ ek duusre=ko$_i$ pasand karte hain.
They each other=DAT like do be.3PL.PRES
'They like each other.'

b. ?Raam$_i$ aur Shyaam$_j$ socte hain [$_{CP}$ ki ek duusre=ne$_{i+j}$ kitaab kho dii].
Ram and Shyam think be.3PL.PRES that one other=ERG book lose gave
'Ram$_i$ and Shyam$_j$ think that they$_{i+j}$ lost the book.'
(Davison 2000:433)

The data below show that this reciprocal can surface as a fragment answer derived from underlying mono-clausal constructions (10) as well as subordinate configurations (11).

(10) A: voh$_i$ kis=ko pasand karte hain?
they who=DAT like do be.3PL.PRES
'Who do they like?'

B: ek duusre=ko$_i$.
each other=DAT
'Each other.'

B′: voh$_i$ ek duusre=ko$_i$ pasand karte hain.
they each other=DAT like do be.3PL.PRES
'They like each other.'

(11) A: kis=ne$_k$ Raam$_i$ aur Shyaam$_j$ socte hain [$_{CP}$ ki t_k Nadia=ko chumaa]?
who=ERG Ram and Shyam think be.3PL.PRES that Nadia=DAT kissed
'Who do Ram and Shyam think kissed Nadia?'

B: ?ek duusre=ne$_{i+j}$.
each other=ERG
'Each other$_{i+j}$.'

B′: Raam$_i$ aur Shyaam$_j$ socte hain [$_{CP}$ ki ek duusre=ne$_{i+j}$ Nadia=ko chumaa].
Ram and Shyam think be.3PL.PRES that each other=ERG Nadia=DAT kissed
'Ram$_i$ and Shyam$_j$ think that they$_{i+j}$ kissed Nadia.'

With regards to Principle B, pronominals must be free in their binding domain (12). The example in (13) shows that when such elements surface as fragment answers, they likewise conform to this constraint.

(12) Raam$_i$ us=ko$_{*i/j}$ maregaa.
Ram he=DAT hit.FUT
'Ram$_i$ will hit him$_{*i/j}$.'

(13) A: Raam$_i$ kis=ko maregaa?
Ram who=DAT hit.FUT
'Who will Ram hit?'

B: us=ko$_{*i/j}$.
he=DAT
'Him$_{*i/j}$.'

Finally, R-expressions respect Principle C of *Binding theory*, as they must be free (14); such expressions behave analogously in elliptical contexts (15).

(14) us=ne$_{*i/j}$ Raam=kii$_i$ kitaab phenkii.
he=ERG Ram=GEN book threw
'He$_{*i/j}$ threw Ram$_i$'s book.'

(15) A: us=ne$_{*i/j}$ kis=kii kitaab phenkii?
he=ERG who=GEN book threw
'Whose book did he$_{*i/j}$ throw?'

B: Raam=kii$_i$.
Ram=GEN
'Ram$_i$'s.'

Crucially, the parallel behaviour of elements affected by *Binding theory* in the sentential and subsentential constructions above is predicted assuming a PF-deletion theory of the short variants. Anaphors, pronominals, and R-expressions respect their corresponding principles when base-generated in an appropriate underlying clause that serves as their binding domain and contains the (un)offending binder—a property that the alternative WYSIWYG approach fails to predict.

3.1.3 P-retention

Subsententials in H/U obligatorily retain post-positions (henceforth, P-retention) (16)–(17).

(16) A: Shiraz=ne kitaab kis=par rakhii?
Shiraz=ERG book what=on put
'On what did Shiraz put the/a book?'

B: Shiraz=ne kitaab mez=par rakhii.
Shiraz=ERG book table=on put
'Shiraz put the/a book on the/a table.'

B′: mez=par / *mez.
table=on table.OBL
'Shiraz put the/a book on the/a table.'

(17) A: Shiraz=ne kitaab kisi chiiz=par rakhii.
Shiraz=ERG book some thing=on put
'Shiraz put the/a book on something.'

B: kis=par / *kis?
what=on what.OBL
'On what did Shiraz put the/a book?'

Complex post-positions such as *=ke paas* '=GEN near' behave differently, permitting P-omission under ellipsis so long as the genitive marker is retained on the remnant (18).[1]

(18) A: kitaab kis=ke paas hai?
book who=GEN near be.3SG.PRES
'Who has the/a book?'

B: Shiraz*(=ke) (paas).
Shiraz=GEN near
'Shiraz has the/a book.'

B′: kitaab Shiraz=ke paas hai.
book Shiraz=GEN near be.3SG.PRES
'Shiraz has the/a book.'

An outlier to this is the complex PP *ke liye* '=GEN for' which obligatorily requires P-retention (19).

(19) A: yeh kitaab kis=ke liye hai?
this book who=GEN for be.3SG.PRES
'Who is this book for?'

B: yeh kitaab Shiraz=ke liye hai.
this book Shiraz=GEN for be.3SG.PRES
'This book is for Shiraz.'

B′: Shiraz*(=ke) *(liye).
Shiraz=GEN for
'This book is for Shiraz.'

P-retained remnants also display selectional effects that further challenge a non-structuralist analysis. For instance, the complex predicate *bharosa rakh* 'depend' selects a PP necessarily headed by *par* 'on' (20).

(20) A: Shiraz=ne kis=par / *kis=mein / *kis=ke saath / *kis bharosa rakha
Shiraz=ERG who=on who=in who=GEN with who.OBL dependence put
thaa?
be.3SG.PAST.M
'Who did Shiraz depend on?'

B: Shiraz=ne Neha=par / *Neha=mein / *Neha=ke saath / *Neha bharosa rakha
Shiraz=ERG Neha=on Neha=in Neha=GEN with Neha.OBL dependence put
thaa.
be.3SG.PAST.M
'Shiraz depended on Neha.'

[1] I thank Rajesh Bhatt (p.c.) for bringing this to my attention.

Crucially, the P-retained fragment answer in (21-a) likewise displays said selectional restrictions that must be locally determined by this underlying verb, supporting its silent source, whence the impossibility of any other postposition in this context. The same holds true for sluices such as (21-b).

(21) a. Neha=par / *Neha=mein / *Neha=ke saath / *Neha.
Neha=on Neha=in Neha=GEN with Neha.OBL
'On Neha.'

b. kis=par / *kis=mein / *kis=ke saath / *kis / *kaun.
who=on who=in who=GEN with who.OBL who.NOM
'On who?'

This effect is of course not limited to this verb, as the example below illustrates.

(22) A: Shiraz=ko kis=se / *kis=mein / *kis=par / *kis dar lagta hai?
Shiraz=DAT what=of what=in what=on what.OBL fear feel.PFV be.3SG.PRES
'What is Shiraz fearful of?'

B: Shiraz=ko saampoN=se / *saampoN=mein / *saampoN=par / *saampoN dar lagta
Shiraz=DAT snakes=of snakes=in snakes=on snakes.OBL fear feel.PFV
hai.
be.3SG.PRES
'Shiraz is fearful of snakes.'

B′: saampoN=se / *saampoN=mein / *saampoN=par / *saampoN.
snakes=of snakes=in snakes=on snakes.OBL
'Of snakes.'

(23) A: Shiraz=ko kisi chiiz=se / *kisi chiiz=mein / *kisi chiiz=par dar lagta hai.
Shiraz=DAT some thing=of some thing=in some thing=on fear feel.PFV be.3SG.PRES
'Shiraz is fearful of something.'

B: kis=se / *kis=mein / *kis=par / *kis?
what=of what=in what=on what.OBL
'Of what?'

It is unclear how a proponent of the WYSIWYG approach would explain such P-retention facts straightforwardly if there is no tacit verb imposing selectional needs on its PP complement, *a fortiori* calling for a PF-deletion analysis.

3.1.4 Eliminating the 'pseudo-ellipsis' solution

Recall from Chapter 2 that Merchant (1998) proposed a 'pseudo-sluicing' analysis to capture SLCs in Japanese (24), an otherwise *wh*-in situ language.

(24) Dareka-ga sono hon-o yon-da ga, watashi-wa dare ka wakaranai.
someone-NOM that book-DAT read-PAST but, I-TOP who Q not know
'Someone read that book, but I don't know who.' (Japanese)
(Merchant 1998:94)

His analysis proposes a typological split between Japanese SLCs and sluicing in *wh*-ex situ languages such as English. The former is assumed to simply comprise a tacit cleft whose pivot constitutes the *wh*-phrase, with concomitant copula/*pro* drop. We saw in Chapter 2 that SLCs and clefts in Japanese showcase parallels that seem to support this proposal (echoing Shimoyama 1995, Kuwabara 1996, Nishiyama et al. 1996, Kizu 2000, among others).

Extending this solution to fragment answers, whose pivot would comprise non-*wh* foci, it is worth asking whether subsententials in H/U are likewise amenable to a 'pseudo-ellipsis' analysis. The fact that this is an *pro*-drop language (25) (Butt and King 1997) *prima facie* suggests that this may be so.

(25) A: Bahadur moolii khariidegaa?
Bahadur radish buy.FUT.3SG.M
'Will Bahadur buy radishes?'

B: haaN, khariidegaa.
yes buy.FUT.3SG.M
'Yes, Bahadur will buy radishes.'

However, properties of subsententials and those of truncated clefts consistently diverge, discounting pseudo-ellipsis (see also Bhattacharya and Simpson 2012, Manetta 2013, Gribanova and Manetta 2016). First, truncated clefts only license nominative case for both *wh*- and non-*wh* phrases; non-nominative case in such contexts is ungrammatical (26). This, of course, conflicts with the case connectivity discussed in §3.1.1.

(26) a. Talib=ne kisi=ko dekhaa, lekin mujhe nahiiN pataa hai ki voh kaun /
Talib=ERG someone=DAT saw but I NEG know be.3SG.PRES that s/he who.NOM
*kis=ne hai.
who=ERG be.3SG.PRES
'Talib saw someone, but I don't know who s/he is.'

b. Talib=ne kisi=ko dekhaa, aur mujhe pataa hai ki voh Ali / *Ali=ne
Talib=ERG someone=DAT saw and I know be.3SG.PRES that s/he Ali.NOM Ali=ERG
hai.
be.3SG.PRES
'Talib saw someone, and I know that it is Ali.'

Additionally, truncated clefts disallow (*wh*/non-*wh*) PP pivots (27), a fact incongruous with the obligatory P-retention witnessed in §3.1.3.

(27) a. Shiraz=ne kisi=par bharosa rakha thaa, lekin mujhe nahiiN pataa
Shiraz=ERG someone=on dependence put be.3SG.PAST.M but I NEG know
hai ki voh kaun / *kis=par hai.
be.3SG.PRES that s/he who who=on be.3SG.PRES
'Shiraz had depended on someone, but I don't know who s/he is.'

b. Shiraz=ne kisi par bharosa rakha thaa, aur mujhe pataa hai ki
Shiraz=ERG someone on dependence put be.3SG.PAST.M and I know be.3SG.PRES that
voh Neha (*par) hai.
s/he Neha on be.3SG.PRES
'Shiraz had depended on someone, and I know that s/he is Neha.'

Moreover, truncated clefts permit only argument pivots (28-a), disallowing adjunct ones (28-b).[2]

(28) a. us=ne gari=ko fix kiyaa, magar mujhe nahiiN pataa kese (*thaa).
he=ERG car=DAT fix did but I NEG know how be.3SG.PAST.M
'He fixed the car, but I don't know how (*it was).' (e.g., with what tool)
(Gribanova and Manetta 2016:644)

b. *Ashok angoor kisi thariike=se khaa raha thaa, aur mujhe pataa hai
Ashok grapes some manner=INSTR eat PROG be.3SG.PAST.M and I know be.ISG.PRES
ki voh jaldii=se thaa.
that it haste=INSTR be.3SG.PAST.M
Intended: 'Ashok was eating the grapes in some manner, and I know that it was quickly.'

However, both (*wh-*/non-*wh*) argument (29) and adjunct (30) remnants are permitted in the language.

(29) us=ne koi gari fix kii, magar mujhe nahiiN pataa kaunsii.
he=ERG some car fix did but I NEG know which.F
'He fixed some car, but I don't know which one.'
(Gribanova and Manetta 2016:644)

(30) A: Ashok angoor kaise khaa raha thaa?
Ashok grapes how eat PROG be.3SG.PAST.M
'How was Ashok eating the grapes?'

B: jaldii=se.
haste=INSTR
'Quickly.'

B′: Ashok jaldii=se angoor khaa raha thaa.
Ashok haste=INSTR grapes eat PROG be.3SG.PAST.M
'Ashok was eating the grapes quickly.'

Further problematic for a pseudo-ellipsis analysis is H/U's general lack of copula drop (31-a). The only exception to this is sentences containing negation (31-b).

(31) a. Gautam accha banda *(hai).
Gautam good person be.3SG.PRES
'Gautam is a good person.'

[2] This is analogous to the argument–adjunct asymmetry we saw for Turkish in Chapter 2.

b. Gautam accha banda nahiiN (hai).
Gautam good person NEG be.3SG.PRES
'Gautam is not a good person.'

Additionally, NPIs easily function as fragment answers in H/U (32); however, NPI pivots are disallowed in truncated clefts (33).

(32) A: Tum=ne kis=ko dekhaa thaa?
you=ERG who=DAT saw be.3SG.PAST.M
'Who had you seen?'

B: kisi=ko-bhii nahiiN.
any=DAT-EMPH NEG
'I hadn't seen anyone.'

B′: mai=ne kisi=ko-bhii nahiiN dekhaa thaa.
I=ERG any=DAT-EMPH NEG saw be.3SG.PAST.M
'I hadn't seen anyone.'

(33) *kisi=ko-bhii thaa jis=ko mai=ne nahiiN dekhaa thaa.
any=DAT-EMPH be.3SG.PAST.M REL=DAT I=ERG NEG saw be.3SG.PAST.M
Intended: 'which entity *x* : it was *x* that I hadn't seen.'

Finally, H/U permits multiple (*wh*-/non-*wh*) remnants (34)–(35).[3]

(34) A: kisi=ne kisi=ko kitaab lautayii thii.
someone=ERG someone=DAT book returned be.3SG.PAST.F
'Someone had returned the/a book to someone.'

B: kis=ne kis=ko?
who=ERG who=DAT
'Who had returned the/a book to whom?'

B′: kis=ne kis=ko kitaab lautayii thii?
who=ERG who=DAT book returned be.3SG.PAST.F
'Who had returned the/a book to whom?'

(35) B: haaN, Ravi=ne Amira=ko.
yes Ravi=ERG Amira=DAT
'Yes, Ravi had returned the/a book to Amira.'

B′: haaN, Ravi=ne Amira=ko kitaab lautayii thii.
yes Ravi=ERG Amira=DAT book returned be.3SG.PAST.F
'Yeah, Ravi had returned the/a book to Amira.'

By contrast, truncated clefts do not license multiple pivots (36).[4]

[3] We will revisit multiple remnants in Chapter 4.

[4] See İnce 2012:260 for parallel facts in Turkish multiple sluices and clefts.

(36) a. kisi=ne kisi=ko kitaab lautayii thii, lekin mujhe nahiiN pataa ki
someone=ERG someone=DAT book returned be.3SG.PAST.F but I NEG know that
kis=ne kis=ko (*thaa).
who=ERG who=DAT be.3SG.PAST.M
'Someone returned the/a book to someone, but I don't know who to whom it was.'

b. kisi=ne kisi=ko kitaab lautayii thii, aur mujhe pataa hai
someone=ERG someone=DAT book returned be.3SG.PAST.F and I know be.3SG.PAST.M
ki Ravi=ne Amira=ko (*thaa).
that Ravi=ERG Amira=DAT be.3SG.PAST.M
'Someone returned the/a book to someone, and I know that it was Ravi to Amira.'

The facts outlined in this section render a potential pseudo-ellipsis analysis à la Merchant 1998 untenable for H/U, further corroborating the claim that remnants are born in a full underlying clause that, excluding the remnant, deletes at PF.

3.2 Interim summary

In this section, we examined H/U's unsurprising lack of amenability to a non-structuralist analysis of sluicing and fragment answers with evidence from various connectivity effects, including case connectivity, binding effects, and P-retention. Such facts elucidate the presence of a tacit source that further must consist of a full clause and not an underlying truncated cleft with associated copula/*pro* drop, thereby eliminating a potential pseudo-ellipsis solution and calling for true PF-deletion of unpronounced clausal material, barring the remnant.

3.3 Issues for the 'move-and-delete' approach

As discussed in Chapter 2, the predominant structuralist solution in the current literature, including scant proposals of clausal ellipsis in H/U, is Merchant's (2001, 2004) MDA. In this section, we review critical issues that the MDA is faced with in light of H/U facts, chiefly exceptional movement, ultimately rendering this approach sub-optimal.

3.3.1 Unavoidable exceptionality

We saw in Chapter 2 that according to Merchant's (2001, 2004) traditional version of the MDA, remnants that are born in a full tacit clause move to the left periphery in the narrow syntax prior to PF-deletion. Problematically, this forces remnants that independently cannot or need not move to undergo obligatory displacement just in the case of ellipsis. The most obvious example of this is exceptional *wh*-movement when deriving sluices in *wh*-in situ languages. H/U has traditionally been described as such a language (Mahajan 1990, Dayal 1996, Bhatt 2003b, among others). Indeed, in mono-clausal contexts, *wh*-phrases obtain matrix scope from their base position (37-a). Similarly, in embedded questions, *wh*-phrases remain *in situ* (37-b).

(37) a. Talib=ne kis=ko kitaab dii thii?
Talib=ERG who=DAT book gave be.3SG.PAST.F
'Who did Talib give a book to?'

b. Ali jaanta hai [$_{CP}$ ki Talib=ne kis=ko kitaab dii thii].
Ali knows be.3SG.PRES that Talib=ERG who=DAT book gave be.3SG.PAST.F
'Ali knows who Talib gave a book to.'

On the other hand, some contend that there is a strong preference for *wh*-phrases in such contexts to systematically scramble to the immediately pre-verbal position of the clause they are born in (38) (Butt and King 1996; Kidwai 2000; Malhotra and Chandra 2007; Manetta 2010, 2013, among others), akin to many other SOV languages (see Jayaseelan 1996 on Malayalam, Kahnemuyipour 2001 on Persian, Kiss 2002 on Hungarian, Kornfilt 2013 on Turkish, among others).

(38) a. Talib=ne kitaab kis=ko dii thii?
Talib=ERG book who=DAT gave be.3SG.PAST.F
'Who did Talib give a book to?'

b. Ali jaanta hai [$_{CP}$ ki Talib=ne kitaab kis=ko dii thii].
Ali knows be.3SG.PRES that Talib=ERG book who=DAT gave be.3SG.PAST.F
'Ali knows who Talib gave a book to.'

Crucially, there is a general consensus that for mono-clausal and embedded *wh*-questions, full *wh*-movement to the edge of CP is impossible. Similarly, non-*wh* foci typically appear either *in situ* with heavy stress (39-a)[5] or in the pre-verbal position (39), not the clausal edge.

(39) a. Talib=ne YARA=KO kitaab dii thii.
Talib=ERG Yara=DAT book gave be.3SG.PAST.F
'Talib gave YARA a book.'

b. Talib=ne kitaab Yara=ko dii thii.
Talib=ERG book Yara=DAT gave be.3SG.PAST.F
'Talib gave Yara a book.'

For long-distance questions, embedded *wh*-phrases must overtly extract to the main clause to obtain matrix scope, as shown in (40) (Mahajan 1990, Dayal 1996, Bhatt 2003c, among others).[6] In other words, this language

[5]Here, and throughout, heavy stress is indicated using all caps.

[6]This is but one strategy to obtain matrix scope of embedded *wh*-phrases. The alternative method is to leave the *wh*-phrase *in situ* and insert the scope marker *kyaa* 'what' in the matrix clause, as shown below.

(i) Ali **kyaa** jaanta hai [$_{CP}$ (ki) Talib=ne **kis=ko** kitaab dii thii]?
Ali what knows be.3SG.PRES that Talib=ERG who=DAT book gave be.3SG.PAST.F
'Who does Ali know that Talib gave a book to?'/
'What does Ali know? Who did Talib give a book to?'

The syntax/semantics of such constructions is the subject of a long-standing debate that we will not be concerned with here (see Beck and Berman 2000 for a review).

truly exhibits a mixed system with respect to *wh*-question formation.

(40) kis=ko$_i$ Ali jaanta hai [$_{CP}$ ki Talib=ne t_i kitaab dii thii]?
who=DAT Ali knows be.3SG.PRES that Talib=ERG book gave be.3SG.PAST.M
'Who does Ali know that Talib gave a book to?'

The MDA may exploit the independently required *wh*-extraction in (40) and claim that this feeds the remnant's movement under sluiced long-distance questions (41).

(41) A: Ali=ko lagta hai [$_{CP}$ ki Talib=ne kisi=ko kitaab dii thii].
Ali=DAT think be.3SG.PRES that Talib=ERG someone=DAT book gave be.3SG.PAST.F
'Ali thinks that Talib gave a book to someone.'

B: kis=ko?
who=DAT
'Who does Ali think that Talib gave a book to?'

B′: kis=ko$_i$ Ali=ko lagta hai [$_{CP}$ ki Talib=ne t_i kitaab dii thii].
who=DAT Ali=DAT think be.3SG.PRES that Talib=ERG book gave be.3SG.PAST.F
'Who does Ali think that Talib gave a book to?'

Crucially, however, sluices derived from underlying mono-clausal *wh*-questions (42), embedded sluices (43), and all fragment answers (43) involve exceptional movement to the left periphery just in the case of ellipsis.

(42) A: Talib=ne kisi=ko kitaab dii thii.
Talib=ERG book someone=DAT gave be.3SG.PAST.F
'Talib gave a book to someone.'

B: kis=ko?
who=DAT
'Who did Talib give a book to?'

B′: #kis=ko$_i$ Talib=ne t_i kitaab dii thii?
who=DAT Talib=ERG book gave be.3SG.PAST.F
Intended: 'Who did Talib give a book to?'

(43) Talib=ne kisi=ko kitaab dii thii, lekin mujhe nahiin pata (ki) #kis=ko$_i$
Talib=ERG someone=DAT book gave be.3SG.PAST.F but I NEG know that who=DAT
Talib=ne t_i kitaab dii thii.
Talib=ERG book gave be.3SG.PAST.F
Intended: 'Talib gave a book to someone, but I don't know who Talib gave a book to.'

(44) A: Talib=ne kitaab kis=ko dii thii?
Talib=ERG book gave be.3SG.PAST.F
'Who did Talib give a book to?'

B: Yara=ko.
Yara=DAT
'Talib gave a book to Yara.'

B′: #Yara=ko Talib=ne kitaab t_i dii thii.
Yara=DAT Talib=ERG book gave be.3SG.PAST.F
Intended: 'Talib gave a book to Yara.'

Why should such phrases undergo $\overline{\text{A}}$-movement in elliptical contexts when in their fully pronounced counterparts, their unmarked position is either *in situ* or in the pre-verbal domain? In the following sections, we will review variants of the MDA that attempt to resolve this issue of exceptional movement for sluicing in this language.

Likewise, recall from §3.1.3 that complex PPs such as *=ke paas* '=GEN near' permit P-omission under ellipsis so long as genitive case on the complement of P^0 is retained (45).

(45) A: kitaab kis=ke paas hai?
book who=GEN near be.3SG.PRES
'Who has the/a book?'

B: kitaab Shiraz=ke paas hai.
book Shiraz=GEN near be.3SG.PRES
'Shiraz has the/a book.'

B′: Shiraz*(=ke) (paas).
Shiraz=GEN near
'Shiraz has the/a book.'

Crucially, for the P-less variant in (45B′), the genitive-marked complement 'Shiraz' independently resists overt extraction (46), suggesting that for the MDA, such subsententials must be derived via exceptional P-stranding movement.

(46) *Shiraz=ke$_i$ kitaab t_i paas hai.
Shiraz=GEN book near be.3SG.PRES
Intended: 'Shiraz has the/a book.'

In line with the MDA, Mishra (2022, 2024) offers an analysis of clausal ellipsis in H/U that assumes focus fronting of the remnant prior to TP deletion (à la Toosarvandani 2008). More precisely, she suggests both sluices and fragment answers involve focus fronting of the remnant to a high focus phrase (FP), an analysis that is independently meant to be supported by sentences such as (47-b), where a *wh*-phrase appears sentence-initially in non-elliptical contexts, which we will return to below.

(47) a. Meena=ne kamra kis=ko diyaa?
Meena=ERG room who-DAT give.PFV
'Who did Meena give the room to?'

b. kis=ko$_i$ Meena=ne kamra t_i diyaa?
who-DAT Meena=ERG room give.PFV
'Who did Meena give the room to?'
(Mishra 2022:74)

Mishra's (2022, 2024) proposal concentrates on the fact that embedded remnants may be preceded by the op-

tional complementizer-like element *ki* (see also Bhattacharya and Simpson 2012:199), as shown in (48).[7]

(48) Ramesh baazar=se kuch laaya, par mujhe nahiiN pata (ki) kyaa.
Ramesh market=from something brought but I.DAT NEG know that what
'Ramesh brought something from the market, but I don't know what.'
(Mishra 2022:78)

This linear order of *ki* $\prec$ remnant is at odds with the MDA's standard assumption that clausal ellipsis is licensed by an E feature on C^0 whose primary function is to flag the feature-bearing head's syntactic complement (i.e., TP) for non-pronunciation (see Chapter 2). Such facts challenge the conventional idea that said licensing takes place in a local configuration (though see Aelbrecht 2010).[8]

Mishra (2022) notes that although the status of *ki* as a complementizer located in C^0 is controversial,[9] Rosenbaum's (1965:41) criteria seem to point to treating it in such a way, echoing Dayal 1996. Specifically, *ki* only appears in sentential complements (49-a) and relative clauses (49-b) but not in matrix ones (49-c).

(49) a. Ramesh jaanta hai ki Seema=ne saari kharidii.
Ramesh=ERG know.HAB.M be.PRES C Seema=ERG saari buy.PFV
'Ramesh knows that Seema bought a saari.'
(Mishra 2022:76)

b. vo baat jo ki Anu jaantii hai vo nahiiN kah saktii.
that matter which that Anu know be.PRES she NEG say can
'The thing which Anu knows she cannot say.'
(Dayal 1996:38)

c. (*ki) Saif=ne khana khaa liyaa.
C Saif=ERG food eat take.PFV
'Saif ate food.'
(Mishra 2022:76)

To account for the observed linear order of *ki* $\prec$ *wh*-remnant within the framework of the MDA as well as

[7] H/U is not alone in this behaviour. For example, as counter-evidence to his *Sluicing–COMP generalization* Merchant (2001) (see Chapter 2, fn. 15) notes that Hungarian sluices may likewise co-occur with an optional complementizer *hogy*, which linearly precedes the *wh*-remnant:

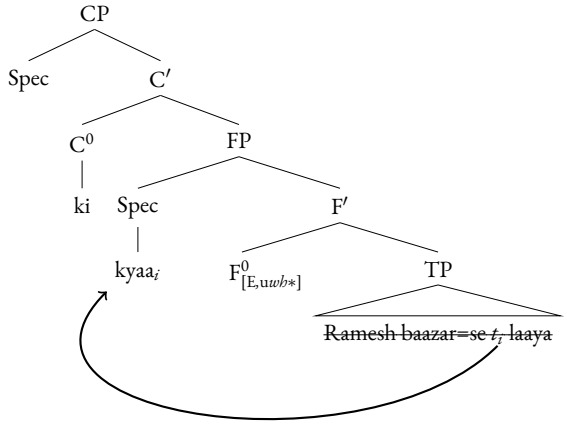
(i) A gyerekek találkoztak valakivel de nem emlékszem, (hogy) kivel.
the children met someone.with but not I.remember that who.with
'The kids met someone, but I don't remember who.' (Hungarian)
(Merchant 2001:81–82)

[8] Alternatively, a proponent of this approach may adopt Roussou's (2010) analysis of (Romance) complementizers that treats the latter as nominals selected by the main verb and which take CP complements. From this vantage point, an MDA proponent could assume that the remnant is in Spec,CP.

[9] Mahajan (1997) analyzes *ki* as a complementizer that is located in a pre-Spec position of CP. Dwivedi (1994) suggests *ki* is not a complementizer but a quotative particle. Manetta (2011) treats *ki* as a marker of the phase boundary that is inserted post-syntactically, given the fact that it is not selected for by the verb (it heads just about any type of embedded clause, including interrogatives), is transparent to selection, and has no particular semantic content.

the general availability of foci appearing in both the immediately pre-verbal position and in the left periphery, the author assumes two focus projections exist in the language: a low FP that immediately dominates *v*P, deriving pre-verbal focus, and a high FP selected by C^0, whose specifier to which said foci optionally move. In elliptical contexts, as shown in (50) for the sluice in (48), the head of the high FP bears the features [E, u*wh**] which are responsible for triggering overt movement of the *wh*-phrase to its specifier prior to TP deletion: an analysis that minimally departs from Merchant's (2001) original proposal.

(50)



One key prediction this analysis makes is that if the E feature resides in F^0, the remnant's movement to Spec,FP should likewise be able to license the clausal ellipsis of embedded non-*wh* foci (see Grebenyova 2009, Van Craenenbroeck and Lipták 2008, among others). This prediction is borne out:

(51) A: kya tum=ne yeh bola ki Rama=ko saari kharidni hai?
Q you=ERG this say.PFV C Rama=DAT saari buy.INF.F be.PRES.SG
'Did you say that Rama has to buy a saari?'

B: nahiiiN. Mein=ne bola ki Meena=ko ~~saari kharidni hai~~.
NEG I=ERG say.PFV C Meena=DAT saari buy.INF.F be.PRES.SG
'No. I said Meena (has to buy a saari).'
(Mishra 2022:79)

This account is the first to attempt to provide a precise locus to which remnants displace while simultaneously attempting to capture the fact that they may be preceded by an overt complementizer. Alternative approaches either largely neglect its optional presence under ellipsis (Gribanova and Manetta 2016) or are vague with respect to the landing site of displaced remnants, the latter of which is reduced to being somewhere in the "C domain" (Bhattacharya and Simpson 2012:184).

However, this approach bears non-trivial conceptual issues that render it sub-optimal. First, the movement observed in (47-b) is by no means obligatory; it thus seems unclear why it should be so only under ellipsis. Furthermore, while this word order is otherwise available, it is marked, with such *wh*-fronting being typically used for emphasis (Gambhir 1981). Absent such emphasis, *wh*-remnants are typically not fronted, whence the judgment in (42B′) above. There is thus nothing in the data observed so far that necessitates such movement just in the case of ellipsis. Furthermore, Mishra (2022, 2024) proposes two focus projections, with the brute force stipulation that

the E feature is present strictly on the high F^0. What should prevent said feature from erroneously appearing on the alternative lower focus head? Indeed, this issue points to a general problem that any E-feature account must contend with, namely, the inability to constrain its presence. There is thus sufficient reason to be wary of Mishra's (2022, 2024) proposal and to warrant an alternative analysis.

3.3.1.1 Does topicalization or scrambling feed ellipsis?

Although its base word order is SOV, H/U is a discourse-configurational language (Kiss 1995), and foci can scramble to various clause-internal positions, with the aforementioned preference for the pre-verbal position (52) (Gambhir 1981; Bains 1989; Mahajan 1990; Dayal 1994, 2017; Butt and King 1996; Kidwai 2000, Manetta 2010, among others).[10]

(52) a. (kis=ko) tum=ne kitaab kal (kis=ko) dii thii (kis=ko)?
who=DAT you=ERG book yesterday who=DAT gave be.3SG.PAST.FEM who=DAT
'Who had you given the book to yesterday?'

b. (Talib=ko) tum=ne kitaab (Talib=ko) kal (Talib=ko) dii thii
Talib=DAT you=ERG book Talib=DAT yesterday Talib=DAT gave be.3.SG.PAST.FEM
(Talib=ko).
Talib=DAT
'You had given (the/a) book TO TALIB yesterday.'

Non-*wh* foci may optionally also participate in long-distance leftward scrambling,[11] as shown in (53), where the embedded object 'Noor' appears at the left edge of the matrix clause.

(53) Nur=ko mein jaantii hoon [$_{CP}$ tum sab log bahut pyaar karte ho].
Noor=DAT I know be.1SG.PRES you all people a lot love do be.2SG.PRES
'I know all of you love Noor a lot.'
(Kidwai 2000:35)

A relevant question worth briefly addressing at this juncture is whether the clause-peripheral DPs in (52-b) and (53) are alternatively instances of left-dislocation (henceforth, LD) (see Dwivedi 1994 and Chandra 2011) rather than scrambling proper. Indeed, such an analysis can be safely ruled out. LDed constituents are characteristically resumed by a pronominal/demonstrative (54), which is absent in (52-b) and (53).

---

[10] Non-*wh* foci can also be marked with emphatic particles like *-hii* (i) and *sirf/bas* 'only' (see Kidwai 2000, Bhatia 2014, among others):

(i) RAAM-hii kitaab laaye-gaa.
Ram-EMPH book bring-FUT
'RAM will bring the book.'
(Kidwai 2000:231)

[11] According to Kidwai (2000), constructions such as (50) are labeled "scrambling". It is not entirely clear to me, however, how such movement differs from the aforementioned "focus fronting".

(54) Talib$_i$, main har hafte *(us=ko$_i$) kitaab detii hooN.
Talib I every week he=DAT book give.PFV PROG
'I usually give a book to Talib every week.'

Additionally, scrambling may target clause-medial positions (55-a), whereas LD may not (55-b).

(55) a. mujhe lagta hai [$_{CP}$ ki Talib=ko$_i$ Ali=ne kaha [$_{CP}$ ki tum=ne t_i kitaab dii thii]].
I think be.1SG.PRES that Talib=DAT Ali=ERG said that you=ERG book give be.3SG.PAST.FEM
'I think that Ali said that you had given the/a book TO TALIB.'

b. *mujhe lagta hai [$_{CP}$ ki Talib$_i$, Ali=ne kaha [$_{CP}$ ki tum=ne us=ko$_i$ kitaab dii thii]].
I think be.1SG.PRES that Talib Ali=ERG said that you=ERG he=DAT book give be.3SG.PAST.FEM
Intended: 'I think that Ali said that you had given the/a book to Talib.'

Furthermore, multiple phrases may be scrambled in a given sentence (56-a); however, LD only accommodates one dislocated nominal per construction (56-b).

(56) a. Talib=ko$_i$ kitaab$_j$ [$_{CP}$ mujhe lagta hai [$_{CP}$ ki tum=ne t_i t_j dii thii]].
Talib=DAT book I think be.1SG.PRES that you=ERG gave be.3SG.PAST.FEM
'I think that you had given THE BOOK TO TALIB.'

b. *Talib$_i$ kitaab$_j$, [$_{CP}$ mujhe lagta hai [$_{CP}$ ki tum=ne us=ko$_i$ vo$_j$ dii thii]].
Talib book I think be.1SG.PRES that you=ERG he=DAT that gave be.3SG.PAST.FEM
Intended: 'I think that you had given the book to Talib.'

Finally, LDed phrases are prosodically separated from the clause that houses their co-referential pronoun/demonstrative, whereas elements that have undergone leftward scrambling (e.g., the DP 'Talib' in (52-b)) are not. These facts thus strongly support analyzing the left-peripheral DPs in (52-b) and (53) as having undergone leftward scrambling and not LD.

Are such fronted DPs alternatively instances of topicalization (i.e., $\overline{\text{A}}$-fronting to Spec,CP) rather than leftward scrambling? Kidwai (2000:41–48) discusses various asymmetries between both operations that answer this question in the negative. For instance, topics may appear *in situ* (57-a) or at the left clausal edge (57-b). They may be morphologically marked by the particle *=to*, which attaches to the maximal projection of any lexical category.[12]

[12]Note that the fact that LDed constituents cannot be topic-marked (i) strongly suggests that topicalization and LD in this language are distinct operations.

(i) *Talib=to$_i$, main har hafte us=ko$_i$ kitaab detii hooN.
Talib=TOP I every week he=DAT book give.PFV be.1SG.PRES
Intended: 'I usually give a book to Talib every week.'

(57) a. Raam=ne Siita=ko kitaabein=to dii.
Ram=ERG Sita=DAT books=TOP gave

b. kitaabein=to$_i$ Raam=ne Siita=ko t_i dii.
books=TOP Ram=ERG Sita=DAT gave
Both: 'Ram gave Sita the books.'

One relevant asymmetry between scrambling and topicalization concerns iterability; the former operation is iterable, as shown in (58) where both the embedded subject and object have scrambled to the left edge of the matrix clause.

(58) tum sab log$_i$ Nur=ko$_j$ main jaantii hoon [$_{CP}$ t_i t_j bahut pyaar karte ho].
you all people Noor=DAT I know be.1SG.PRES a lot love do be.2SG.PRES
'I know all of you love Noor a lot.'

Topicalization, on the other hand, is not, appearing only once in a given construction (59).

(59) *Siita=ko=to$_i$ kitaabein=to$_j$ Raam=ne t_i t_j dii.
Sita=DAT=TOP books-TOP Ram=ERG gave
Intended: 'Ram gave Sita the books.'

Furthermore, we have seen that *wh*-phrases can scramble to various clause-internal positions (see (52-a)), but such phrases cannot be topic-marked (60), suggesting that *wh*-phrases that appear at the left clausal edge in mono-clausal questions are not topicalized.

(60) *kis=ko=to$_i$ tum=ne kitaab t_i kal dii thii?
who=DAT=TOP you=ERG book yesterday gave be.3SG.PAST.FEM
Intended: 'Who had you given the book to yesterday?'

Finally, scrambling does not block *wh*-extraction, as illustrated in (61), where the embedded subject *wh*-phrase and object scramble to the left edge of the main clause.

(61) kaun$_i$ Nur=ko$_j$ tum=ne kaha [$_{CP}$ t_i t_j bahut pyaar karta hai]?
who.NOM Noor=DAT you=ERG said a lot love does be.3SG.PRES
'Who did you say loves Noor a lot?'

Topicalization, on the other hand, does block further *wh*-extraction (62).

(62) *kaun$_i$ Nur=ko=to$_j$ tum=ne kaha [$_{CP}$ t_i t_j bahut pyaar karta hai]?
who.NOM Noor=DAT=TOP you=ERG said a lot love does be.3SG.PRES
Intended: 'Who did you say loves Noor a lot?'

These facts cogently discount an analysis of the clause-peripheral DPs in (52-b) and (53) as being instances of topicalization and support the alternative claim that these truly are instances of leftward scrambling.

From the perspective of the MDA, non-*wh* remnants that tacitly undergo movement out of the ellipsis site in

this language may in principle be fed by one of two types of $\overline{\text{A}}$-movement then: topicalization or scrambling. If non-*wh* remnants were tacitly undergoing topicalization, we would expect that multiple remnants would not be licensed in the language, given the non-iterability of this operation (see (59)); however, we saw facts in the previous section, repeated below, that demonstrate the availability of multiple non-*wh* remnants.[13]

(63) A: kisi=ne kisi=ko kitaab lautayii thii.
someone=ERG someone=DAT book returned be.3SG.PAST.F
'Someone had returned the/a book to someone.'

B: haaN, Ravi=ne Amira=ko.
yes Ravi=ERG Amira=DAT
'Yes, Ravi had returned the/a book to Amira.'

Could it be scrambling that feeds the (*wh*/non-*wh*) remnant's movement in this language, as Merchant (2001:84–85) suggests might be the case for sluicing in *wh*-in situ languages not amenable to pseudo-sluicing? This perspective predicts that whatever can surface as a remnant under ellipsis can independently undergo scrambling, a prediction that is minimally challenged by the general resistance of thematic *kyaa* 'what' to scramble (64) despite its availability under sluicing (65).

(64) (??kyaa) Anu=ne (??kyaa) Uma=ko (kyaa) diyaa (??kyaa).
what Anu=ERG what Uma=DAT what gave what
'What did Anu give to Uma?'
(Bhatt and Dayal 2014:3)

(65) A: Anu=ne Uma=ko kuch diyaa thaa.
Anu=ERG Uma=DAT someone gave be.3SG.PAST.M
'Anu had given something to Uma.'

B: kyaa?
what
'What had Anu given to Uma?'

Furthermore, scrambling certain elements in this language induces interpretive effects in non-elliptical contexts; these, crucially, do not parallel those found in their elliptical counterparts. For instance, bare object nominals in the pre-verbal position generally bear either a specific or a non-specific reading, as shown in (66-a).[14] When such nominals scramble to any other clausal position, they only bear a specific interpretation (66-b) (Gambhir 1981, Mahajan 1990, Butt and King 1996, Kidwai 2000, among others).

[13]Note that the availability of such multiple remnants also rules out an MDA analysis that assumes non-*wh* remnants move out of the ellipsis site via LD, which likewise only accommodates one dislocated element per configuration (see (56-b)). Of course, the absence of a resumptive pronominal/demonstrative, which is otherwise obligatory in LD (see (54)), in all of the fragment answers witnessed so far also safely discounts such a view.

[14]See Enç 1991 for similar facts in Turkish.

(66) a. Nadia=ne Hassan=ko kitaab dii.
Nadia=ERG Hassan=DAT book gave
'Nadia gave Hassan a certain/some book.'

b. (kitaab) Nadia=ne (kitaab) Hassan=ko dii (kitaab).
book Nadia=ERG book Hassan=DAT gave book
'Nadia gave Hassan a certain book.'

(Butt and King 1996:9)

Crucially, in elliptical contexts, such nominals are ambiguous with respect to specificity (67).

(67) A: Nadia Hassan=ko kyaa dena chahtii hai?
Nadia Hassan=DAT what give want.IPFV.F be.3SG.PRES
'What does Nadia want to give to Hassan?'

B: kitaab.
book
'Nadia wants to give Hassan a certain/some book.'

Note that both continuations in (68) are felicitous here, elucidating said ambiguity.

(68) a. ...yaani, *Catch-22*.
namely Catch-22

b. ...aur koi-bhii chalega.
and any-EMPH will.do
'...and any one will do.'

If such bare nominals were scrambling to the left periphery to derive elliptical constructions like (67B), they should only be interpreted as specific, contrary to fact.

Moreover, H/U generally encodes relative scope in terms of linear order and is typically classified as a surface-scope language (Mahajan 1997, Kidwai 2000, Bhatt and Dayal 2007, among others). However, Bhatia and Iyer (2018) note that some indefinites can obtain non-surface scope.[15] For example, the object indefinite in (69-a) permits both a wide- and narrow-scope reading. When this indefinite appears in sentence-initial position, the availability of its narrow-scope interpretation is blocked (69-b).

(69) a. har aadmii kisi aurat=ko pyaar kartaa hai.
each man some woman-DOM love do.IPFV.M be.PRES
'Each man loves some woman.'

(Bhatia and Iyer 2018:8) (✓EACH > SOME)
(✓SOME > EACH)

[15] Though see Kidwai 2000 for conflicting judgments in this regard, where indefinites in sentences such as (69-a) unambiguously receive a surface-scope reading. My own intuitions and those of the native speakers I consulted echo those of Bhatia and Iyer (2018).

b. kisi aurat=ko har aadmii pyaar kartaa hai.
some woman-DOM each man love do.IPFV.M be.PRES
'Each man loves some woman.'
(Kidwai 2000:7) (✓SOME > EACH)
(✗EACH > SOME)

Crucially, such object indefinites under ellipsis receive the same ambiguous interpretation that their non-elliptical *in situ* counterparts license (70).

(70) A: har aadmii kisi=ko pyaar kartaa hai.
each man someone=DAT love do.IPFV.M be.PRES
'Each man loves someone.'
B: haaN, kisi aurat=ko.
Yes some woman=DAT
'Yes, some woman.' (✓EACH > SOME)
(✓SOME > EACH)

If the DP remnant in (70) underlyingly scrambled to the left clausal edge, we would expect it to reflect the unambiguous interpretation that said movement otherwise produces (69-b), contrary to fact.

Finally, the monomorphemic reflexive *apna* 'self' is ambiguously bound in ditransitive constructions such as (71-a) (Mahajan 1990).[16] Here, the antecedent of the reflexive is ambiguously interpreted as being either the subject or the indirect object when the direct object containing said reflexive appears in its canonical position. By contrast, scrambling this DP to any other clausal position once again disambiguates the construction, producing a strictly subject-oriented reading of the reflexive (71-b).

(71) a. Raam=ne$_i$ Mohan=ko$_j$ apni$_{i/j}$ kitaab lautaii.
Ram=ERG Mohan=DAT self.F book returned
'Ram$_i$ returned his$_{i/j}$ book to Mohan$_j$.'
b. (apni$_{i/*j}$ kitaab) Raam=ne$_i$ (apni$_{i/*j}$ kitaab) Mohan=ko$_j$ lautaii.
self's book Raam=ERG self.F book Mohan=DAT returned
'Ram$_i$ returned his$_{i/*j}$ book to Mohan$_j$.

Crucially, direct object fragments containing this reflexive are, once again, ambiguously interpreted as being bound by either the subject or indirect object correlate in the antecedent clause (72).

(72) A: kal Raam=ne$_t$ Mohan=ko$_j$ kyaa lautayaa thaa?
yesterday Ram=ERG Mohan=DAT what returned be.3.SG.PAST.M
'What did Ram return to Mohan yesterday?'

[16] The ambiguous binding of this reflexive likewise appears to be subject to speaker variation. For example, Kidwai (2000) and Davison (2015) claim that this reflexive is strictly subject-oriented. My own intuitions and those of the native speakers I consulted echo Mahajan's (1990) judgments.

B: apni$_{i/j}$ kitaab.
self's book
'Ram$_i$ returned his$_{i/j}$ book to Mohan$_j$.'

B′: ~~kal~~ ~~Raam=ne$_i$~~ ~~Mohan=ko$_j$~~ apni$_{i/j}$ kitaab ~~lautaii~~ ~~thii~~.
yesterday Ram=ERG Mohan=DAT self's book returned be.3.SG.PAST.F
'Ram$_i$ returned his$_{i/j}$ book to Mohan$_j$ yesterday.'

If this reflexive-containing direct object fragment underlyingly scrambled to the left periphery prior to TP deletion, it would unambiguously be bound by the subject—a prediction that is not borne out.

Note that an MDA proponent cannot explain away these interpretive effects under ellipsis by claiming such DPs underlyingly reconstruct at LF (Chomsky 1977) to their canonical position, thus licensing their respective ambiguous readings. The failure for such leftward-scrambled DPs to be interpreted ambiguously in non-elliptical contexts suggests that such DPs generally cannot reconstruct to their base position (which licenses the relevant ambiguity). Note that this is also true for the behaviour of the *apna* 'self' reflexive above; its failure to be interpreted ambiguously when scrambled in (71-b) suggests that its reconstruction is limited to a position lower than the subject and higher than the indirect object (not its base position) for this interpretive reason (Mahajan 1990:36–37).

Finally, constituents that are $\overline{\text{A}}$-fronted in non-elliptical contexts, be it via topicalization or scrambling, are interpreted as discourse-Given or presupposed information (Gambhir 1981, Butt and King 1996, Kidwai 2000, among others), which is precisely not what subsententials are: elliptical remnants denote discourse-new information.

Overall, the facts discussed in this section strongly militate against the view that clausal ellipsis in H/U involves $\overline{\text{A}}$-movement of the remnant, irrespective of whether said movement is an instance of topicalization or scrambling, given the various discrepancies observed between elliptical and non-elliptical configurations. Thus, a proponent of the MDA cannot exploit such readily available $\overline{\text{A}}$-movements to derive sluices and fragment answers in this language. Its issue of exceptional movement therefore persists.

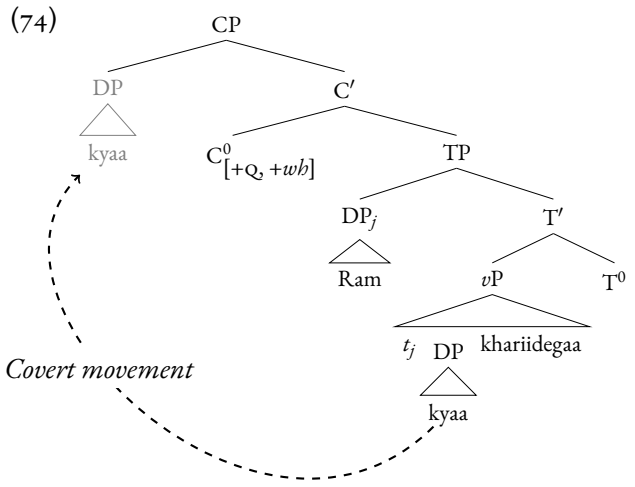
3.3.1.2 The covert-movement offshoot

Yet another resolution to the problem of exceptional movement under ellipsis comes from Manetta (2013) and Gribanova and Manetta (2016), which assume covert movement of the remnant prior to PF-deletion, rather than its displacement in the narrow syntax. Both analyses adopt a copy theory of movement (Chomsky 1993, 1995), wherein movement chains comprise links (or copies) of a displaced element. For Manetta (2013), in mono-clausal *wh*-questions such as (73), the *wh*-phrase undergoes covert *wh*-movement to Spec,CP (74), preserving the surface syntax of such representations.[17]

[17] For ease of visualization, unpronounced *wh*-copies are grayed out.

(73) Raam kyaa khariidegaa?
Ram what buy.3SG.FUT.M
'What will Ram buy?'

(74)



This covert movement creates a *wh*-chain; which copy in the chain is ultimately pronounced is assumed to be a matter of language preference (following Franks 1998, Bobaljik 2002, Bošković and Nunes 2007, among others). If the copy typically preferred for pronunciation somehow leads to a PF violation, this preference will be overridden. The author adopts Landau's (2006) principle of *P-recoverability* (75), built on from Pesetsky 1998, which ensures that minimally one copy in the chain is pronounced.

(75) *P-recoverability*:
In a chain $\langle X_1, \ldots X_i \ldots X_n \rangle$, where some X is associated with phonetic content, X must be pronounced.
(Landau 2006:56)

Here, X is associated with phonetic content iff:

(76) a. X has phonetic content, or
b. X is in a position specified with some phonological requirement.[18]
(Landau 2006:56)

Manetta (2013) further assumes the economy condition in (77), which establishes the requisite upper bound on the number of copies that may be pronounced in a *wh*-chain.

(77) *Economy of pronunciation*:
Delete all chain copies at PF up to *P-recoverability*.
(Landau 2006:57)

[18] With respect to this proviso, Landau (2006:56) explains that certain syntactic positions can impose phonological requirements on elements in said positions. One suggested example of this is V-to-T movement, where V^0 adjoins to T^0 and has the phonological requirement of providing a lexical host for inflectional affixes in T^0. In this case, V^0 is associated with phonetic content and thus will be pronounced.

According to Manetta (2013), mono-clausal *wh*-questions such as (78) generally involve EPP-driven covert *wh*-movement first to the specifier of *v*P in order to check uninterpretable focus-related (interroga-tive/non-interrogative) features (à la Manetta 2010).

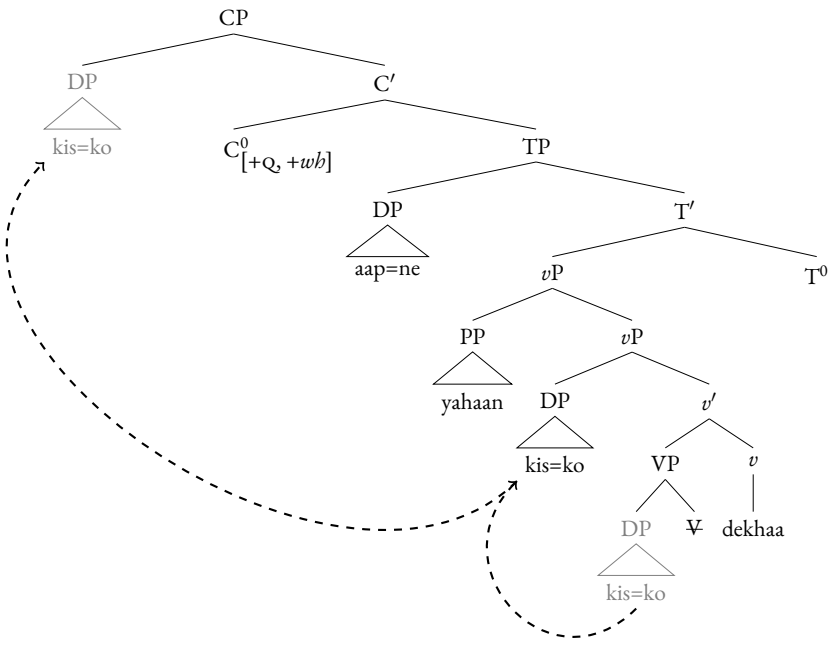
(78) aap=ne yahaan kis=ko dekhaa?
you=ERG here who=DAT saw
'Who did you see here?'
(Manetta 2013:15)

This is taken to be so since, for example, *wh*-phrases in unmarked sentences may be linearly followed by *v*P-adjoining adverbs (79), suggesting that they are not quite *in situ* but occupy an $\overline{\text{A}}$-position at the edge of the *v*P layer (e.g., Spec,*v*P).

(79) vo aap=ko kyaa hamesha pil-ata hai?
he you-DAT what always drink-CAUSE be.3SG.PRES
'What does he always have you drink?'
(Manetta 2010:8)

The *wh*-phrase then raises to Spec,CP at LF to achieve matrix scope. In non-elliptical contexts, the preferred pre-verbal *wh*-copy in the chain is pronounced, as shown in (80) for the sentence in (78).

(80)



Since sluices are assumed to involve TP deletion, this preference for pronouncing the pre-verbal *wh*-copy is overridden to obviate a PF violation, namely, no phonetic realization of the chain altogether (81-a);[19] *P-recoverability* thus forces the sole candidate copy, that in Spec,CP, to be pronounced, as shown in (82) for the sluice in (81-b).

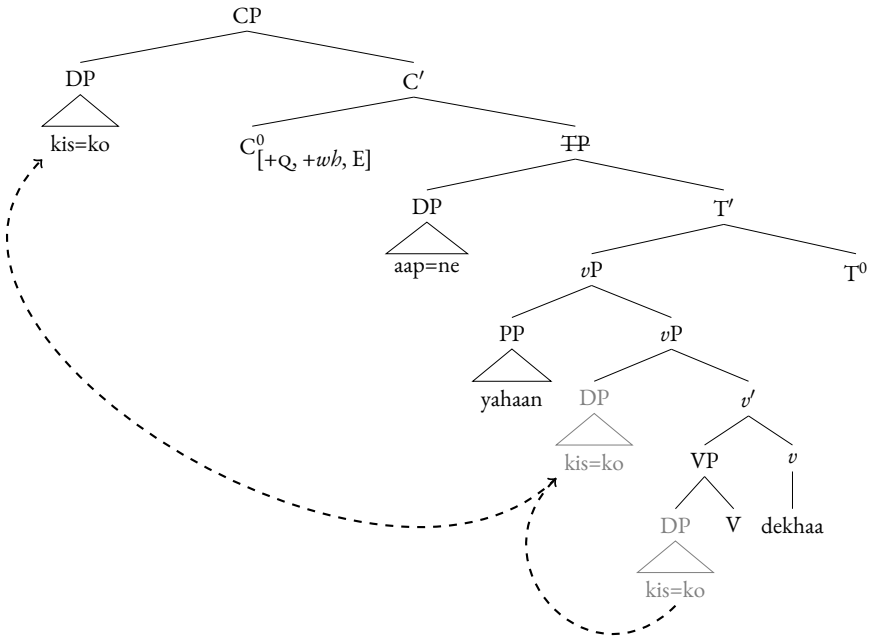
[19]Note that this would of course also be ruled out by general recoverability conditions on deletion, rendering a unique condition on phonetic recoverability superfluous.

(81) I saw someone here, but I don't know …

a. … ~~kis=ko~~ ~~mai=ne~~ ~~yahaan~~ ~~kis=ko~~ ~~dekhaa~~ **P-recoverable*
who=DAT I=ERG here who=DAT saw
'…~~who I saw here~~.'

b. … kis=ko ~~mai=ne~~ ~~yahaan~~ ~~kis=ko~~ ~~dekhaa~~ *P-recoverable*
who=DAT I=ERG here who=DAT saw
'…who ~~I saw here~~.'

(82)



Thus, from this perspective, sluicing in H/U does not entail exceptional *wh*-movement but exceptional top-copy pronunciation of a movement chain.

The feature-based solution provided in Gribanova and Manetta 2016 differs in its implementation though the basic premise is the same as Manetta 2013. That is, mono-clausal *wh*-questions entail covert *wh*-movement to Spec,CP. This minimally different analysis forgoes *P-recoverability* and the economy condition in (75) and alternatively adopts Richards's (1997) restrictions on a well-formed PF object:

(83) a. PF must receive unambiguous instructions concerning which copy in a chain to pronounce.
b. A strong feature requires that PF pronounce the copy in the derivation that has checked that feature.

For non-elliptical content questions, the pre-verbal *wh*-copy is assumed to be associated with strong features on v^0 and the highest copy with weak features on C^0. This is schematized in (84) below, where 'X' marks the tail of the chain, and boldface indicates the position of pronunciation.

(84) [weak] [**strong**] X

Richards (1997) suggests that overt *wh*-movement to check weak features is "obligatory in all cases in which it is possible" (p. 14). In other words, overt movement to check weak features is required in all instances where the conditions in (83) are satisfied. For the schema representing mono-clausal *wh*-questions in (84), only the intermediate copy is associated with strong features, thereby providing unambiguous instructions to PF regarding which copy in the chain should be pronounced. This may be contrasted with the illegal chain in (85); here, the *wh*-copy associated with weak features is pronounced, flouting (83-b).

(85) *[**weak**] [strong] X

Following Richards (1997), Gribanova and Manetta (2016) claim that ellipsis represents a "special circumstance" (p. 648), wherein (83-b) is suppressed yet (83-a) is satisfied. Specifically, if a constituent α that is flagged for non-pronunciation contains a copy with strong features, a copy with weak features may be pronounced, since PF would receive unambiguous instructions regarding which copy in the chain to pronounce.

(86) [**weak**] [$_{\alpha}$[~~strong~~] ~~X~~]

In the case of sluicing, the intermediate copy that is associated with strong features is contained in TP, which the assumed E feature on C^0 flags for deletion at PF; thus, this copy cannot be pronounced. The only copy in the chain that can be pronounced in this context is the copy in Spec,CP, despite that it is associated with weak features. Thus, (86) constitutes a well-formed PF object only in the case of ellipsis.

Assuming a uniform analysis of sluicing and fragment answers, it is unclear how such covert-movement approaches would be extendable to the latter. Recall from the previous section that non-*wh* remnants in non-elliptical contexts cannot be analyzed as having undergone such $\overline{\text{A}}$-movements as topicalization or scrambling, given the various asymmetries we find between such elliptical remnants and such displacement operations in non-elliptical contexts. An obvious rebuttal here would be to forgo the notion that the syntax of sluices and that of fragment answers do indeed deserve a unified treatment; however, I see no empirical justification for an alternative bifurcate analysis.

Additionally, while this perspective addresses H/U's conflicting lack of *wh*-movement in non-elliptical mono-clausal content questions for the standard MDA, the issue of exceptionality it seeks to resolve persists, being merely reallocated to the PF component: instead of having overt *wh*-movement just in the case of sluicing, we now have a special copy in the *wh*-chain that is pronounced only under ellipsis, the latter of which is strictly deriveable via brute force stipulations. Such shortcomings demonstrate the need for an alternative solution.

3.3.1.3 PF movement: the last resort

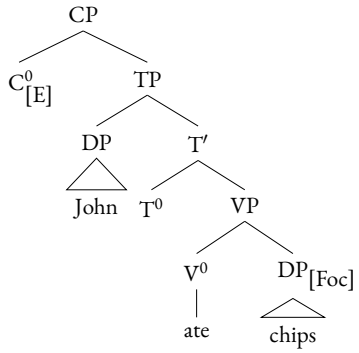
In defense of the MDA, Weir (2014) offers an explanation for the issue of exceptional movement specifically to derive English fragment answers (87)–(88).

(87) A: What did John eat? B: Chips$_i$ ~~he ate t_i~~.

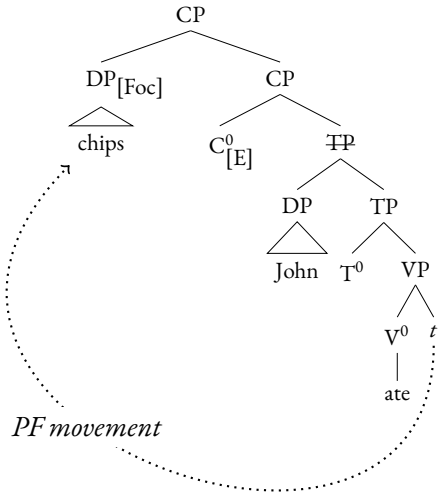
(88) *Chips$_i$ he ate t_i.
(Weir 2014:3–4)

In line with Boone 2013 and Yoshida et al. 2015, Weir (2014) suggests that focused remnants such as (87B), which are phonologically stressed/prominent, undergo exceptional movement out of the ellipsis site, representing a kind of 'evacuating movement' that crucially takes place strictly at PF (à la Aoun and Benmamoun 1998, Sauerland and Elbourne 2002). PF movement importantly leaves the surface and LF representations of such elliptical forms unaffected, as shown below for the fragment answer in (87B).

(89) *Surface and LF representations:*



(90) *PF representation:*



In other words, foci remain *in situ* in the narrow syntax and at LF but appear in the left periphery at PF, with the presupposed E feature on C^0 triggering TP deletion. This type of movement is assumed to be syntactic though it occurs entirely in the PF component, and it is not feature-driven but is enforced purely for PF to satisfy conflicting instructions: (i) do not pronounce TP and (ii) stress anything that is focus-marked.

With respect to H/U, there is a general consensus in the literature that foci in this language are prosodically prominent/stressed, bearing greater pitch, intensity, and duration values relative to non-foci, and prosodic focus marking has been shown to induce post-focal pitch compression.[20] This is true for both *wh* and non-*wh* foci, wherein the focused item consistently has an expanded register while following constituents have a compressed register. It has also been reported that discourse-Given content in the pre-focal domain remains prosodically unaffected. In other words, pre-nuclear pitch compression is absent (Harnsberger 1994, 1999; Patil et al. 2008; Féry et al.

[20]In other words, compressed L*H pitch accents appear in the post-focal domain unlike deaccenting found in languages such as English, which involves the delinking (or absence of) pitch accents altogether on post-focal constituents.

2016, among others).[21] It is thus *prima facie* plausible for a proponent of the MDA to adopt Weir's (2014) approach and claim that in elliptical contexts, foci exceptionally must move out of the ellipsis site at PF to once again satisfy the paradoxical needs of deleting TP and stressing focus-marked constituents.

Why is such $\overline{\text{A}}$-fronting generally ruled out in languages like English under this approach (see (88))? To account for this, Weir (2014) appeals to *Economy of derivation* (Chomsky 1995 *et seq*.), which bans superfluous derivational steps. Here, this economy condition is assumed to rule out movements unless there is a reason to do them (e.g., for feature checking or for prosodic/recoverability reasons, etc.). Note, however, that the very idea that elliptical remnants need to move to the left periphery is in and of itself a superfluous derivational step, being purely a consequence of the adopted MDA's assumption that PF-deletion targets syntactic constituents, for which there is no independent evidence.

This PF-movement approach to clausal ellipsis predicts that remnants of such phenomena will always be stressed foci, whence the "last resort" nature of PF movement as described above. However, the availability of unstressed MPs which cannot be focused as secondary remnants in German (see Chapter 2) shows that this prediction is not borne out.

Furthermore, we saw in §3.3.1.1 that multiple remnants are permitted in H/U. As will be discussed further in Chapter 4, such configurations display a strict linearity effect, whereby the linear order of multiple remnants has a strong preference for mirroring the linear order of the correlates in the antecedent clause (91).

(91) A: kisi=ne kisi=ko kitaab lautayii thii.
someone=ERG someone=DAT book returned be.3SG.PAST.F
'Someone had returned the/a book to someone.'

B: kis=ne kis=ko?
who=ERG who=DAT
'Who had returned the/a book to whom?'

B′: *kis=ko kis=ne?
who=DAT who=ERG
Intended: 'Who had returned the/a book to whom?'

This is so despite the fact that the non-elliptical answers display no such strict linearity:

(92) a. kis=ne kis=ko kitaab lautayii thii?
who=ERG who=DAT book returned be.3SG.PAST.F

b. kis=ko kis=ne kitaab lautayii thii?
who=DAT who=ERG book returned be.3SG.PAST.F
Both: 'Who had returned the/a book to whom?'

Kotek and Barros (2018) show that a similar pattern holds for multiple sluicing in Russian, a language which in-

[21] The lack of pre-focal pitch compression is by no means unique to this language. For similar effects cross-linguistically, see Hayes and Lahiri 1991 on Bengali, Rahmani et al. 2018 on Persian, Xu 2011 on Mandarin Chinese, Frota and de Moraes 2016 on European Portuguese, and Alzaidi et al. 2019 on Hijazi Arabic, among others.

dependently displays no superiority effects but whose multiple *wh*-remnants likewise must reflect the linear order of their correlates. As we will see in the next chapter, their analysis of the Russian facts suggests that differences in the hierarchical order of correlates–remnants correspond to subtle interpretive mismatches that are illicit in elliptical contexts. Crucially, a PF-movement analysis of clausal ellipsis, which assumes such movement does not affect meaning, falsely predicts the absence of such fixed-order effects in elliptical contexts. It is thus not obvious how such an approach would be able to derive said order preservation.[22]

A core conceptual issue for this approach is that it does not make any morpho-syntactic predictions; it thus stands in opposition to the very purpose of the MDA, whose leading advocates (van Craenenbroeck and Merchant 2013) stress the contrary: "the postulated movement operations would have to bear the hallmarks of regular, non-elliptical $\overline{\text{A}}$-movement" (p. 721). There is therefore good reason to be wary of this PF-movement offshoot, not least because it further undermines the MDA's explanatory power (see Ott and Struckmeier 2018:400–401 for a similar critique).

3.3.2 Asymmetries in island effects

A core issue relevant to the question of movement in deriving subsententials concerns island effects, which are often used as a diagnostic for movement. Islands, as discussed in Ross's (1967) seminal work, signify configurations that block syntactic dependencies such as $\overline{\text{A}}$-movements. H/U independently displays island effects in non-elliptical contexts (Mahajan 1990; Dayal 1996; Malhotra 2009, 2010, 2011; 2012; Manetta 2013; Gribanova and Manetta 2016; among others). This is true irrespective of whether the matrix-scope-taking *wh*-phrase is overtly extracted to a sentence-initial position or remains *in situ*, as demonstrated below.

(93) *Complex NP island:*

a. *kis-se$_i$ Raam=ko [$_{\text{DP}}$ yeh baat [$_{\text{CP}}$ ki Siita t_i mili]] pa-taa hai?
who-with Ram-DAT this fact that Sita met know-HAB.M be.3SG.PRES
Intended: 'which entity x : Ram knows the fact that Sita met x'

b. *Raam=ko [$_{\text{DP}}$ yeh baat [$_{\text{CP}}$ ki Siita kis-se mili]] pa-taa hai?
Ram-DAT this fact that Sita who-with met knowHAB.M be.3SG.PRES
(Gribanova and Manetta 2016:656)

(94) *Adjunct island:*

a. *kyaa$_i$ Raam=ne kahaa ki Siita bazaar jaaye-gii [$_{\text{CP}}$ kyunki Mohan t_i nahiiN lay-aa]?
what Ram=ERG said that Sita market go-FUT because Mohan NEG bring-PFV
Intended: 'which object x : Ram said Sita will go to the market because Mohan didn't bring x'

b. *Raam=ne kahaa ki Siita bazaar jaaye-gii [$_{\text{CP}}$ kyunki Mohan kyaa nahiiN lay-aa]?
Ram=ERG said that Sita market go-FUT because Mohan what NEG bring-PFV
(Gribanova and Manetta 2016:656–657)

[22] It is certainly possible that a PF-movement account may assume that though remnants raise out of the ellipsis site in a free order, constraints governing recoverability may independently account for such order preservation, which is a stance that Weir (2014) adopts. It is not obvious then, however, how such a PF-movement approach would fare any better than alternative *in situ* accounts (see Chapter 2), which simply do not enforce the remnant's movement just in the case of ellipsis.

(95) *Relative clause island:*

a. *kyaa$_i$ Raam=ko [$_{DP}$ vo ladkaa [$_{CP}$ jo t_i lay-aa]] pasand hai?
what Ram-DAT DEM boy REL bring-PFV]] like be.3SG.PRES
Intended: 'which object x : Ram likes the boy that brought x'

(Malhotra 2009:58)

b. *Raam=ko [$_{DP}$ vo ladkaa [$_{CP}$ jo kyaa lay-aa]] pasand hai?
Ram-DAT DEM boy REL what bring-PFV like be.3SG.PRES
(Gribanova and Manetta 2016:657)

(96) *Wh-island:*

a. *kis=ko$_i$ Raam=ne puch-aa [$_{CP}$ ki kyaa Miira=ne t_i dekh-aa]?
Who=DAT Ram=ERG ask.PFV that whether Mira=ERG see-PFV
Intended: 'which entity x : Ram asked whether Mira saw x'

b. *Raam=ne puch-aa [$_{CP}$ ki kyaa Miira=ne kis=ko dekh-aa]?
Ram=ERG ask.PFV that whether Mira=ERG who=DAT see-PFV
(Gribanova and Manetta 2016:657)

(97) *Co-ordinate (NP) island:*

a. *kis=ko$_i$ Raam=ne [$_{DP}$ t_i aur Siita=ko] bazaar-mein dekh-aa?
who=DAT Ram=ERG and Sita=DAT market-at see-PFV
Intended: 'which entity x : Ram saw x and Sita at the market'

b. *Raam=ne [$_{DP}$ kis=ko aur Siita=ko] bazaar=mein dekh-aa?
Ram=ERG who=DAT and Sita=DAT market=at see-PFV

Sluicing in H/U generally displays no island effects,[23] as shown below.[24]

(98) *Relative clause island:*

%voh log kisi ek aadmi-ko naukri denaa chaahte hain jo koi ek bhaartiya
those people some one man=DAT job give want be.3PL.PRES REL some one Indian
bhasha bolta hai, lekin mujhe nahiiN pataa (ki) kaunsii.
language speak be.3SG.PRS but I NEG know that which
'Those people want to hire someone who speaks an Indian language, but I don't know which.'

(Bhattacharya and Simpson 2012:214)

[23] The claim that H/U sluices are island in-sensitive is not uncontroversial and, to some degree, appears to be subject to speaker variation. For example, see Bhattacharya and Simpson 2012 and Gribanova and Manetta 2016 for some conflicting judgments in this regard.

[24] The judgments in these examples are from Bhattacharya and Simpson 2012, wherein the "%" symbol is meant to reflect speaker variation for the consulted speakers, ranging from full acceptance of (some or all of) said constructions to complete rejection. My own intuitions and those of the speakers I consulted agree that sluicing in this language is island in-sensitive.

(99) *Adjunct island:*

%mE-ne sunaa hE ki Sharma-ji bahut khuS honge agar Raam unkii kisi baccii-se
I-ERG heard be that Sharma-POL very happy be if Ram his some daughter-with
Saadi-kar-le, par mujhe nahiiN pataa (ki) kis-se.
marriage-do-COND but me.DAT not known that who-with
'I heard that Mr. Sharma will be very happy if Ram marries one of his daughters, but I don't know which one.'

(Bhattacharya and Simpson 2012:214)

(100) *Co-ordinate (NP) island:*

%Un logoN-ne Raam Or ek laRkii se madad karne-ko kahaa, par mujhe nahiiN
those people-ERG Ram and one girl with help doing-DAT said but me.DAT not
pataa (ki) kOnsii.
known that which
'Those people asked Ram and one girl to help, but I don't know which (girl).'

(Bhattacharya and Simpson 2012:215)

(101) *Complex NP island:*

%mE Minaa-kii yah baat maantaa huN ki Raam kisi-se pyaar-kartaa hE, par mujhe
I Mina-GEN this word believe be that Ram someone-with love-doing be but me.DAT
nahiiN pataa (ki) kis-se.
not known that who-with
'I believe Mina's claim that Ram loves someone, but I don't know who.'

(Bhattacharya and Simpson 2012:215)

On the other hand, the examples below suggest that non-contrastive fragment answers in this language are island sensitive.

(102) *Relative clause island:*

A: Safiina=ko [voh aadmi [$_{RC}$ jo kisi-ek rishtedaar=ko pasand hai]] accha lagta
Safina=DAT that man REL some-one relative=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'Safina likes the same man that some relative likes.'

B: *haaN, Khalid=ko.
yes Khalid=DAT
'Yes, Safina likes the same man that Khalid likes.'

B′: haaN, Safina=ko [voh aadmi [$_{RC}$ jo Khalid=ko pasand hai]] accha lagta
yes Safina=DAT that man REL Khalid=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'Yes, Safina likes the same man that Khalid likes.'

(103) *Adjunct island:*

A: Fahd ghar gayaa [kyunki kisi=ek aadmi us=ke saath baat nahiiN kii].
Fahd home went because some-one man him=GEN with talk NEG did
'Fahd went home because some man didn't talk to him.'

B: *haaN, Ashok.
yes Ashok
'Yes, Fahd went home because Ashok didn't talk to him.'

B′: haaN, Fahd ghar gayaa [kyunki Ashok us=ke saath baat nahiiN kii].
yes Fahd home went because Ali him=GEN with talk NEG did
'Yes, Fahd went home because Ashok didn't talk to him.'

(104) *Complex (NP) island:*

A: Umbrin=ko [yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=DAT this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: *haaN, kheer.
yes rice pudding
'Yes, Umbrin knows the fact that Shazia will eat rice pudding.'

B′: haaN, Umbrin=ko [yeh baat [$_{CP}$ ki Shazia kheer khaaye-gii]] pataa hai.
yes Umbrin=DAT this fact that Shazia kheer eat-FUT.F know be.3SG.PRES
'Yes, Umbrin knows the fact that Shazia will eat kheer.'

An exception to this is co-ordinate (NP) islands, which are not island sensitive (105).

(105) *Co-ordinate (NP) island:*

A: Ali [gosht aur ek aur chiiz] kal khariide-gaa.
Ali meat and some other thing tomorrow buy-FUT.M
'Ali will buy meat and some other thing tomorrow.'

B: haaN, baklava.
yes baklava
'Yes, Ali will buy meat and baklava tomorrow.'

B′: haaN, Ali [gosht aur baklava] kal khariide-gaa.
yes Ali meat and baklava tomorrow buy-FUT.M
'Yes, Ali will buy meat and baklava tomorrow.'

Contrastive fragment answers also appear to be island sensitive, as illustrated below.

(106) *Relative clause island:*

A: Safiina=ko [voh aadmi [$_{RC}$ jo TALIB=KO pasand hai]] accha lagta hai?
Safina=DAT that man REL Talib=DAT like be.3SG.PRES like seem be.3SG.PRES
'Does Safina like the same man that TALIB likes?'

B: *nahiiN, KHALID=KO.
NEG Khalid=DAT
Intended: 'No, Safina likes the same man that KHALID likes.'

B′: nahiiN, Safiina=ko [voh aadmi [$_{RC}$ jo KHALID=KO pasand hai]] accha lagta
NEG Safina=DAT that man REL Khalid=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'No, Safina likes the same man that KHALID likes.'

(107) *Adjunct island:*

A: Fahd ghar gayaa [kyunki ALI us=ke saath baat nahiiN kii]?
Fahd home went because Ali him=GEN with talk NEG did
'Did Fahd go home because ALI didn't talk to him?'

B: *nahiiN, ASHOK.
NEG Ashok
Intended: 'No, Fahd went home because ASHOK didn't talk to him.'

B′: nahiiN, Fahd ghar gayaa [kyunki ASHOK us=ke saath baat nahiiN kii].
NEG Fahd home went because Ashok him=GEN with talk NEG did
'No, Fahd went home because ASHOK didn't talk to him.'

(108) *Complex (NP) island:*

A: Umbrin=ko [yeh baat [$_{CP}$ ki Shazia MITHAI khaaye-gii]] pataa hai?
Umbrin=DAT this fact that Shazia sweets eat-FUT.F know be.3SG.PRES
'Does Umbrin know the fact that Shazia will eat SWEETS?'

B: *nahiiN, KHEER.
NEG rice pudding
Intended: 'No, Umbrin knows the fact that Shazia will eat RICE PUDDING.'

B′: nahiiN, Umbrin=ko [yeh baat ki Shazia KHEER khaaye-gii] pataa hai.
NEG Umbrin=DAT this fact that Shazia rice pudding eat-FUT.F know be.3SG.PRES
'No, Umbrin knows the fact that Shazia will eat RICE PUDDING.'

Again, co-ordinate (NP) islands seem to behave differently, in that they are not island sensitive (109).

(109) *Co-ordinate (NP) island:*

A: Ali [gosht aur MURGHII] kal khariide-gaa?
Ali meat and chicken tomorrow buy-FUT.M
'Will Ali buy meat and CHICKEN tomorrow?'

B: nahiiN, BAKLAVA.
NEG baklava
'No, Ali will buy meat and BAKLAVA tomorrow.'

B′: nahiiN, Ali [gosht aur BAKLAVA] kal khariide-gaa.
NEG Ali meat and baklava tomorrow buy-FUT.M
'No, Ali will buy meat and BAKLAVA tomorrow.'

Thus, it seems as though sluices and fragment answers present asymmetries in island (in-)sensitivity: sluices are island in-sensitive, while (contrastive/non-contrastive) fragment answers are island sensitive, with the exception of

co-ordinate islands which consistently display no locality effects.[25] This presents an important challenge for the MDA, which predicts widespread island effects, given the remnant's movement out of the ellipsis site prior to TP deletion.[26]

Merchant's (2004) explanation of asymmetries in locality effects under ellipsis assumes a PF theory of islands, according to which island violations are considered to be a by-product of pronounced properties of syntactic structure. Intermediate traces of island-escaping constituents are deemed defective and so are marked with *.[27] This feature must be eliminated from the syntactic structure interpreted by PF in order to prevent a crash. *Wh*-movement is assumed to target every intermediate maximal projection (à la Fox 1999b), leaving behind *-traces in its wake when such movement crosses an island boundary. As shown in (110) for the grammatical sluice in (98), TP deletion eliminates that portion of the structure which contains all residual * features created by successive cyclic *wh*-movement. In this way, sluicing ameliorates island effects, since the offending portion of the structure is marked for non-pronunciation.

(110) voh log kisi ek aadmi=ko naukri denaa chaahte hain jo koi ek bhaartiya bhasha
those people some one man=DAT job give want be.3PL.PRES REL some one Indian language
bolta hai, lekin mujhe nahiiN pataa [$_{CP}$ (ki) kaunsii$_i$ [$_{TP}$ ~~*t_i'' voh~~ ~~log~~ [$_{vP}$ ~~*t_i' kisi~~ ~~ek~~
speak be.3SG.PRS but I NEG know that which those people some one
~~aadmi=ko~~ ~~naukri~~ ~~denaa~~ ~~chaahte~~ ~~hain~~ [$_{CP}$ ~~jo~~ ~~t_i~~ ~~bolta~~ ~~hai~~]]]].
man=DAT job give want be.3PL.PRES REL speak be.3SG.PRS
'Those people want to hire someone who speaks an Indian language, but I don't know which.'

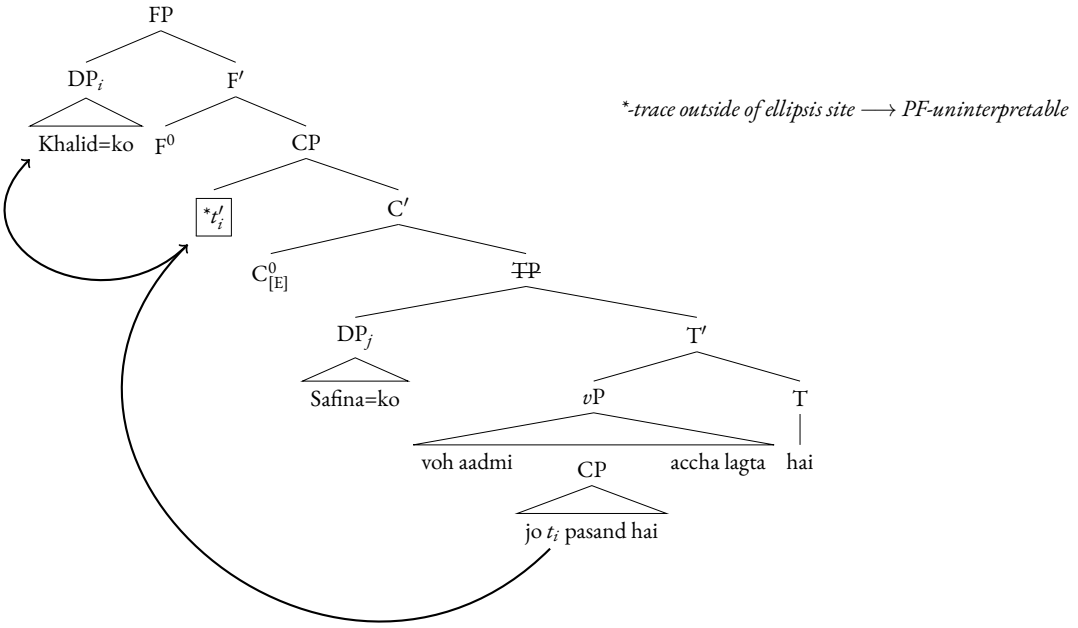
By contrast, ellipsis does not ameliorate island violations in fragment answers, as they contain a lingering defective trace in Spec,CP, which, the reader will recall, is an $\overline{\text{A}}$-position through which non-*wh* remnants are assumed to obligatorily pass on their way to the specifier of a high FP under the traditional MDA. This is shown in (111) for the ungrammatical fragment answers in (102) and (106) (Merchant 2004:708).

[25] Similar to the reported findings of sluicing in this language, the island sensitivity of fragment answers seems to be subject to speaker variation. For example, one of the native speakers I consulted accepted all of the contrastive/non-contrastive fragment answers above and another found the non-contrastive fragments grammatical but rejected the contrastive ones. I leave the explanation for this speaker variation to future work.

[26] As we will see in Chapter 4, English presents a similar asymmetry in island effects, where sluicing is generally island in-sensitive and contrastive fragment answers are not. Furthermore, non-contrastive fragment answers are typically island in-sensitive (see Barros et al. 2014, Griffiths 2019, among others), further complicating matters for the MDA.

[27] The latter instantiates a PF-uninterpretable featural modification of the XP itself (Merchant 2004:706).

(111) *Illicit fragment answer in (102)/(106)*



However, the situation is further obfuscated by the fact that reprise sluices (112) and fragment answers (113) are entirely island in-sensitive.

(112) A: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=DAT this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: KAUN?
who
'Umbrin knows the fact that WHO will eat something?'

B′: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki KAUN kuch khaaye-gaa]] pataa hai?
Umbrin=DAT this fact that who something eat-FUT.M know be.3SG.PRES
'Umbrin knows the fact that WHO will eat something?'

(113) A: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=DAT this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: SHAZIA?
Shazia
'Umbrin knows the fact that SHAZIA will eat something?'

B′: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki SHAZIA kuch khaaye-gii]] pataa hai?
Umbrin=DAT this fact that Shazia baklava eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that SHAZIA will eat something?'

Merchant (2004:709) treats English reprise subsententials, which are likewise island in-sensitive, as metalinguistic devices (on a par with metalinguistic negation à la Horn 1989). Griffiths et al. (2023) claim that this predicts reprise

configurations should display no $\overline{\text{A}}$-properties. The fact that English and H/U non-elliptical reprise questions are island in-sensitive *prima facie* supports this view. Problematically, however, Griffiths et al. (2023) show that reprise subsententials in Hungarian do show $\overline{\text{A}}$-properties. For instance, reprise questions in this language (114B), akin to their non-reprise counterparts, involve overt *wh*-movement to a focus position that immediately precedes the main verb, and the verb and its lexical particle undergo inversion. Simply leaving the *wh*-phrase *in situ*, akin to English and H/U, results in ungrammaticality (114B′).

(114) A: Szeretnék egy hódeszkát. (Hungarian)
like.COND.1SG a snowboard.ACC
'I'd like a snowboard.'

B: MIT szeretnél?
what.ACC like.COND.2SG
'What would you like?'

B′: *?Szeretnél mit?
like.COND.2SG what.ACC
(Griffiths et al. 2023:173)

Crucially, reprise questions in Hungarian are generally island sensitive:

(115) a. Gabi azért mérges, [$_{\text{ISLAND}}$ mert Töhötöm meghívta].
Gabi that.CAU angry because Töhötöm PRT.invite.PAST.3SG
'Gabi is angry because Töhötöm invited her.' (Hungarian)

b. *Kicsoda$_i$ mérges azért Gabi, [$_{\text{ISLAND}}$ mert t_i meghívta]?
who angry that.CAU Gabi because PRT.invite.PAST.3SG
Intended: 'WHO is Gabi angry because he did not invite her?'
(Griffiths et al. 2023:173)

The presence of such $\overline{\text{A}}$-properties in Hungarian reprise questions renders Merchant's (2004) solution suspect. Griffiths et al. (2023:185) argue that an MDA proponent may rebut this issue by simply suggesting that reprise questions in English, and by extension, H/U, are metalinguistic devices whose derivation do not involve clausal ellipsis whereas those in Hungarian are not, an independently unmotivated bifurcation. The island in-sensitivity of reprise remnants thus remain an issue for the MDA.

Further problematic for the aforementioned PF theory of islands is the fact that fragment answers whose correlates are contained in co-ordinated islands show no island sensitivity in H/U, despite the fact that such constructions are independently island sensitive. According to Merchant's (2004) solution for fragment answers as shown in (111), a lingering *-trace in Spec,CP for such remnants likewise should induce a PF crash, contrary to fact. We will also see in Chapter 4 that the distinction in island sensitivity presented here for H/U is not quite accurate and at least in some instances, (contrastive/non-contrastive) fragment answers display no island effects, suggesting that their degraded quality here is not due to island-violating movement of the remnant but some other syntax-external factor, *pace* Merchant 2004.

The asymmetries in island (in-)sensitivity observed in this section collectively suggest that culpability cannot be contingent on the presence/absence of a PF-uninterpretable *-trace and remain an issue for the MDA. It is difficult

to imagine how a movement analysis of clausal ellipsis would account for the island in-sensitivity of a subset of elliptical phenomena (*viz.*, sluicing and co-ordinate fragment answers), if all subsententials are forced to illegally evacuate the tacit island they are born in.[28] Conversely, such asymmetries *prima facie* are also an enigma for an alternative *in situ* analysis that does not presuppose underlying movement of the remnant (see Chapter 2). From this perspective, it is not obvious why some elliptical forms display no locality effects (*viz.*, all fragment answers except for co-ordinate islands) if the remnant does not underlyingly move (though see Griffiths 2019). We will return to this in Chapter 4.

3.4 Summary

This chapter began by arguing against both the non-structuralist and 'pseudo-ellipsis' analysis for clausal ellipsis in H/U, given the presence of various connectivity effects under ellipsis and the fact that the properties of subsententials and those of truncated clefts disunite. We then saw that subsententials in this language present non-trivial issues for the traditional MDA, at the forefront of which is exceptional movement. Its theoretical variants fail to truly resolve this issue of exceptionality and merely reallocate it to another domain of the grammar. Importantly, this issue is purely a consequence of the MDA's assumption that clausal ellipsis entails PF-deletion of a syntactic constituent (e.g., ***A:*** *Who did John kiss?* ***B:*** *Mary*$_i$ [$_{\text{TP}}$ ~~*John kissed* t_i~~]), an assumption that is not independently motivated. The MDA thus offers an analysis of clausal ellipsis in H/U that is less parsimonious than the alternative *in situ* approach introduced in Chapter 2, which, *qua* deletion of morpho-syntactic material surrounding the remnant, does not enforce unwanted ellipsis-specific movement (e.g., ***A:*** *Who did John kiss?* ***B:*** [$_{\text{TP}}$ ~~*John kissed*~~ *Mary*]). Finally, we saw that elliptical expressions in this language present asymmetries with respect to island effects that further cast doubt on the widely accepted notion that remnants must move out of the ellipsis site prior to TP deletion.

[28] Note that these asymmetries are also problematic for variants of the MDA that assume scrambling/topicalization of the remnant (§3.3.1.1) as well as the covert-movement offshoot (§3.3.1.2), despite the fact that such approaches are independently substantiated by island effects in long-distance *wh*-questions and scrambling/topicalization of both *wh*- and non-*wh* phrases. The onus is on proponents of such solutions to account for why only a sub-set of elliptical expressions are enigmatically repaired. Mishra (2024:136) speculates that such asymmetries in island effects may point to a processing effect, wherein ellipsis repair is precluded wherever putative locality effects are observed under ellipsis. While I agree that such facts do not seem to point to true island sensitivity under ellipsis where seemingly present, as will be argued in the next chapter, an analysis of clausal ellipsis such as hers, which involves syntactic movement (i.e., focus fronting) that is otherwise island sensitive, *a priori* predicts widespread island sensitivity under ellipsis, on a par with the aforementioned versions of the MDA, contrary to fact. It is thus not obvious from this perspective what would be causing said processing effect. Perhaps, as Mishra (2024) suggests, future psycholinguistic research may offer insights into this issue.

The only true voyage of discovery would be not to visit strange lands but to possess other eyes.

—Marcel Proust
The Prisoner

Chapter 4

Clausal ellipsis as background deletion

In this chapter, I present a novel analysis of clausal ellipsis in H/U, according to which non-pronunciation does not target a syntactic constituent, as available analyses assume. Rather, in line with *in situ* approaches to clausal ellipsis, I propose that PF-deletion freely and maximally targets morpho-syntactic material surrounding the remnant. This perspective does not require remnants to move in the narrow syntax, avoiding the issues raised by alternative MDA accounts in the previous chapter and capturing the availability of remnants whose independent displacement is infelicitous (§4.1). Following Griffiths (2019), I suggest that the presence of putative locality effects under ellipsis amounts to preclusion of recoverability, rather than island-violating movement of the remnant (§4.2). I further show how such an *in situ* approach may handle obligatory P-retention (§4.3) in elliptical contexts. Finally, I argue that this solution solves an additional puzzle identified in elliptical constructions involving multiple remnants, namely, their strict linear order (§4.4). A summary follows in §4.5.

4.1 The mechanics of background deletion

This section introduces the proverbial 'meat and potatoes' of this chapter. It outlines the proposed mechanics that underlie optional non-pronunciation, namely, background deletion. *Contra* available treatments of H/U clausal ellipsis as discussed in Chapter 3, I propose that PF-deletion targets morpho-syntactic material surrounding the remnant freely and maximally and that said deleted content must comprise the propositional background of the elided clause to ensure recoverability.

4.1.1 Discontinuous PF-deletion

We saw in Chapter 3 that available accounts of clausal ellipsis in this language assume some version of the MDA, which presupposes movement of the remnant to a high escape hatch. Such proposals pose conceptual and empirical issues, at the forefront of which is exceptional movement. The crux of this issue, as highlighted in the previous chapter, is the MDA's assumption that a designated syntactic constituent (TP) deletes at PF; importantly, we saw no evidence from this language (and beyond) that corroborates this claim. Thus, in adopting an *in situ* perspective to clausal ellipsis (see Chapter 2), I alternatively suggest that PF-deletion does not single out a fixed syntactic constituent but occurs freely and maximally, targeting all morpho-syntactic material surrounding the remnant up to

recoverability. This may be stated as the optional rule in (1).[1]

(1) *PF-deletion rule:*
Delete all morpho-syntactic material up to recoverability.

Following existing QUD approaches of ellipsis identity (Krifka 2006; Weir 2014, 2018; Griffiths 2019; among others) as described in Chapter 2, I assume that recoverability itself is bound by the background status of PF-deleted content. Recall that QUDs represent (implicit/explicit) questions in discourse that interlocutors address to update their common ground and are organized in a pushdown stack, with "MaxQUD" denoting the most salient, or "currently discussable", question. The clausal "background" comprises morpho-syntactic material that is discourse-Given, or a part of the common ground. It thus excludes any discourse-new material, contrastive foci, and extra-propositional content that does not enter into the calculation of truth conditions, such as the German MPs seen in Chapter 2 (see also Ott and Struckmeier 2018). This means that although PF-deletion is not sensitive to syntactic constituency, if what is deleted does not constitute the clausal background, recoverability will be blocked. Ellipsis identity thus places the requisite upper bound to silence, rendering clausal ellipsis an instance of background deletion (henceforth, BD).

An important advantage of such discontinuous deletion is that it allows the remnant to remain *in situ* in the narrow syntax, avoiding the issue of exceptional movement that existing MDA accounts raise. This is exemplified by the sluice in (2) and fragment answer in (3), derived from underlying configurations in which the remnant would otherwise need not move from its canonical position (see Chapter 3).[2]

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[1] This is similar to but a more simplified version of Kimura's (2013:681) PF-deletion rule for sluicing (i).

(i) Delete all the recoverable elements except a focused phrase inside a TP constituent.

[2] Note that this proposal is in principle compatible with an alternative view that proposes foci scramble to the pre-verbal position prior to PF-deletion, where such movement is importantly not ellipsis-specific (see Chapter 3):

(i) A: Ashok kisi=se angoor khariid raha thaa.
Ashok someone=from grapes buy PROG be.3SG.PAST.M
'Ashok was buying grapes from someone.'
B: ~~Ashok angoor~~ kis=se ~~khariid raha thaa~~?
Ashok grapes who=from buy PROG be.3SG.PAST.M
'Who was Ashok buying grapes from?'

(ii) A: Ashok kis=se angoor khariid raha thaa?
Ashok who=from grapes buy PROG be.3SG.PAST.M
'Who was Ashok buying grapes from?'
B: ~~Ashok angoor~~ dukandaar=se ~~khariid raha thaa~~.
Ashok grapes shopkeeper=from buy PROG be.3SG.PAST.M
'Ashok was buying grapes from the/a shopkeeper.'

(2) A: Ashok kisi=se angoor khariid raha thaa.
Ashok someone=from grapes buy PROG be.3SG.PAST.M
'Ashok was buying grapes from someone.'

B: ~~Ashok~~ kis=se ~~angoor khariid raha~~ ~~thaa~~?
Ashok who=from grapes buy PROG be.3SG.PAST.M
'Who was Ashok buying grapes from?'

(3) A: Ashok kis=se angoor khariid raha thaa?
Ashok who=from grapes buy PROG be.3SG.PAST.M
'Who was Ashok buying grapes from?'

B: ~~Ashok~~ dukandaar=se ~~angoor khariid raha~~ ~~thaa~~.
Ashok shopkeeper=from grapes buy PROG be.3SG.PAST.M
'Ashok was buying grapes from the/a shopkeeper.'

The indefinite in the assertion in (2A) evokes (i.e., gives rise to) the salient implicit MaxQUD in (4-a), with its corresponding background shown in (4-b).

(4) a. Ashok kis=se angoor khariid raha thaa?
Ashok who=from grapes buy PROG be.3SG.PAST.M
'Who was Ashok buying grapes from?'

b. Background of question (Q): $\lambda x.$ Ashok was buying grapes from x

Similarly, the background of the explicit MaxQUD in (3A) is as in (5).

(5) Background of question (Q): $\lambda x.$ Ashok was buying grapes from x
$\therefore A \sqsubseteq Q$

Importantly, in both the sluice and fragment answer above, the PF-deleted material *in toto* comprises the background of the tacit clause (6)–(7), which matches the MaxQUD's background, ensuring recoverability.

(6) Background of sluice (A): $\lambda x.$ Ashok was buying grapes from x
$\therefore A \sqsubseteq Q$

(7) Background of answer (A): $\lambda x.$ Ashok was buying grapes from x
$\therefore A \sqsubseteq Q$

As indicated above and as we saw in Chapter 2, the notion of "background matching" I assume here is as proposed in Weir 2018 and Griffiths 2019, where the background of the underlying clause must be generally entailed by that of the antecedent MaxQUD to license identity.

It is worth clarifying that apart from the sluice shown in (2B), one may in principle follow up the statement in (2A) with other sluices, such as the following:

(8) a. ~~Ashok~~ kahaN ~~angoor khariid raha~~ ~~thaa~~?
Ashok where grapes buy PROG be.3SG.PAST.M
'Where was Ashok buying grapes?'

b. ~~Ashok~~ kyuN ~~angoor khariid raha~~ ~~thaa~~?
Ashok why grapes buy PROG be.3SG.PAST.M
'Why was Ashok buying grapes?'

c. ~~Ashok~~ kab ~~angoor khariid raha~~ ~~thaa~~?
Ashok when grapes buy PROG be.3SG.PAST.M
'When was Ashok buying grapes?'

The elliptical expressions in (8) have backgrounds that match other possible QUDs in the pushdown stack (9), ensuring recoverability.

(9) a. Ashok kahaN angoor khariid raha thaa?
Ashok where grapes buy PROG be.3SG.PAST.M
'Where was Ashok buying grapes?'

b. Ashok kyuN angoor khariid raha thaa?
Ashok why grapes buy PROG be.3SG.PAST.M
'Why was Ashok buying grapes?'

c. Ashok kab angoor khariid raha thaa?
Ashok when grapes buy PROG be.3SG.PAST.M
'When was Ashok buying grapes?'

Linguistic triggers such as the indefinite correlate in the antecedent clause in (2A), as well as disjunctions, etc., are what make MaxQUDs like that in (4-a) more salient relative to the other possible QUDs in (9) (see also Weir 2014, Barros 2014, among others).

Since long-distance *wh*-questions independently require overt extraction of the *wh*-phrase to the matrix clause to obtain wide scope (see Chapter 3), I assume that sluices derived from tacit long-distance questions likewise underlyingly involve said extraction (10).

(10) A: Bahadur=ne kaha [$_{CP}$ ki Ashok kisi=se angoor khariid raha thaa].
Bahadur=ERG said that Ashok someone=from grapes buy PROG be.3SG.PAST.M
'Bahadur said that Ashok was buying grapes from someone.'

B: Kis=se$_i$ ~~Bahadur-ne~~ ~~kaha~~ [$_{CP}$ ~~ki~~ ~~Ashok~~ t_i ~~angoor khariid raha~~ ~~thaa~~]?
who=from Bahadur=ERG said that Ashok grapes buy PROG be.3SG.PAST.M
'Who did Bahadur say that Ashok was buying grapes from?'

In other words, unlike existing analyses of clausal ellipsis in H/U, I propose that when it comes to deriving elliptical constructions such as sluicing and fragment answers in this language, it is business as usual. No exceptional movement is required; remnants will move in the narrow syntax if they independently have to or can do so, with PF-deletion targeting morpho-syntactic material surrounding said remnant, demonstrated above. As noted in Chapter 2, such an *in situ* approach to clausal ellipsis more accurately reflects Ross's (1969) original intuition for sluicing, according to which a *wh*-question is formed, followed by PF-deletion of all clausal material except for the *wh*-phrase.

This order of transformations does not entail remnant extraction, unless the language in question independently requires *wh*-movement. The proposed BD, which assumes ellipsis is licensed not by the narrow syntax (cf. E-feature accounts; see Chapter 2) but by discourse, likewise does not impose ellipsis-specific syntactic operations. The same holds true for fragment answers, where such remnants in H/U (and beyond) need not move from their canonical position.

An immediate strength of such an approach is its generalizability, having the potential to capture elliptical phenomena such as sluicing in languages that independently require *wh*-movement, such as English; those that are *bona fide wh*-in situ languages, such as Turkish (see Chapter 2); and those with a seemingly mixed system, such as H/U, without any *ad hoc* stipulations regarding movement. As discussed in the previous chapter, the MDA struggles to circumvent the issue of exceptional movement it raises purely because of its assumption that PF-deletion targets a syntactic constituent.[3] Importantly, unlike the MDA, BD does not enforce the prediction that *wh*-in situ languages will only ever have SLCs, not genuine sluicing.

Discontinuous deletion straightforwardly captures the empirical facts raised in Chapter 3 regarding the interpretation of certain DPs under ellipsis in H/U. Bare DP remnants (11B) are ambiguous with respect to specificity because they underlyingly remain in their base-generated position (11B′), which, as the reader will recall, is the only position that licenses this ambiguity in non-elliptical contexts.

(11) A: Nadia=ne Hassan=ko kyaa diyaa?
Nadia=ERG Hassan=ACC what give.PFV
'What did Nadia give to Hassan?'

B: Khat.
letter
'The/a letter.'

B′: ~~Nadia=ne~~ ~~Hassan=ko~~ khat ~~diyaa~~.
Nadia=ERG Hassan=ACC letter give.PFV
'Nadia gave the/a letter to Hassan.'

This is also true of surface-low quantified indefinites such as *kisii aurat=ko* 'some woman=ACC' in (12) that are likewise ambiguous under ellipsis—an interpretation that is only licensed when such DPs appear *in situ* in non-elliptical contexts.

(12) A: Har aadmii kisii=ko pyaar kartaa hai.
each man someone=ACC love do.IPFV be.PRES
'Each man loves someone.'

B: Haan, kisii aurat=ko.
yes some woman=ACC
'Yes, some woman.' (✓EACH > SOME)
(✓SOME > EACH)

[3]As discussed in Chapter 3, PF movement à la Weir 2014 reconciles the MDA's problem of exceptional movement but poses other conceptual and empirical issues that nevertheless render it dubious. As noted there, we will see data concerning the strict linearity of multiple remnants in §4.4 that further militate against this MDA offshoot.

B′: Haan, ~~har~~ ~~aadmii~~ kisii aurat=ko ~~pyaar~~ ~~kartaa~~ ~~hai~~.
yes each man some woman=ACC love do.IPFV be.PRES
'Yes, each man loves some woman.'

Finally, ambiguity of the monomorphemic reflexive *apna* 'self' in configurations such as (13) under ellipsis is also correctly predicted from this vantage point which assumes it does not underlyingly move to derive such fragments but remains in the structural position that licenses this interpretation (*viz.*, a locus that is structurally lower than the subject and indirect object) (13B′).

(13) A: Kal Raam=ne$_i$ Mohan=ko$_j$ kyaa lautaaya?
yesterday Ram=ERG Mohan=ACC what returned
'What did Ram return to Mohan yesterday?'

B: Apni$_{i/j}$ kitaab.
self's book
'Ram$_i$ returned self's$_{i/j}$ book to Mohan$_j$.'

B′: ~~Kal~~ ~~Raam=ne$_i$~~ ~~Mohan=ko$_j$~~ apni$_{i/j}$ kitaab ~~lautayii~~.
yesterday Ram=ERG Mohan=ACC self's book returned
'Ram$_i$ returned self's$_{i/j}$ book to Mohan$_j$ yesterday.'

Since this proposal assumes that the syntax of sluices in H/U is bipartite as a consequence of the bifurcate strategy of *wh*-question formation in non-elliptical contexts, it predicts the presence of asymmetries between sluices formed from underlying long-distance questions vs. simple ones. This prediction is borne out: when the aforementioned *apna* reflexive appears within an embedded *wh*-phrase in elliptical contexts, there is a strong preference to interpret it as being bound by the embedded subject (14).

(14) A: Raam=ko lagta hai [$_{CP}$ ki Raj=ne$_i$ Mohan=ko$_j$ [$_{DP}$ apni$_{i/j}$ koi kitaab] lautayii].
Ram=ACC thinks be.3SG.PRES that Raj=ERG Mohan=ACC self's some book returned
'Ram thinks that Raj$_i$ returned one of his$_{i/j}$ books to Mohan$_j$.'

B: Kaunsii apni$_{i/*j}$ kitaab?
which self's book
'Which one of his$_{i/*j}$ books does Ram think Raj$_i$ returned to Mohan$_j$?'

B′: [$_{DP}$ Kaunsii apni$_{i/*j}$ kitaab]$_m$ Raam=ko lagta hai [$_{CP}$ ki Raj=ne$_i$ Mohan=ko$_j$ t_m
which self's book Ram=ACC thinks be.3SG.PRES that Raj=ERG Mohan=ACC
lautayii]?
returned
'Which one of his$_{i/*j}$ books does Ram think Raj$_i$ returned to Mohan$_j$?'

By contrast, when it surfaces in a sluice formed from an underlying mono-clausal question (15) or a fragment answer whose corresponding correlate is in an embedded clause (16), it is ambiguous, akin to (13).

(15) A: Raj=ne$_i$ Mohan=ko$_j$ [$_{DP}$ apni$_{i/j}$ koi kitaab] lautayii.
Raj=ERG Mohan=ACC self's some book returned
'Raj$_i$ returned one of his$_{i/j}$ books to Mohan$_j$.'

B: Kaunsii apni$_{i/j}$ kitaab?
which self's book
'Which one of his$_{i/j}$ books did Raj$_i$ return to Mohan$_j$?'

B′: Raj=ne$_i$ Mohan=ko$_j$ [$_{DP}$ kaunsii apni$_{i/j}$ kitaab] lautayii?
Raj=ERG Mohan=ACC which self's book returned
'Which one of his$_{i/j}$ books did Raj$_i$ return to Mohan$_j$?'

(16) A: Kyaa$_i$ Raam=ko lagta hai [$_{CP}$ ki Raj=ne$_i$ Mohan=ko$_j$ t_i lautayaa]?
what Ram=ACC thinks be.3SG.PRES that Raj=ERG Mohan=ACC returned
'What does Ram think Raj returned to Mohan?'

B: Apni$_{i/j}$ kitaab.
self's book
'Ram thinks that Raj returned his book to Mohan.'

B′: Raam=ko lagta hai [$_{CP}$ ki Raj=ne$_i$ Mohan=ko$_j$ apni$_{i/j}$ kitaab lautayii].
Ram=ACC thinks be.3SG.PRES that Raj=ERG Mohan=ACC self's book returned
'Ram thinks that Raj returned his book to Mohan.'

The suggested proposal correctly predicts that this should be so. The reflexive-containing *wh*-phrase in (14B) must underlyingly extract to the matrix clause to obtain wide scope, resulting in an unambiguous interpretation of the reflexive. This differs from its ambiguous reading in sluices derived from underlying mono-clausal constructions (15B) and the fragment answer in (16B) where the remnant need not move from its base position, which independently licenses this ambiguous reading. The question as to why movement disambiguates in this way certainly remains open; crucially, however, no ellipsis-specific assumptions regarding movement/reconstruction need be made to handle these facts.

As noted in Chapter 2, there is an important question for BD that Ott and Struckmeier (2016:231) raise: why must the background be expressed or deleted *in toto*, with instances of partial deletion such as (17B′) being impossible? In other words, what enforces the maximality of non-pronunciation from the perspective of discontinuous deletion?

(17) A: Talib=ne kis=ko dekha thaa?
Talib=ERG who=ACC saw be.3SG.PAST.M
'Who did Talib see?'

B: ~~Talib=ne~~ Yara=ko ~~dekha thaa~~.
Talib=ERG Yara=ACC saw be.3SG.PAST.M
'Talib saw Yara.'

B′: #Talib=ne Yara=ko ~~dekha thaa~~.
Talib=ERG Yara=ACC saw be.3SG.PAST.M
Intended: 'Talib saw Yara.'

For now, I adopt the tentative suggestion Ott and Struckmeier (2016) provide, whereby the maximality of PF-deletion may be driven by the need to satisfy Heim's (1991) notion of *Maximize Presupposition!* (henceforth, *MP!*), which requires presupposition marking to be as maximal as possible. To this end, we may assume Sauerland's (2004) presuppositional account of G-marking, as introduced in Chapter 2. Recall that from this vantage point,

it is G-marked material, not its complement, that imposes conditions on the context. *MP!* further requires that G-marking give rise to the strongest possible presupposition, as is the case in (17B) but, importantly, not (17B′). The antecedent question in (17A) establishes that the relevant constituent 'Talib' is G-marked in this context (18).

(18) Talib=ne$_G$ kis=ko dekha$_G$ thaa$_G$
Talib=ERG who=ACC saw be.3SG.PAST.M

The background of the antecedent question in (17) is λx. Talib saw x. The existential closure of this background gives rise to the presupposition *Talib saw someone*. For Speaker B's felicitous response in (17B), G-marking in (18), as determined by the antecedent question, introduces a presupposition which is the existential closure of the background of the elliptical clause, namely, λx. Talib saw x, or *Talib saw someone*. G-marking, as established by the antecedent question, thus effectively renders the constituent 'Talib' to be salient in the context, or discourse-Given.

However, for the infelicitous response in (17B′), when Speaker B pronounces the subject as part of their answer, they are somehow indicating that 'Talib' is not G-marked. This gives rise to the weaker presupposition in the context, namely, λx. someone saw x, or *Someone saw someone*, which *MP!* rules out given the availability of a presuppositionally stronger alternative in the context (*viz.*, *Talib saw someone*). In this way, *MP!* requires that in the face of competing elliptical alternatives, those carrying the stronger presupposition in the context will always be the optimal choice. In other words, *MP!* will always ensure PF-deletion up to non-Givenness/presupposedness (see also Kroll 2020 for a similar conclusion). I leave a proper development of this proposal to future work. Suffice it to say, BD has the potential to provide an explanation for why ellipsis has a strong preference for being maximal. As also discussed in Chapter 2, the question of maximality under ellipsis likewise holds for alternative E-feature accounts, as there is in principle nothing to prevent material within TP from being exempt from deletion (as proposed in Griffiths 2019 and Stigliano 2022).

4.1.2 Recoverability as background matching

Recall from Chapter 2 Merchant's (2001) focus condition that licenses the identity of clausal ellipsis (19), which demands meaning equivalency between the elided clause and its antecedent.

(19) *Focus condition on IP ellipsis:*
A constituent α can be deleted only if α is e-GIVEN.
(Merchant 2001:38)

Once again, "e-GIVENness" requires mutual entailment of the F-closure of the antecedent and elided clauses (20).

(20) *e-GIVENness:*
An expression E counts as e-GIVEN iff E has a salient antecedent A and, modulo ∃-type shifting,
(i) A entails F-clo(E), and
(ii) E entails F-clo(A)
(Merchant 2001:26)

Recoverability from this perspective is thus ensured only if the F-closure of the elided IP and that of the antecedent IP mutually entail one another. This is shown in (21) for the sluice and fragment answer in (21)–(22).

(21) A: Someone was exiled. B: Who ~~was exiled~~?

(22) A: Who was exiled? B: Napoleon ~~was exiled~~.

(23) $\exists x.x$ was exiled $\Longleftrightarrow$ $\exists x.x$ was exiled

We saw that this account explains the presence of morpho-syntactic discrepancies, including tense–finiteness mismatches (24), unlike those which assume strict morpho-syntactic isomorphism (Sag 1976, Williams 1977, Fiengo and May 1994, Chung et al. 1995, among others).

(24) Decorating for the holidays is easy if you know how!

a. $\neq$ …*how [decorating for the holidays]
b. = …how [to decorate for the holidays]
(Merchant 2001:22–23)

Crucially, however, Merchant's (2001) focus condition presupposes clausal ellipsis involves constituent deletion, which raises a number of conceptual and empirical issues for the MDA at the forefront of which is several instances of exceptional movement.

We also saw that such a focus condition fails to capture various 'inheritance-of-content' effects present in elliptical expressions but not necessarily their non-elliptical counterparts, which reflect the fact that remnants of clausal ellipsis obligatorily inherit restrictions imposed on their antecedent (see Chung et al. 1995; Romero 1998; Barros 2013; Weir 2014, 2018; Jacobson 2016; among others). An example of this, familiar from Chapter 2, is (25).

(25) A: Which Brontë sister wrote *Emma*?
B: #Jane Austen, you idiot.
B′: Jane Austen wrote *Emma*, you idiot.
(Weir 2014:66)

Merchant's (2001) notion of e-GIVENness falsely predicts that the fragment answer in (25B) is felicitous, given mutual entailment of the unpronounced clause and that of its antecedent (26).

(26) $\exists x.x$ wrote *Emma* $\Longleftrightarrow$ $\exists x.x$ wrote *Emma*
(Weir 2014:66)

To account for such facts, several alternative proposals (see Krifka 2006; AnderBois 2014; Barros 2014; Weir 2014, 2018; among others) agree that the identity relation should be sensitive to the inquisitive content of the unpronounced clause and its antecedent. This is typically achieved by couching the identity condition in Roberts's (1996, 2012) QUD framework (see Chapter 2), as in (27).

(27) *Background-matching condition on clausal ellipsis*:
Given a question q in the MaxQUD with background Q and a clause α with background A, clausal ellipsis is recoverable in α iff A $\sqsubseteq$ Q.
(Griffiths 2019:10)

The indefinite in (28A) evokes the implicit MaxQUD in (28B), which may be subsequently posed explicitly in its complete or abbreviated form (i.e., a sluice).

(28) A: Franklin admires someone.
B: Who (does Franklin admire)? *MaxQUD of (28A)*

This condition thus requires the background of a remnant under clausal ellipsis be a subset of or equal to the MaxQUD's background to ensure recoverability; this is indeed the case for the sluice variant of (28B), where the background of the sluice and that of its corresponding MaxQUD are equivalent (29).[4]

(29) $[\![$Who does Franklin admire$]\!]$ = QUEST($\langle$PERSON, λx. Franklin admires $x\rangle$)
where PERSON is the alternatives the question word can range over
(*Adapted from* Griffiths 2019)

Fragment answers such as that in (25) were thus ruled out because the background of the elided clause and that of its antecedent do not match, precluding recoverability (30).

(30) *Infelicitous fragment answer in (25):*
Background of question (Q): λx. the Brönte sister who is x wrote *Emma*
Background of answer (A): λx. Jane Austen who is x wrote *Emma*
(Weir 2018:1304)

Importantly, we find analogous effects in H/U, which background matching likewise captures straightforwardly, further supporting the adoption of such an identity condition. This is illustrated in (31),[5] a direct counterpart of (25).

(31) A: *Mughal-e-Azam*=mein kis Deol bhai=ne adakari kii thii?
Mughal-e-Azam=in which Deol brother=ERG act do be.3SG.PST.F
'Which Deol brother acted in *Mughal-e-Azam*?'
B: #Dilip Kumar=ne, bewaqoof.
Dilip Kumar=ERG idiot
'#Dilip Kumar, you idiot.'

[4]Recall from Chapter 2 that the lambda term in such representations represents the background.

[5]For cultural context, the film *Mughal-e-Azam* (1960) stars the late Indian actor Dilip Kumar; neither of the so-called "Deol brothers" of Indian cinema (namely, Bobby and Sunny Deol) act in this film.

B′: Dilip Kumar=ne *Mughal-e-Azam*=mein adakari kii thii, bewaqoof.
Dilip Kumar=ERG Mughal-e-Azam=in act do be.3SG.PST.F idiot
'Dilip Kumar acted in *Mughal-e-Azam*, you idiot.'

Once again, the lack of background matching between the elliptical clause and that of its antecedent blocks recoverability (32).

(32) *Infelicitous fragment answer in (31):*
Background of question (Q): $\lambda x.$ the Deol brother who is x acted in *Mughal-e-Azam*
Background of answer (A): $\lambda x.$ Dilip Kumar who is x acted in *Mughal-e-Azam*
$\therefore$ A $\not\sqsubseteq$ Q

We find similar effects in sluices (33) where background matching of the implicit MaxQUD, which denotes alternatives that are restricted by a 'Pakistani dish', and that of the remnant ensures recoverability (34) (see Barros 2013 for similar facts in English).

(33) Ali=ne koi Pakistani dish=ka ordar diya, lekin Neha=ko nahiiN pataa (ki) kyaa.
Ali=ERG some Pakistani dish=GEN order gave but Neha=ACC NEG know that what
'Ali ordered some Pakistani dish, but Neha doesn't know what.'
= Neha doesn't know what (Pakistani dish) Ali ordered.
≠ Neha doesn't know what (food) Ali ordered.
(*Adapted from* Barros 2013:298)

(34) *Felicitous sluice in (33):*
Background of question (Q): $\lambda x.$ Ali ordered the Pakistani dish that is x
Background of sluice (A): $\lambda x.$ Ali ordered the Pakistani dish that is x
$\therefore$ A $\sqsubseteq$ Q

Continuations such as (35) are also infelicitous in H/U.

(35) A: Aadhi raat=ko kaunsa profesir chala gaya?
half night=ACC which professor walk went
'Which professor left at midnight?'
B: Raam, #lekin vo profesir nahiiN hai.
Ram but he professor NEG be.3SG.PRES
'Ram, #but he's not a professor.'
B′: Raam aadhi raat=ko chala gaya, lekin vo profesir nahiiN hai.
Ram half night=ACC walk went but he professor NEG be.3SG.PRES
'Ram left at midnight, but he's not a professor.'

From the perspective of background matching, since the set of propositions denoted by the elliptical answer in (35) is restricted to alternatives that are 'professor' entities, such a continuation leads to a contradiction, as discussed in Chapter 2 for analogous English data.

Overall, adopting the recoverability condition in (27) not only forgoes the presupposition that clausal ellipsis entails deletion of a syntactic constituent, thereby avoiding issues such as exceptional movement, but doing so also captures the 'inheritance-of-content' effects witnessed in this section. As mentioned earlier, we will see additional evidence from multiple remnants in §4.4, whose strict linearity further substantiate the adopted QUD approach to recoverability, as originally proposed in Kotek and Barros 2018 for Russian.

4.1.3 The infelicity of remnants that $\overline{\text{A}}$-move

We saw in Chapter 3 that existing analyses of clausal ellipsis in H/U follow the MDA, which raises the issue of exceptional movement. In this section, we will see additional facts that demonstrate the infelicity of remnants that $\overline{\text{A}}$-move. These data further buttress a theory of clausal ellipsis in this language that does not presuppose the remnant's movement, such as BD.

The first type of remnant we will consider is reprise/echo remnants (Culicover and Jackendoff 2005, Valmala 2007, Abe and Tancredi 2013, Weir 2014, Griffiths et al. 2023, among others). Reprise/echo configurations are generally used for clarificatory purposes (Griffiths et al. 2023). Speakers employ these to question various aspects of a preceding discourse, including its content, form, phonology, etc. Such constituents in H/U typically appear *in situ*. This is shown below, with the non-elliptical, extracted variants being infelicitous.

(36) A: Mujhe [*inaudible*] pasand hai.
I.DAT like be.3SG.PRES
'I like [*inaudible*].'

B: KYAA??
what
'You like WHAT??'

(37) a. Tumhe KYAA pasand hai??
you.DAT what like be.3SG.PRES
'You like WHAT??'

b. #KYAA$_i$ tumhe t_i pasand hai?
what you.DAT like be.3SG.PRES
Intended: 'You like WHAT?'

(38) A: Mujhe aam pasand haiN.
I.DAT mangoes like be.3PL.PRES
'I like mangoes.'

B: AAM?!
mangoes
'You like MANGOES?!'

(39) a. Tumhe AAM pasand haiN?!
you.DAT mangoes like be.3PL.PRES
'You like MANGOES?!'

b. #AAM$_i$ tumhe t_i pasand haiN?!
mangoes you.DAT like be.3PL.PRES
Intended: 'You like MANGOES?!'

Furthermore, degree modifiers are grammatical ellipsis remnants (40) (see Valmala 2007 for similar facts in English). Note that the fragment answer in (40B) is a felicitous response to both the mono-clausal question in (40A) and the long-distance one in (40A′).

(40) A: Vo naraaz thaa kyaa?
he upset be.3SG.PAST.M Q
'Was he upset?'

A′: Aaliyah=ne kyaa kaha ki vo naraaz thaa kyaa?
Aaliyah=ERG what said that he upset be.3SG.PAST.M Q
'Did Aaliyah say he was upset?'

B: Bahut.
very
'He was very upset./Aaliyah said he was very upset.'

When such modifiers appear in the left periphery in non-elliptical contexts, the outcome is infelicitous (41)–(42).

(41) a. #Bahut$_i$ voh t_i naraaz thaa.
very he upset be.3SG.PAST.M
Intended: 'He was very upset.'

b. #Bahut$_i$ Aaliyah=ne kaha ki voh t_i naraaz thaa.
very Aaliyah said that he upset be.3SG.PAST.M
Intended: 'Aaliyah said that he was very upset.'

Finally, bare non-finite verbs also productively surface as subsententials, as in (42).

(42) A: Amir seb KHAANA ya KHARIIDNA chaahta hai?
Amir apples eat.INF or buy.INF wants be.3SG.PRES
'Does Amir want to EAT or BUY apples?'

B: KHAANA.
eat.INF
'Amir wants to EAT apples.'

$\overline{\text{A}}$-fronting such constituents in non-elliptical contexts likewise results in infelicity (43).

(43) #KHAANA$_i$ Amir seb t_i chaahta hai.
eat.INF Amir apples wants be.3SG.PRES
Intended: 'Amir wants to EAT apples.'

Note that it is not obvious how the proposal herein may account for the availability of infinitive verb fragments whose antecedent is an alternative question, as in (42). To show how this may be accounted for under the

present approach, I adopt the analysis of alternative questions proposed by Biezma and Rawlins (2012), in line with Griffiths's (2019) treatment of analogous remnants in English (44).

(44) A: Should he REVOLVE or TILT the gyroscope?
B: REVOLVE.
(Griffiths 2019:26)

According to Biezma and Rawlins (2012), alternative questions interpretively differ from other types of questions, such as *wh*-interrogatives. Content questions introduce a discourse-new QUD to be resolved by speakers that denotes a principally unlimited set of propositional alternatives. Conversely, alternative questions bear an exhaustive property that restricts the set of propositions they denote to those made salient by the QUD. That is to say, the MaxQUD in (44) necessarily denotes the set {He should revolve the gyroscope, he should tilt the gyroscope} and that of (43) denotes {Amir should eat apples, Amir should buy apples}. I further assume that akin to sluicing and fragment answers, such disjunctive constructions are underlyingly co-ordinated structures, which are often analyzed as involving PF-deletion of isomorphic structure underlying one of the surfacing conjuncts (Sag et al. 1985, de Vries 1992, Beavers and Sag 2004, among others). Following Frazier et al. (2012), I assume such configurations specifically comprise co-ordinated CPs with ellipsis targeting sub-clausal material as in (45)–(46).

(45) [Should he REVOLVE ~~the gyroscope~~] or [~~should he~~ TILT the gyroscope]
(Griffiths 2019:28, fn. 23)

(46) [Amir seb KHAANA ~~chaahta hai~~] ya [~~Amir seb~~ KHARIIDNA chaahta hai]
Amir apples eat.INF wants be.3SG.PRES or Amir apples buy.INF wants be.3SG.PRES

Griffiths (2019:28) explains that under the assumed structured-meaning approach, the focus–background structure of alternative questions may be represented with a choice function as the focus and a λ-abstraction over the choice function as the background. Under such a co-ordinated-CP analysis of alternative questions, either co-ordinand may license clausal ellipsis, bearing a background that matches that of the antecedent question (47)–(48).

(47) QUEST($\langle f_{\text{revolve}}, \lambda f \lambda w$. he should $[f(\{x | x \in D_{\langle e,\langle e,t\rangle\rangle}\})](w)$ the gyroscope in $w\rangle]$) or
QUEST($\langle f_{\text{tilt}}, \lambda f \lambda w$. he should $[f(\{x | x \in D_{\langle e,\langle e,t\rangle\rangle}\})](w)$ the gyroscope in $w\rangle]$)
(Griffiths 2019:28, fn. 23)

(48) QUEST($\langle f_{\text{khaana}}, \lambda f \lambda w$. Amir seb $[f(\{x | x \in D_{\langle e,\langle e,t\rangle\rangle}\})](w)$ chaahta hai in $w\rangle]$) ya
QUEST($\langle f_{\text{khariidna}}, \lambda f \lambda w$. Amir seb $[f(\{x | x \in D_{\langle e,\langle e,t\rangle\rangle}\})](w)$ chaahta hai in $w\rangle]$)
(*Adapted from* Griffiths 2019:28, fn. 23)

Thus, the fragment answer in (42B) and (44B) is permissible since clausal ellipsis is recoverable from the antecedent, which represents an explicit alternative question. Importantly, one need not make recourse to movement to achieve the desired result.

As discussed in Chapter 3, while it is possible for the constituents discussed in this section to front to a clause-

initial position in non-elliptical contexts, such fronting seems to produce unwanted interpretations of the underlying forms. We saw there that fronted constituents are consistently interpreted as discourse-Given material, or receive a presuppositional interpretation (Kidwai 2000:6), irrespective of whether said fronting constitutes topicalization or scrambling (see also Butt and King 1996).[6] By contrast, elliptical remnants typically represent discourse-new information. The latter claim is further supported by the fact that subsententials are unable to surface with the topic marker *=to*, introduced in Chapter 3. In non-elliptical contexts, constituents that carry new-information focus cannot appear with this particle (49-a), while those that are discourse-Given can (49-b) (Deo 2022).

(49) QUD: 'Who is in the house?'

a. #[niśa]$_F$=to ghar=mein hai
niśa.NOM=TOP house=in be.PRS.3SG
'Niśa is in the house.'

b. ghar=mein=to [niśa]$_F$ hai
house=in=TOP niśa be.PRS.3SG
'Niśa is in the house.'

(Deo 2022:723)

Being a particle that generally attaches to background material, we naturally do not expect *=to* to attach to discourse-new constituents, as in (49-a) (Deo 2022:723). Importantly, if clausal ellipsis truly involves BD, as maintained here, we predict that constituents bearing this particle should not be able to function as felicitous subsententials, and this prediction is borne out:

(50) A: Kis=ko$_i$ tum=ne kaha [$_{CP}$ ki Ali t_j bahut pyaar karta hai]?
who=ACC you=ERG said that Ali a lot love does be.3SG.PRES
'Who did you say that Ali loves a lot?'

B: #Nur=ko=to.
Noor=ACC=TOP
Intended: 'I said that Ali loves Noor a lot.'

Importantly, Deo (2022) notes that there are specific contexts in which the *=to* marker can appear on discourse-new material in non-elliptical environments. Consider the following context she provides. Anu, Bilal, and Niśa are all in different parts of the house. Anu goes to Bilal and asks the following: 'Where is Niśa?'. Bilal may then respond with the following non-elliptical response:

(51) niśa ghar=mein=to hai.
niśa.NOM house=in=TOP be.PRS.3SG
'Niśa is in the house. (Duh.)'

(Deo 2022:731)

[6] Again, I adopt the terminology "scrambling" as used in the relevant literature. While we saw evidence in Chapter 3 from Kidwai 2000 that casts doubt on treating "scrambling" as topicalization, it is not obvious to me how this type of $\overline{\text{A}}$-movement differs from so-called "focus fronting".

Unlike what we saw in (49) where =*to* only attaches to a host that is a part of the propositional background, in (51), the particle cliticizes to a host that contributes new information (i.e., it is not part of the background). Deo (2022) explains that such configurations differ prosodically and interpretively from their counterparts in (49). The topic-marked constituent in (51) bears a unique 'scoop-like' intonation (Deo 2022:721). Furthermore, in cases such as (51), the speaker specifically implies that the posed question is resolvable in the context from their perspective since information regarding Niśa's whereabouts is accessible from the broader context. Topic-marking in such instances is used for the speaker to convey that there is no reason for a discrepancy between the speaker and addressee to hold for such a question to be asked in the first place. One may thus follow up such a response with continuations such as 'Have you tried looking around?' or 'What do you mean/what are you talking about?'. Crucially, BD predicts that in such environments, the =*to* host should serve as a felicitous elliptical remnant (cf. (50)), and this prediction is borne out. With the provided context, Bilal may optionally respond with the following fragment answer:

(52) ~~niśa~~ ghar=mein=to ~~hai~~. (Kyaa matlab?)
niśa.NOM house=in=TOP be.PRS.3SG what mean
'Niśa is in the house. (Duh.) (What do you mean?)'

Overall, there is good reason to believe that elliptical remnants such as those introduced in this section are *in situ* underlyingly, as suggested by BD. On a par what we saw for the facts in Chapter 3, an alternative MDA account would necessarily have to assume such subsententials are derived via exceptional movement, rendering the proposal offered herein more parsimonious.

4.2 Island effects are epiphenomenal

If it is indeed the case that remnants do not move unless independently required, how do we account for the presence of putative locality effects observed in a subset of fragment answers in this language? Recall from Chapter 3 that different types of elliptical constructions seem to showcase asymmetries in island (in-)sensitivity, a damning fact for the MDA which predicts widespread island effects. Similarly, it is not obvious how BD can account for island sensitivity under ellipsis when we see it. To this end, I adopt the proposal offered by Griffiths (2019), who attempts to derive apparent island effects in clausal ellipsis without assuming movement of the remnant and with the background-matching condition stated in (27), on a par with the proposed BD. For the island in-sensitivity of sluices, Griffiths (2019) assumes an island evasion approach (Merchant 2001, Barros et al. 2014, among others). This view rejects the notion of island repair and alternatively proposes that subsententials with an island-bound correlate are derived via an underlying meaning-equivalent short source (53).[7]

[7] As Merchant (2001) notes, such sources are used to evade "propositional islands", or islands that correspond to propositional domains (e.g., relative clauses).

(53) They hired someone who speaks a Balkan language – guess which!
Possible sources

a. which$_i$ ~~they speak t_i~~ *non-isomorphic*
b. which$_i$ ~~it is t_i that they speak~~ *non-isomorphic*
c. *which$_i$ ~~it is that they hired [$_{\text{ISLAND}}$ someone who speak t_i]~~ *non-isomorphic*
d. *which$_i$ ~~they hired [$_{\text{ISLAND}}$ someone who speaks t_i]~~ *isomorphic*
(Griffiths 2019:5)

In other words, when a subsentential displays no island effects, the source of the remnant is a non-isomorphic one whose background nonetheless matches that of its MaxQUD, ensuring recoverability. I suggest that this is the case for H/U sluices, as illustrated in (54).

(54) a. %mE Minaa=kii yah baat maantaa huN ki Raam kisi=se pyaar-kartaa hE, par
I Mina-GEN this word believe be that Ram someone=with love-doing be.3SG.PRS but
mujhe nahiiN pataa (ki) kis=se.
me.DAT not known that who=with
'I believe Mina's claim that Ram loves someone, but I don't know who.'

b. …lekin mujhe nahiiN pataa (ki) ~~Raam~~ kis=se ~~pyaar-kartaa hE~~.
but I NEG know that Ram who=with love-doing be.3SG.PRS
'…but I don't know who Ram loves.'

Recall from Chapter 3 that truncated clefts/copular clauses are not appropriate elliptical sources in H/U, as such structures do not license the morphological case that the remnant must bear to match that of its correlate. I thus assume that such configurations do not underlie sluices in this language.

To achieve this, I adopt Barros's (2014) SCM (55), introduced in Chapter 2.

(55) *Stubborn case matching:*
In sluicing, given a correlate, C, and a remnant, R, if C is a case-bearing category, R and C must have the same case morphology.
(Barros 2014:62)

Following Barros (2014), I assume that structural isomorphism follows from the need to satisfy SCM. Recall that this condition thus permits non-isomorphic elliptical sources iff such sources license the requisite overt case morphology, eliminating truncated clefts as possible sources for H/U since these only license unmarked nominative

case.[8] Conversely, the short source in (54-b) is allowed as it licenses the desired post-positional case marker =*se*.

To ensure recoverability, I assume such short sources take the clausal island, and not the larger structure containing it, as the antecedent. In other words, the implicit MaxQUD evoked by the indefinite correlate in the antecedent in (54) is as follows:

(56) Raam kis=se pyaar-kartaa hE?
Ram who=with love-doing be.3SG.PRS
'Who does Ram love?'

Importantly, Griffiths (2019) posits that QUDs, which are necessary in computing recoverability (see §4.1.2), are syntactically derived and invokes the conjecture in (57) to ensure that only grammatical questions may enter the pushdown stack.

(57) *QUD-syntax correspondence conjecture:*
Regardless of whether they are explicit or implicit, the questions in the MaxQUD from which the meaning of clausal ellipsis is recovered are always syntactically derived.
(Griffiths 2019:11)

The question in (56) may serve as the implicit MaxQUD of (54-a) as it is a grammatical question that, according to (57), may enter the pushdown stack. The background of this question (58) is furthermore equivalent to that of the remnant in (54-b), ensuring recoverability.

(58) λx. Ram loves x

Thus, from this perspective, the source of an elliptical remnant may be structurally non-isomorphic to its antecedent so long as said source licenses the requisite case morphology and the background of the remnant matches that of the MaxQUD to ensure recoverability. This accounts for why sluices are generally not island sensitive, as they are amenable to short sources that meet these conditions.

Griffiths (2019) argues that putative island effects under clausal ellipsis are not a consequence of illicit $\overline{\text{A}}$-movement of the remnant out of an underlying island, as is typically assumed. Rather, such effects are really due to failure to recover unspoken content, as the MaxQUD required to license recoverability is an island-violating (i.e., ungrammatical) one, flouting (57). I adopt this solution and likewise suggest that the island sensitivity of contrastive fragment answers in H/U that we saw in Chapter 3, repeated in (59)–(61) below, is epiphenomenal and ultimately caused by

[8]Note that though (truncated) clefts/copular clauses are not possible elliptical sources for such instances of clausal ellipsis in H/U, they may very well be possible sources for other natural languages/contexts where morphological case matching is not at stake. BD thus has a handle on psuedo-sluicing in Japanese (see Chapter 2), as well as those elliptical constructions in English that must underlyingly consist of a cleft, seen in Chapter 2 and repeated in (i).

(i) Sally has a new boyfriend, guess who it is!
(cf. #...guess who she has!)
(Barros 2014:7)

the need to satisfy the assumed identity condition.

(59) *Relative clause island:*

A: Safiina=ko [voh aadmi [$_{RC}$ jo TALIB=KO pasand hai]] accha lagta hai?
Safina=DAT that man REL Talib=DAT like be.3SG.PRES like seem be.3SG.PRES
'Does Safina like the same man that TALIB likes?'

B: *nahiiN, KHALID=KO.
NEG Khalid=ACC
Intended: 'No, Safina likes the same man that KHALID likes.'

B′: nahiiN, Safiina=ko [voh aadmi [$_{RC}$ jo KHALID=KO pasand hai]] accha lagta
NEG Safina=DAT that man REL Khalid=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'No, Safina likes the same man that KHALID likes.'

(60) *Adjunct island:*

A: Fahd ghar gayaa [kyunki ALI us=ke saath baat nahiiN kii]?
Fahd home went because Ali him=GEN with talk NEG did
'Did Fahd go home because ALI didn't talk to him?'

B: *nahiiN, ASHOK.
NEG Ashok
Intended: 'No, Fahd went home because ASHOK didn't talk to him.'

B′: nahiiN, Fahd ghar gayaa [kyunki ASHOK us=ke saath baat nahiiN kii].
NEG Fahd home went because Ashok him=GEN with talk NEG did
'No, Fahd went home because ASHOK didn't talk to him.'

(61) *Complex (NP) island:*

A: Umbrin=ko [yeh baat [$_{CP}$ ki Shazia MITHAI khaaye-gii]] pataa hai?
Umbrin=ACC this fact that Shazia sweets eat-FUT.F know be.3SG.PRES
'Does Umbrin know the fact that Shazia will eat SWEETS?'

B: *nahiiN, KHEER.
NEG rice pudding
Intended: 'No, Umbrin knows the fact that Shazia will eat RICE PUDDING.'

B′: nahiiN, Umbrin=ko [yeh baat ki Shazia KHEER khaaye-gii] pataa hai.
NEG Umbrin=ACC this fact that Shazia rice pudding eat-FUT.F know be.3SG.PRES
'No, Umbrin knows the fact that Shazia will eat RICE PUDDING.'

Recall that whether *in situ* or *wh*-extracted, H/U content questions systematically display island effects in non-elliptical contexts (see Chapter 3) (Mahajan 1990; Dayal 1996; Malhotra 2009, 2010, 2011; Bhattacharya and Simpson 2012; Manetta 2013; Gribanova and Manetta 2016; among others). It thus follows that the corresponding questions required for background matching will be island sensitive (i.e., ungrammatical), preventing their inclusion in the QUD stack and blocking recoverability. The examples below show that whether *in situ* or extracted, the corresponding *wh*-question of the illicit fragments above, that is, the implicit MaxQUD their correlates evoke, are

indeed ungrammatical.

(62) *Relative clause island:*

a. *Safina=ko [$_{DP}$ voh aadmi [$_{RC}$ jo kis rishtedaar=ko pasand hai]] accha lagta
Safina=DAT that man REL who.OBL relative=DAT like be.3SG.PRES like seem
hai?
be.3SG.PRES
Intended: 'Which relative *x*: Safina likes the same man that *x* likes'

b. *[Kis rishtedaar=ko]$_i$ Safina=ko [$_{DP}$ voh aadmi [$_{RC}$ jo t_i pasand hai]] accha lagta
who.OBL relative=DAT Safina=DAT that man REL like be.3SG.PRES like seem
hai?
be.3SG.PRES
Intended: 'Which relative *x*: Safina likes the same man that *x* likes'

(63) *Adjunct island:*

a. *Fahd ghar gayaa [$_{CP}$ kyunki kaunsaa aadmii us=ke saath baat nahiiN kii]?
Fahd home went because which man him=GEN with talk NEG did
Intended: 'Which man *x*: Fahd went home because *x* didn't talk to him'

b. *[Kaunsaa aadmii]$_i$ Fahd ghar gayaa [$_{CP}$ kyunki t_i us=ke saath baat nahiiN kii]?
which man Fahd home went because him=GEN with talk NEG did
Intended: 'Which man *x*: Fahd went home because *x* didn't talk to him'

(64) *Complex NP island:*

a. *Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia kyaa khaaye-gii]] pataa hai?
Umbrin=ACC this fact that Shazia what eat-FUT.F know be.3SG.PRES
Intended: 'Which thing *x*: Umbrin knows the fact that Shazia will eat *x*'

b. *[Kyaa]$_i$ Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia t_i khaaye-gii]] pataa hai?
what Umbrin=ACC this fact that Shazia eat-FUT.F know be.3SG.PRES
Intended: 'Which thing *x*: Umbrin knows the fact that Shazia will eat *x*'

The only questions that could license the identity of the superficially island-sensitive fragment answers above are their genuinely island-sensitive implicit questions, disallowing short sources unlike sluicing. In this way, apparent island effects in such fragment answers are superficial, being induced by the island sensitivity of their correlating *wh*-questions that are required to ensure recoverability.

In Chapter 3, we also saw that languages like English show an asymmetry with respect to island effects among the different types of fragment answers. For instance, contrastive fragments are island sensitive and non-contrastive ones are not. To capture this, Griffiths (2019) invokes the *corrective QUD constraint* (henceforth, CQC) in (65).

(65) *Corrective QUD constraint*:
Let q be a question and p be a proposition such that $[\![q]\!]$ and $\texttt{alt}([\![p]\!])$ are identical, where $[\![p]\!]^{o} \in [\![p]\!]^{f} \setminus \texttt{alt}([\![p]\!])$. After p is denied entry into the Common Ground, the MaxQUD must be set the singleton of questions $\{q\}$.
(Griffiths 2019:21)

According to this condition, when speakers reject a proposition, either by uttering a negative expression like *no* or via extralinguistic means, this triggers the CQC, which has the following consequence: the MaxQUD is necessarily restricted to the corresponding question of the antecedent. To show how this works, reconsider the contrastive and non-contrastive fragments in English below from Chapter 3.

(66) *Context*: There is a rumor going around that one of the teaching assistants was fired.
A: [$_{\text{ISLAND}}$ The rumor that SALLY was fired] is true.
B: *No, JUDY. *Contrastive*

(67) A: [$_{\text{ISLAND}}$ The rumour that one of the teaching assistants was fired] is true.
B: Yeah, JUDY.
(Griffiths 2019:22) *Non-contrastive*

Griffiths (2019) suggests that the reason why contrastive fragments in English are infelicitous is because they trigger the CQC, which clashes with syntactic correspondence and precludes recoverability. Non-contrastive fragments, on the other hand, are not subject to the CQC and, consequently, permit non-isomorphic sources whose background matches that of the MaxQUD, ensuring recoverability. This is also the case for sluicing, as mentioned above. Thus, for the illicit fragment in (66), when Speaker B utters *no*, the CQC is active, and the MaxQUD is restricted to the following isomorphic question:

(68) *[Which teaching assistant]$_i$ is [$_{\text{ISLAND}}$ the rumor that t_i was fired] true, then?
(Griffiths 2019:23)

Although (68) satisfies the CQC, being equivalent to $\texttt{alt}([\![(66A)]\!])$, it is ungrammatical and thus cannot enter the QUD stack, blocking recoverability. The implicit question in (69-a), derived from the non-isomorphic source in (69-b), is a suitable licensor for the non-contrastive fragment in (67B), whence the latter's grammaticality. However, the question in (69-a) cannot be used to license the contrastive fragment in (66B), as the meaning of this question violates the CQC. That is, $[\![(69\text{-a})]\!] = \{x \text{ was fired} : x \in \mathrm{D}_e\}$, while $\texttt{alt}([\![(66A)]\!]) = \{\text{the rumor that } x \text{ was fired is true} : x\ \mathrm{D}_e\}$ (Griffiths 2019:22–23).

(69) a. Which teaching assistant was fired, then?
b. [JUDY ~~was fired~~].

The H/U facts seem to slightly differ, as we saw in Chapter 3. Non-contrastive fragment answers, akin to their

contrastive counterparts, generally appear to be island sensitive (70)–(72).

(70) *Relative clause island:*

A: Safiina=ko [voh aadmi [$_{RC}$ jo kisi=ek rishtedaar=ko pasand hai]] accha lagta
Safina=DAT that man REL some=one relative=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'Safina likes the same man that some relative likes.'

B: *haaN, Khalid=ko.
yes Khalid=DAT
'Yes, Safina likes the same man that Khalid likes.'

B′: haaN, Safina=ko [voh aadmi [$_{RC}$ jo Khalid=ko pasand hai]] accha lagta
yes Safina=DAT that man REL Khalid=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'Yes, Safina likes the same man that Khalid likes.'

(71) *Adjunct island:*

A: Fahd ghar gayaa [kyunki kisi=ek aadmii us=ke saath baat nahiiN kii].
Fahd home went because some=one man him=GEN with talk NEG did
'Fahd went home because some man didn't talk to him.'

B: *haaN, Ashok.
yes Ashok
'Yes, Fahd went home because Ashok didn't talk to him.'

B′: haaN, Fahd ghar gayaa [kyunki Ashok us=ke saath baat nahiiN kii].
yes Fahd home went because Aaliyah him=GEN with talk NEG did
'Yes, Fahd went home because Ashok didn't talk to him.'

(72) *Complex (NP) island:*

A: Umbrin=ko [yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=ACC this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: *haaN, kheer.
yes rice pudding
'Yes, Umbrin knows the fact that Shazia will eat rice pudding.'

B′: haaN, Umbrin=ko [yeh baat [$_{CP}$ ki Shazia kheer khaaye-gii]] pataa hai.
yes Umbrin=ACC this fact that Shazia kheer eat-FUT.F know be.3SG.PRES
'Yes, Umbrin knows the fact that Shazia will eat kheer.'

In other words, unlike in English, H/U fragment answers appear to be generally island sensitive, irrespective of whether they are contrastive or not. To account for this within Griffiths's (2019) framework, I propose a relaxed version of the CQC, stated in (73), which I will refer to as the *Fragment-answer QUD constraint* (henceforth, FAQC).

(73) *Fragment-answer QUD constraint*:
Let q be a question and p be a proposition such that $[\![q]\!]$ and $\texttt{alt}([\![p]\!])$ are identical, where $[\![p]\!]^{o} \in [\![p]\!]^{f} \setminus \texttt{alt}([\![p]\!])$. The MaxQUD must be set the singleton of questions $\{q\}$.
(*Adapted from* Griffiths 2019)

Unlike the CQC, the FAQC is always active and reduces the MaxQUD of a fragment answer to the corresponding question of the antecedent, as this seems to be the only possible question that can license fragment answers. In other words, the MaxQUDs for the ungrammatical contrastive fragment answers above are identical to those in (62)–(64) for the observed ungrammatical non-contrastive fragment answers. This proposal raises the following important questions that I will have to leave for future work. The first asks why some languages exhibit an asymmetry between contrastive vs. non-contrastive fragment answers, while others do not (i.e., why the CQC is operative in languages like English while the FAQC is active in those such as H/U).[9] Perhaps, in this regard, the affirmative particle *haaN* somehow differs pragmatically from its English counterpart *yes*, though it is not at all obvious how or why this should be the case. The second asks why sluices but not fragment answers are amenable to short sources. While it is true that the FAQC only applies to fragment answers, thereby allowing sluices to have non-isomorphic sources that license overt case morphology and whose background matches that of the MaxQUD, it is admittedly only a stipulation; it therefore does not explain why sluicing seems to readily permit island-evading sources but fragment answers do not. These are important issues that remain unresolved.

Interestingly, the ungrammatical (contrastive/non-contrastive) fragment answers in (59) and (70) above may be rescued. First, its possible that the degraded quality of the contrastive fragment answer in (59) is due to ambiguity of what constituent is being contrasted in the sentence, namely, the modified head noun *voh aadmi* 'that man' or the island-bound correlate *Talib=ko* 'Talib=dat'. The fact that such fragments are grammatical when the modified head noun and the island-bound correlate are clearly distinguished (74) seems to support this suggestion.

(74) *Relative clause island:*

A: Safiina=ko [voh teevee sho [$_{RC}$ jo us=kii kisi=ek dost=ko pasand hai]]
Safina=dat that T.V. show rel her=gen some=one friend=dat like be.3sg.pres
accha lagta hai?
like seem be.3sg.pres
'Does Safina like the same T.V. show that one of her friends likes?'

[9]It is worth noting that H/U appears to be an outlier with respect to the island sensitivity of non-contrastive fragment answers. For instance, such subsententials exhibit no island sensitivity in Turkish (i).

(i) A: Hasan [birşey-I gezdir-en bir çocuk]-la konuş-muş.
Hasan something-acc walk-nom one child-com talk-evd
'Apparently, Hasan spoke with a child that walked something.'
B: Evet, köpeğ-i.
yes dog-acc
'Yes, a dog.'
(Griffiths 2019:30)

B: nahiiN, us=kii kisi=ek BEHEN=KO.
NEG her=GEN some=ONE sister=DAT
'No, Safina likes the same T.V. show that one of her SISTERS likes.'

It thus seems that the statement above needs to be qualified: fragment answers can be anaphoric to short sources, whereas sluices must be. The important question as to why this is so still remains open.

Similarly, the non-contrastive fragment answer in (70) becomes grammatical when it functions as an answer to an inserted sluiced question, as demonstrated in (75).[10]

(75) A: Safiina=ko [voh aadmi [$_{RC}$ jo kisi=ek rishtedaar=ko pasand hai]] accha lagta
Safina=DAT that man REL some=one relative=DAT like be.3SG.PRES like seem
hai.
be.3SG.PRES
'Safina likes the same man that some relative likes.'

B: Kaunse rishtedaar=ko?
which relative=DAT
'Which relative?'

A: Khalid=ko.
Khalid=DAT
'Khalid.'

Recall from Chapter 3 that to account for asymmetries in island sensitivity, Merchant (2001) adopts a PF theory of islands. According to this solution, intermediate traces left in the wake of island-evacuating remnants are deemed defective. Ellipsis is said to repair island effects so long as such defective traces are PF-deleted, as is the case for sluicing but not fragment answers, given their different landing sites. Barros (2012) argues against this solution using sentences such as the following, which is an analogue of (75):

(76) A: They hired someone who speaks a Balkan language.

B: Which one?

A: Albanian.

(Barros 2012:6)

According to Merchant's (2001) PF-theory of islands, the fragment answer *Albanian* in (76) should be ungrammatical, unlike the intervening sluice, since its derivation is assumed to leave behind a defective trace that is not marked for PF-deletion, contrary to fact. Although Barros (2012) does not provide an explanation for why such sluiced insertions improve fragment answers whose correlates are island-bound, I suspect that such remnants appear to be island in-sensitive because the inserted sluice functions as a short source antecedent (on a par with sluicing in general) for the subsequent fragment answer in (76A), as shown in (77).

[10] I thank Rajesh Bhatt (p.c.) for pointing this out to me.

(77) B: ~~Voh aadmi~~ kaunse rishtedaar=ko ~~pasand karta hai~~?
that man which relative=DAT like does be.3SG.PRES
'Which relative does the man like?'

A: ~~Voh aadmi~~ Khalid=ko ~~pasand karta hai~~.
that man Khalid=DAT like does be.3SG.PRES
'The man likes Khalid.'

Since sluices are amenable to non-island-violating sources, the isomorphic source of the subsequent fragment answer likewise does not contain an island, whence its grammaticality. Crucially, the fact that manipulating the antecedent and inserting a sluice that is anaphoric to a short source improves such fragment answers strongly supports the claim that the degraded quality of such subsententials is not due to island-violating movement of the remnant but some other syntax-external factor. I leave the important question as to whether the other island types observed above for H/U may likewise be rescued.

We also saw in Chapter 3 that (contrastive/non-contrastive) fragment answers whose correlates are bound by co-ordinate islands do not show locality effects (78)–(79), despite the fact that such constructions are otherwise island sensitive.

(78) *Co-ordinated NP islands:*

A: Ali kal [$_{DP}$ gosht aur ek aur chiiz] khariide-gaa.
Ali tomorrow beef and some other thing buy-FUT.M
'Ali will buy beef and some other thing tomorrow.'

B: haaN, baklava.
yes baklava
'Yes, Ali will buy beef and baklava tomorrow.'

B′: haaN, Ali kal [$_{DP}$ gosht aur baklava] khariide-gaa.
yes Ali tomorrow beef and baklava buy-FUT.M
'Yes, Ali will buy beef and baklava tomorrow.'

(79) A: Ali kal [$_{DP}$ gosht aur MURGHII] khariide-gaa?
Ali tomorrow beef and chicken buy-FUT.M
'Will Ali buy beef and CHICKEN tomorrow?'

B: nahiiN, BAKLAVA.
NEG baklava
'No, Ali will buy beef and BAKLAVA tomorrow.'

B′: nahiiN, Ali kal [$_{DP}$ gosht aur BAKLAVA] khariide-gaa.
NEG Ali tomorrow beef and baklava buy-FUT.M
'No, Ali will buy beef and BAKLAVA tomorrow.'

To account for this, I assume that the antecedent of such expressions consist of co-ordinated NPs as shown below for (78A) and (79A).

(80) a. Ali kal [$_{DP}$ [$_{NP}$ gosht] aur [$_{NP}$ ek aur chiiz]] khariide-gaa.
Ali tomorrow beef and some other thing buy-FUT.M
'Ali will buy beef and some other thing tomorrow.'

b. Ali kal [$_{DP}$ [$_{NP}$ gosht] aur [$_{NP}$ [MURGHII]$_{F}$] khariide-gaa?
Ali tomorrow beef and chicken buy-FUT.M
'Ali will buy beef and CHICKEN tomorrow.'

Furthermore, I suggest that the fragment answers in (78B) and (79B) bear similar NP co-ordination, with PF-deletion up to the focus, as shown below.

(81) a. ~~Ali kal~~ [$_{DP}$ [$_{NP}$ ~~gosht~~] ~~aur~~ [$_{NP}$ [baklava]$_{F}$] ~~khariide-gaa~~.
Ali tomorrow beef and baklava buy-FUT.M
'Ali will buy beef and baklava tomorrow.'

b. ~~Ali kal~~ [$_{DP}$ [$_{NP}$ ~~gosht~~] ~~aur~~ [$_{NP}$ [BAKLAVA]$_{F}$] ~~khariide-gaa~~.
Ali tomorrow beef and chicken buy-FUT.M
'Ali will buy beef and CHICKEN tomorrow.'

Importantly, within the QUD approach to ellipsis identity, it has been argued that each conjunct of a co-ordinated structure represents an individual, partial answer to the overarching MaxQUD (Hartmann et al. 2021, among others). For (78) and (79), this overarching question may be as follows:

(82) Ali kal kyaa khariide-gaa?
Ali tomorrow what buy-FUT.M
'What will Ali buy tomorrow?'

This question, being grammatical, it may enter the QUD stack. I assume that this MaxQUD is the implicit question evoked by the antecedent in (78) and is a meaning-equivalent alternative to that denoted by the explicit QUD in (79). In both instances, the fragment answer functions as an individual focus alternative that belongs to the same set as that denoted by the antecedent conjunct (83).

(83) ⟦What will Ali buy tomorrow⟧ = {Ali will buy beef tomorrow, Ali will buy chicken tomorrow …}

Thus, both conjuncts collectively resolve the MaxQUD in (82). The background of this QUD and that of the fragment answers above are equivalent and shown in (84), satisfying background matching and thereby licensing recoverability.

(84) λx. Ali will buy x tomorrow

Finally, BD further captures the availability of reprise sluices and fragment answers in H/U (85)–(86).

(85) A: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=ACC this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: KAUN?
who.NOM

B′: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki KAUN kuch khaaye-gaa]] pataa hai?
Umbrin=ACC this fact that Shazia baklava eat-FUT.M know be.3SG.PRES
'Umbrin knows the fact that WHO will eat something?'

(86) A: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki Shazia kuch khaaye-gii]] pataa hai.
Umbrin=ACC this fact that Shazia something eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that Shazia will eat something.'

B: SHAZIA?
Shazia

B′: Umbrin=ko [$_{DP}$ yeh baat [$_{CP}$ ki SHAZIA kuch khaaye-gii]] pataa hai?
Umbrin=ACC this fact that Shazia baklava eat-FUT.F know be.3SG.PRES
'Umbrin knows the fact that SHAZIA will eat something?'

To this end, I adopt Griffiths et al.'s (2023) generalization in (87).

(87) *Licensing according to function generalization*:
Standard [remnants] must be licensed by standard questions, whereas clarificatory (i.e., reprise) [remnants] must be licensed by reprise questions.
(Griffiths et al. 2023:182)

As discussed in the previous section, since reprise remnants differ in function from their non-reprise counterparts in that they specifically perform a clarificatory purpose, they must be licensed by a corresponding (implicit/explicit) reprise question. Thus, the MaxQUD for the antecedents in (85)–(86) is equivalent to the non-elliptical reprise question in (85B′); crucially, this implicit question is equivalent to the reprise sluice in (85B) and the reprise fragment answer in (86B), ensuring recoverability.

An additional benefit of (87) is that it has the ability to capture cross-linguistic differences in the availability of reprise remnants. That is, a reprise short form will only be acceptable if its corresponding reprise question is. As noted in Chapter 3, and repeated in (88) below, Hungarian reprise questions are generally island sensitive; that reprise fragment answers with an island-bound correlate are ungrammatical (89) is thus a corollary of this generalization.

(88) a. Gabi azért mérges, [$_{ISLAND}$ mert Töhötöm meghívta].
Gabi that.CAU angry because Töhötöm PRT.invite.PAST.3SG
'Gabi is angry because Töhötöm invited her.' (Hungarian)

b. *Kicsoda$_i$ mérges azért Gabi, [$_{ISLAND}$ mert t_i meghívta]?
who angry that.CAU Gabi because PRT.invite.PAST.3SG
Intended: 'WHO is Gabi angry because he did not invite her?'
(Griffiths et al. 2023:173)

(89) A: Kidobtam [ISLAND egy BPA-t tartalmazó] palackot.
away.throw.PST.1PL a BPA=ACC containing bottle.ACC
'I threw away a bottle containing BPA.'

B: *BPA-t?
BPA=ACC
'BPA?'

BD thus not only has the potential to account for the island in-sensitivity of reprise remnants but further captures cross-linguistic differences in this regard. Not only is it unclear how the alternative MDA would be able to account for the island in-sensitivity of such remnants relative to non-reprise remnants, but it is also not obvious from this alternative vantage point how we may capture observed differences in the (un)availability of such remnants across languages.

4.2.1 Interim summary

In this section, I argued that asymmetries in putative island effects under H/U clausal ellipsis are epiphenomenal, adopting the proposal in Griffiths 2019. To account for the island in-sensitivity of sluices, I adopt the island evasion approach, proposing that the source of such elliptical forms consists of a morpho-syntactically non-isomorphic clause that licenses overt case morphology and whose background matches that of its antecedent MaxQUD to ensure recoverability. For those fragment answers that are ungrammatical, I suggest that the source of such subsententials is limited to the corresponding question of the antecedent clause, which, being an island-violating question, cannot enter the QUD stack, precluding recoverability. This gives rise to the illusion of locality effects in fragment answers.

As noted, there are important questions that remain open for this account. The first is why we find cross-linguistic differences regarding the island (in-)sensitivity of non-contrastive fragment answers in some instances. The second asks why those fragment answers with island-bound correlates that are grammatical can be anaphoric to short sources while sluices must be. Despite these remaining issues, it is important to stress that this solution fares better than alternative MDA accounts, which falsely predict ubiquitous island effects under clausal ellipsis,[11] as discussed in the previous chapter. From the MDA's perspective, it is not obvious at all why we should find asymmetries within and across island types if the remnant must move in the narrow syntax due to TP deletion. While the issues above hold for the present proposal, the facts corroborate the general claim made here that putative island effects in clausal ellipsis should not be blamed on the syntax of the remnant itself but on factors extraneous to the narrow syntax (i.e., interpretation).

[11]Note that the MDA is in principle compatible with the island-evasion approach assumed here (see Merchant 2001). BD nevertheless fares better given that it does not suffer from the other conceptual and empirical issues the MDA raises.

4.3 Whence P-retention?

If PF-deletion occurs freely and maximally, why do we find obligatory P-retention in elliptical contexts for H/U? We saw in Chapter 3 that the MDA handles such facts by assuming the adposition in such languages that resist P-stranding under ellipsis 'pied-pipes' along with its complement to the clausal edge exactly as in overt syntax, according to Merchant's (2001) *Preposition-stranding generalization* (henceforth, PSG).[12] The problem with this explanation of course is that it presupposes the remnant moves in the first place, raising the issues discussed in the previous chapter. In this section, we will first review Griffiths's (2019) *in situ* analysis of the PSG. We will see that this explanation is conceptually dubious and thus insufficient. The alternative perspective, which I ultimately adopt, suggests that P-retention may be due to PF-deletion targeting prosodic constituents in the PF component that correspond with the clausal background. From this view, P-retention is no more than a consequence of the P^0 encliticizing to the lexical remnant.

4.3.1 A structured-meaning account

To capture the PSG under an *in situ* approach to clausal ellipsis, Griffiths's (2019) adopts a version of Cable's (2010) Q-based theory of content questions and pied-piping, where remnants are c-commanded by an *f*-particle (or "Q-particle" in Cable's (2010) original terms). In the case of *wh*-questions, f^0 selects its focused complement; in fragment answers or "assertoric responses", *fP* adjoins to a focus-marked phrase (i.e., the remnant). Cable (2010) discusses various restrictions on the syntactic position of *f*P, including its inability to intervene selection by functional heads. This is captured by the condition in (90).

(90) *fP-intervention condition*:
An *fP* cannot intervene between a functional head X and a phrase selected by X.
(Cable 2010:57)

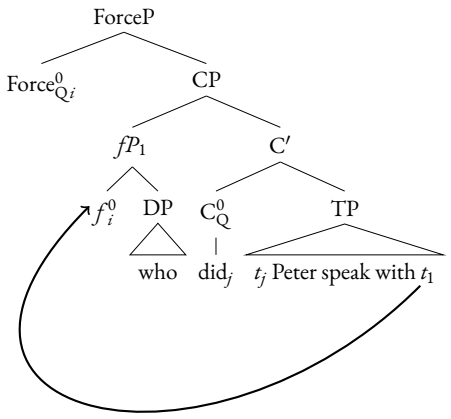
Adopting this framework, Griffiths (2019:17) suggests that the P^0 in P-stranding languages, such as English, is lexical; thus, *fP* in such languages is not an intervener with respect to (90), and P-stranding is thus permitted. Conversely, in non-P-stranding languages, such as H/U, the P^0 is functional and so is susceptible to the condition in (90), enforcing P-retention. This, in addition to the background-matching condition in §4.1.2, which assumes a structured-meaning approach to questions and foci, as well as syntactic well-formedness, is what derives the PSG. To illustrate, the following trees[13] represent Griffiths's (2019) analysis of P-omission in (91B).

(91) A: Who did Peter speak with?
B: Mary.
(Merchant 2004:685)

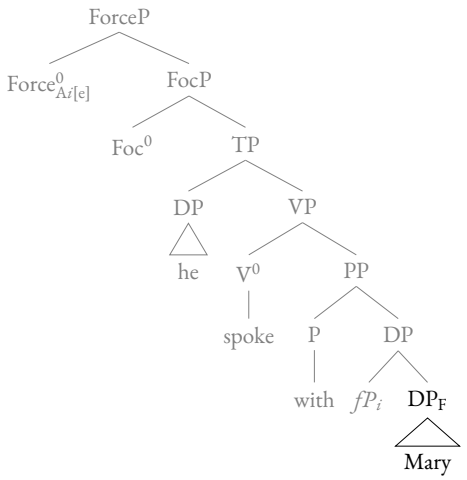
[12] Though see Almeida and Yoshida 2007 for counter-evidence that problematizes this generalization.

[13] Once again, for ease of visualization, unpronounced material is grayed out here.

(92) *Tree for (91A)*



(93) *Tree for (91B)*



Note that in (92), the f^0 selects the *wh*-phrase as its complement and that English independently has overt *wh*-movement; thus, $\overline{\text{A}}$-movement of *fP* to Spec,CP is triggered. The explicit query represented in (92) can function as the MaxQUD for the fragment answer in (91B), represented in (93), since it is grammatical. Additionally, the structured meaning of both is equivalent (94), ensuring recoverability.

(94) a. $\langle f$, Peter spoke with $f(x)\rangle$ *Structured meaning of MaxQUD*

b. $\langle f$, Peter spoke with $f(x)\rangle$ *Structured meaning of (91B)*

(Griffiths 2019:18)

This can be contrasted with H/U, a non-P-stranding language whose post-positions under this analysis are thus considered to be functional heads. The obligatory P-retention in this language is assumed to be a consequence of the intervention condition in (90), whereby *fP* cannot occur between the P^0 and its DP complement. Rather, in such non-P-stranding languages, *fP* is adjoined to the *wh*-phrase or a phrase that contains it (i.e., PP). To illustrate, consider the H/U P-retained remnant in (95B).

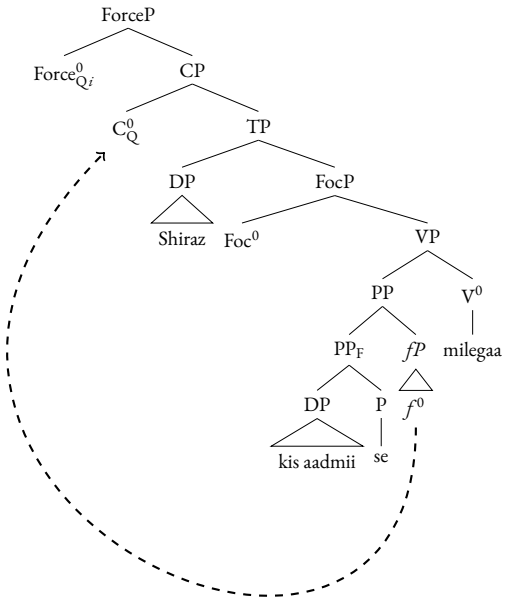
(95) A: Shiraz kis aadmii=se milegaa?
Shiraz which man=with meet.3SG.FUT.M
'Which man will Shiraz meet with?'

B: Ali*(=se).
Ali=with
'Shiraz will meet with Ali.'

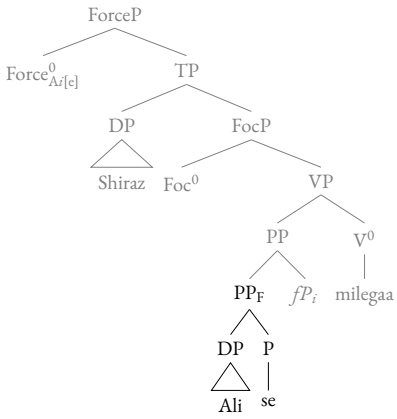
B′: Shiraz Ali=se milegaa.
Shiraz=ERG Ali=with meet.3SG.FUT.M
'Shiraz will meet with Ali.'

The trees below represent Griffiths's (2019) analysis of the exchange in (95).

(96) *Tree for (95A)*



(97) *Tree for (95B)*



In (96), the *f*-particle undergoes covert head movement to C_Q, leaving the *wh*-phrase *in situ*. The question in (96) serves as the explicit MaxQUD, since it is of course a grammatical question. The structured meaning of this question also matches that of the P-retained fragment in (93B), ensuring recoverability:

(98) a. ⟨*f*, Shiraz *f* (*x*=se) milegaa⟩ *Structured meaning of MaxQUD*

b. ⟨*f*, Shiraz *f* (*x*=se) milegaa⟩ *Structured meaning of P-retained (95B)*

'Which man *x*: Shiraz will meet (with *x*)'

For the ungrammatical bare-NP option in (95B), *fP* adjoins to the NP *Ali*, thereby intervening between the latter and the P^0 that selects it. Furthermore, this ungrammatical variant does not share the structured meaning of the MaxQUD in (98):

(99) a. *[$_{\text{ForceP}}$ ~~Shiraz~~ [Ali ~~[*fP*]]~~ ~~=se milegaa~~

Intended: 'Shiraz spoke with Neha.'

b. ⟨*f*, Shiraz *f* (*x*) =se milegaa⟩ *Structured meaning of non-P-retained (95B)*

'Which man *x*: Shiraz will meet with (*x*)'

Thus, the unavailability of the non-P-retained variant of (95B) is a consequence of the *fP-intervention condition* being violated from this perspective. This further affects the structured meaning of the remnant, preventing it from matching with that of its MaxQUD and thereby precluding recoverability.

While Griffiths's (2019) account seems to handle the P-retention of fragment answers derived from underlying mono-clausal questions in this language, it is not at all clear how it would simultaneously capture the P-retention of fragment answers derived from underlying long-distance questions, which independently require overt

wh-extraction (100).

(100) A: Kis aadmii=se$_i$ Simran=ne kaha [$_{CP}$ ki Shiraz t_i milegaa]?
which man=with Simran=ERG said that Shiraz meet.3SG.FUT.M
'Which man did Simran say that Shiraz will meet with?'

B: Ali*(=se).
Neha=GEN with
'Simran said that Shiraz will meet with Ali.'

B′: Simran=ne kaha [$_{CP}$ ki Shiraz Ali=se milegaa].
Simran=ERG said that Shiraz Ali=with meet.3SG.FUT.M
'Simran said that Shiraz will meet with Ali.'

A crucial consequence of *fP* being analyzed as adjoining to PP in "*wh*-in situ" languages like H/U is that the *f*-particle need not raise to C_Q (as schematized in (96)), accounting for why the *wh*-phrase surfaces in its canonical position in mono-clausal questions. But then what of (100)? To answer this, one may assume that unlike in mono-clausal questions, in long-distance questions, the *fP*-containing PP must overtly raise to the left periphery in order to obtain matrix scope of its embedded *wh*-phrase, as is independently required of such questions. An alternative explanation, inspired by Cable's (2010:86) original proposal, would be to assume that H/U PPs are in fact lexical (*pace* Griffiths 2019) and are thus not subject to the *fP*-intervention condition, being on a par with English but differing from the latter in that movement of *fP* is covert. For mono-clausal questions then, *fP* covertly raises to the left periphery with the base copy being pronounced, and for long-distance questions, such movement must occur overtly (since embedded *wh*-phrases generally cannot LF-raise to the matrix clause).

Furthermore, we saw in Chapter 3 that P-omission is possible for complex PPs as long as the genitive marker on the remnant is retained (101).

(101) A: kitaab kis=ke paas hai?
book who=GEN near be.3SG.PRES
'Who has the/a book?'

B: Shiraz*(=ke) (paas).
Shiraz=GEN near
'Shiraz has the/a book.'

B′: kitaab Shiraz=ke paas hai.
book Shiraz=GEN near be.3SG.PRES
'Shiraz has the/a book.'

It is unclear how this approach would be able to account for the availability of P-omission in such contexts while simultaneously capturing the obligatory P-retention observed in configurations such as (95).

Finally, Griffiths's (2019) account of P-retention has a conceptual edge over the MDA in that it does not presuppose movement of the remnant, once again avoiding the issues raised in the previous chapter. It does so, however, at the non-trivial cost of reducing all PPs within and across languages to either functional or lexical categories, which, as the literature shows (see Rauh 1993), is an overly simple dichotomy. Thus, an alternative explanation of P-retention in clausal ellipsis is necessary.

4.3.2 P-retention as clitics

I believe that there is a different and far more straightforward explanation for P-retention under clausal ellipsis in this language that is compatible with BD. The solution I propose suggests that what actually gets deleted in the PF component is some prosodic constituent that maps to morpho-syntactic material corresponding with the clausal background, thereby surfacing as deletion of a (non-syntactic) constituent. This solution follows Bruening's (2015) *in situ* analysis of non-constituent co-ordination in English (102).

(102) I claimed that I was a spy to impress John and an astronaut to impress Bill.
(Sailor and Thoms 2014:362)

In (102), what appears to be co-ordinated is *a spy to impress John* and *an astronaut to impress Bill*. However, the NP in each conjunct does not form a constituent with the rationale clause (*viz.*, *to impress John* and *to impress Bill*, respectively), hence co-ordination of supposed non-constituents. However, as Bruening (2015) notes, most syntactic analyses of such forms, including the MDA, treat these strings as co-ordination of larger categories, namely, CPs. The MDA further proposes that the pronounced material of the second conjunct undergoes leftward movement followed by TP deletion in the PF component (103), akin to its treatment of sluicing and fragment answers.

(103) I claimed that I was a spy to impress John and [$_{CP}$ [$_{DP_i}$ an astronaut] [$_{CP_j}$ to impress Bill] [$_{TP}$ ~~I claimed that I was t_i t_j~~]]
(Bruening 2015:2)

Bruening (2015) argues against a TP-deletion analysis of such co-ordinated expressions given various false empirical predictions it makes. He alternatively proposes non-pronunciation affects prosodic constituents that may or may not map to syntactic ones, thereby allowing the remnant to remain *in situ* in the narrow syntax.

Bruening's (2015) analysis assumes prosody plays a crucial role in deriving such elliptical expressions, a claim that is independently supported by systematic stress patterns in English. For example, the sentence in (102) is only felicitous with heavy stress on *spy* in the first conjunct and on *astronaut* in the second (104). Stressing other elements in the sentence leads to a garden path effect and forces a re-parsing of the sentence.

(104) I claimed that I was a SPY to impress John and an AStronaut to impress Bill.
(Bruening 2015:4)

He offers constraints that require PF-deletion of a prosodic constituent excluding its "head", which is defined as the most prominent, main-stressed constituent of a phrase. In English, prominence typically falls on the right edge of a prosodic constituent (Selkirk 2011:38). Using *Match theory* (Selkirk 2011), which links morpho-syntactic constituents to prosodic ones, Bruening (2015) proposes that PF-deletion in sentences such as (102) systematically targets the left edge of a prosodic unit. More precisely, non-pronunciation is said to affect the first phonological phrase (ϕ) of the second conjunct, with prosodic heads appearing at the right edge of this phrase. The head itself is assumed to form a prosodic word, since this is the constituent a phonological phrase immediately dominates

according to the *Prosodic hierarchy* (Selkirk 2011), as shown in (105).[14]

(105) (ϕ claimed that I was (a SPY)) (to impress John)
and
(ϕ ~~claimed that I was~~ (an AStronaut))) (to impress Bill)
(Bruening 2015:4)

In (105), the strings *to impress John* and *to impress Bill* form individual phonological phrases (ϕ); the latter remain unaffected, since PF-deletion is suggested to target the first ϕ of the second conjunct in a sequence of such phonological phrases.[15] Thus, from this perspective, English "non-constituent" co-ordination does not involve deletion of a syntactic constituent but of a phonological phrase to the exclusion of its head, allowing remnants to remain *in situ* in the narrow syntax.

I suggest that P-retention under H/U clausal ellipsis (106) may be treated similarly.

(106) A: Shiraz kis aadmii=se milegaa?
Shiraz which man=with meet.3SG.FUT.M
'Which man will Shiraz meet with?'

[14] The prosodic representations Bruening (2015) provides leave the co-ordinator *and*, which seems to be grouped with the second conjunct, unparsed. To account for this, he offers two solutions. The first is to assume recursive phonological phrases (à la Selkirk 2011), with ellipsis targeting the inner ϕ under identity with an antecedent ϕ (i).

(i) (ϕ claimed that I was (a SPY)) (to impress John) (ϕ and (ϕ ~~claimed that I was~~ (an AStronaut))) (to impress Bill)
(Bruening 2015:4)

The second option is to assume the co-ordinator indeed starts out unparsed but combines with the second ϕ after ellipsis (Bruening 2015:4).

[15] Bruening (2015:4–8) discusses a number of empirical facts that strongly corroborate the claim that it is only the *first* in a sequence of phonological phrases in the second conjunct that is consistently deleted. One such piece of evidence comes from the inability to P-strand with non-initial remnants (i) (as first noted in Dowty 1988).

(i) a. Mary caught a fish with a spear and a rabbit with a snare.
b. *Mary caught a fish with a spear and a rabbit a snare.
(Bruening 2015:7)

As shown in (ii), Bruening's (2015) analysis correctly predicts that ellipsis cannot target the preposition in such instances, as it is indeed not the first ϕ of the second conjunct (ii).

(ii) (ϕ ~~caught~~ (a rabbit))(with a snare)
(Bruening 2015:7)

By contrast, such facts remain a puzzle for a movement analysis which forces the PP to escape the ellipsis site, given that P-stranding is otherwise permissible in such contexts (iii).

(iii) What did she catch a rabbit with?
(Bruening 2015:7)

B: Ali*(=se).
Ali=with
'Shiraz will meet with Ali.'

B′: Shiraz Ali=se milegaa.
Shiraz=ERG Ali=with meet.3SG.FUT.M
'Shiraz will meet with Ali.'

There is a general consensus in the literature that PPs in this language are best categorized as clitics (see Mohanan 1994, Butt and King 2004, among others). In non-elliptical contexts, such functional material is morpho-phonologically dependent on a surrounding lexical host. In these cases, such P heads cannot be separated from their lexical complement under movement (107) and in all-new sentences, typically do not bear a pitch accent of their own, surfacing as interpolations between immediately preceding (H*) and following (L) pitch accents (Harnsberger 1994, 1999; Féry et al. 2016).

(107) a. *Kis aadmii Simran=ne kaha [$_{CP}$ ki Shiraz t_i se milegaa]?
which man Simran=ERG said that Shiraz with meet.3SG.FUT.M
Intended: 'Which man did Simran say that Shiraz will meet with?'

b. Kis aadmii=se Simran=ne kaha [$_{CP}$ ki Shiraz t_i milegaa]?
which man=with Simran=ERG said that Shiraz meet.3SG.FUT.M
'Which man did Simran say that Shiraz will meet with?'

Thus, following Bruening (2015), I suggest PF-deletion targets prosodic constituents in the PF component, not syntactic ones. These in turn correspond with the clausal background. From this perspective, P-retention in elliptical contexts is nothing more than a consequence of the post-position encliticizing to the surviving lexical remnant, thereby being exempt from PF-deletion. This is schematized in (108) for (106B), where each lexical item forms its own prosodic word (ω), which I take to be the prosodic constituent that ultimately PF-deletes.

(108) (ϕ(ω ~~Shiraz~~))$_G$ (ϕ(ω Ali se)) (ϕ(ω ~~milegaa~~))$_G$
Shiraz Ali with meet.3SG.FUT.M

This may be contrasted with complex PPs such as that in (109) which independently may or may not bear a pitch accent of their own (see Harnsberger 1994, 1999).

(109) A: kitaab kis=ke paas hai?
book who=GEN near be.3SG.PRES
'Who has the/a book?'

B: Shiraz*(=ke) (paas).
Shiraz=GEN near
'Shiraz has the/a book.'

B′: kitaab Shiraz=ke paas hai.
book Shiraz=GEN near be.3SG.PRES
'Shiraz has the/a book.'

Thus, I suggest that their optional presence in elliptical constructions such as (109) is reduced to the optional en-

cliticization of P^0 to its G-marked lexical host (110).[16]

(110) a. $(\phi(_\omega$ ~~kitaab~~$))_G$ $(\phi(_\omega$ Shiraz ke)) $(\phi(_\omega$ ~~paas~~$))_G$ $(\phi(_\omega$ ~~hai~~$))_G$
book Shiraz GEN near be.3SG.PRES

b. $(\phi(_\omega$ ~~kitaab~~$))_G$ $(\phi(_\omega$ Shiraz ke paas)) $(\phi(_\omega$ ~~hai~~$))_G$
book Shiraz GEN near be.3SG.PRES

Recall that an exception to this behaviour of P-omission with complex PPs is that in (111).

(111) A: yeh kitaab kis=ke liye hai?
this book who=GEN for be.3SG.PRES
'Who is this book for?'

B: yeh kitaab Shiraz=ke liye hai.
this book Shiraz=GEN for be.3SG.PRES
'This book is for Shiraz.'

B′: Shiraz*(=ke) *(liye).
Shiraz=GEN for
'This book is for Shiraz.'

It is not entirely clear why the P^0 in (111) must be retained, whereas that in (110) need not. I suspect that this may have something to do with the different syllable structures of the two types of P^0s, though I leave a proper explanation of this to future work.

4.3.3 Is *ki* also a clitic?

One may wonder whether such an explanation of P-retention may be extended to account for the optional complementizer-like element *ki* in embedded sluices and fragment answers to boot. Note that *ki* only appears in embedded contexts and cannot head matrix clauses (as also seen in Chapter 3):

(112) (*Ki) Raj=ne Neha=ko dekha thaa.
KI Raj=ERG Neha=ACC saw be.3SG.PAST.M
Intended: 'Raj saw Neha.'

Similar to morphologically simple PPs, *ki* is a stress-less functional particle that requires a surrounding lexical host to attach to.[17] In other words, akin to other monosyllabic functional content (Harnsberger 1994, 1999; Féry et al. 2016), *ki* generally requires a stressed host that either precedes or follows it and may either be preceded or followed by an intonational phrase boundary (i.e., a prosodic break). Thus, the optionality of *ki* in elliptical contexts (113) may *prima facie* be a consequence of its ambiguous prosodic parsing.

[16] As the bracketing in (110) shows, I follow standard assumptions (see Mohanan 1994 and Butt and King 1996, among others) and likewise treat case markers in this language as post-positional clitics.

[17] See Selkirk 1996 for similar remarks on other types of monosyllabic functional material in English.

(113) Neha=ne kisi=ko dekha thaa, lekin mujhe nahiiN pata (ki) ~~Neha=ne~~ kis=ko
Neha=ERG someone=ACC saw be.3SG.PAST.M but I.DAT NEG know KI Neha=ERG who=ACC
~~dekha thaa~~.
saw be.3SG.PAST.M
'Neha saw someone, but I don't know who Neha saw.'

As suggested below, when *ki* surfaces, it arguably cliticizes to the lexically preceding host (*viz*., the embedding verb), and when it deletes, *ki* procliticizes to a following lexical host in the ellipsis site (here, the embedded subject).[18]

(114) a. …($_{\omega}$ pata ki) … b. …($_{\omega}$ ki Neha ne) …

What renders this solution dubious, however, is that it seems to imply that the optionality of *ki* is somehow contingent on clausal ellipsis, predicting that it should always appear in non-elliptical contexts. While there is indeed a strong preference for *ki* to head subordinate configurations, this is not always obligatory, as the following grammatical sentence illustrates.[19]

(115) Ali=ne kaha [$_{CP}$ (ki) Neha=ne kisi=ko dekha thaa].
Ali=ERG said KI Neha=ERG someone=ACC saw be.3SG.PAST.M
'Ali said Neha saw someone.'

An alternative speculation, which I will adopt here for now, would be the tentative proposal offered by Manetta (2010, 2011). She treats *ki* not as a *bona fide* complementizer inserted in the syntactic component but as a morphological marker of the phase edge boundary that is inserted post-syntactically (as noted in Chapter 3). This is argued to be the case given that *ki* in H/U generally does not appear to be selected by the verb (it heads both interrogative and non-interrogative embedded clauses), it has no specific semantic content, and it is transparent to selection (Manetta 2011:139). Of course, from this perspective, the optional presence of *ki* in elliptical contexts seems to be

[18]For instances where the embedded remnant is clause-initial (i) and *ki* does not surface, it is possible that the remnant scrambles to the independently preferred pre-verbal position (see Chapter 3), a movement that is entirely compatible with the proposal herein, so that *ki* is adjacent to the ellipsis site and thus may procliticize to PF-deleted material (ii).

(i) Kisi=ne Neha=ko dekha thaa, lekin mujhe nahiiN pata (ki) kis=ne ~~Neha=ko~~ ~~dekha~~
someone=ERG Neha=ACC saw be.3SG.PAST.M but I.DAT NEG know KI who=ERG Neha=ACC saw
~~thaa~~.
be.3SG.PAST.M
'Someone saw Neha, but I don't know who saw Neha.'

(ii) … lekin mujhe nahiiN pata (ki) ~~Neha=ko~~ kis=ne ~~dekha thaa~~.
but I.DAT NEG know KI Neha=ACC who=ERG saw be.3SG.PAST.M
'…but I don't know who saw Neha.'

[19]*Ki* is also optional in scope-marking constructions; however, as also mentioned in Chapter 3, the syntax/semantics of such constructions is a subject of intense debate (see Lutz et al. 2000), and it is not at all clear whether the linearly second clause is truly embedded. Nevertheless, in such configurations, *ki* need not head the secondary CP.

(i) Ali=ne kyaa kaha [$_{CP}$ (ki) Neha=ne kis=ko dekha thaa]?
Ali=ERG what said KI Neha=ERG someone=ACC saw be.3SG.PAST.M
'Who did Ali say Neha saw?'

no more a problem for the MDA as it is for BD; in either case, clausal ellipsis (whether it be viewed as deletion of a syntactic constituent or not) applies prior to *ki*-insertion.

I believe this treatment of *ki* as being inserted post-syntactically is extendable to account for the optionality of 'differential-object marking' (henceforth, DOM) in H/U (Baker 2021, among others) which, in both elliptical and non-elliptical contexts, alternates with unmarked nominative case (116)–(117) with no syntactic/semantic effect.[20]

(116) Ali kitaab(=ko) paRegaa.
Ali book=DOM read.FUT.MASC
'Ali will read the book.'

(117) A: Ali kyaa paRegaa?
Ali what read.FUT.MASC
'What will Ali read?'

B: Kitaab(=ko).
book=DOM
'Ali will read the book.'

This suggestion is on a par with Wood et al.'s (2020) analysis of accusative–dative alternations on the subject of the Icelandic verb *langa* 'want' (118)–(119).

(118) {Mig / Mér} langar að fara.
me.ACC / me.DAT want to go
'I want to go.' (Icelandic)
(Wood et al. 2020:405)

(119) A: Mig langar að fara.
me.ACC want to go
'I want to go.'
B: Mig / Mér / *Ég líka.
me.ACC / me.DAT / I.NOM too
'Me too.'
(Wood et al. 2020:415)

They argue that this alternation is a purely morphological one, not a syntactic/semantic one. Dative case is treated as underlyingly accusative case that, relevant for our purposes, is assigned post-syntactically.

This solution predicts that any case alternation that results in an interpretive difference should not be possible in elliptical contexts, and this prediction is borne out (see also Kidwai 2020). For instance, certain intransitives (e.g., *khaans* 'cough', *chilla* 'yell', etc.) license both nominative and ergative case (120).

(120) a. Omar / Omar=ne chillaya.
Omar.NOM / Omar=ERG yell.PFVM.SG
'Omar yelled.'

[20] DOM seems to be conditioned by specificity (appearing only on specific arguments), which I take to be pragmatically conditioned (Groenendijk and Stokhof 1980). The question as to why DOM is generally interpreted in this way remains open.

b. Omar / #Omar=ne ghalti=se chillaya.
Omar.NOM / Omar=ERG mistake=INS yell.PFVM.SG
'Omar yelled by mistake.'
(Kidwai 2000:52)

Generally, H/U is a split-ergative language, where ergativity is conditioned by aspect; in perfective contexts, the subject is typically ergative-marked, and in non-perfective ones, it bears unmarked nominative case. Crucially, the facts in (120) seem to suggest that ergative marking is further semantically conditioned, systematically surfacing on subjects that are interpreted as having volitionality or conscious control over the event. Unmarked nominative subjects are conversely typically associated with inadvertent acts (Tuite et al. 1985, Kachru 1987, Mohanan 1994, Davison 1999, Bashir 1999, Butt and King 2004, Anand and Nevins 2006, Keine 2007, among others). This accounts for why ergative-marked arguments are incompatible with adverbials such as *ghalti=se* 'by mistake', whereas their nominative counterparts are not (120-b). Crucially, as illustrated below, said case alternation is impermissible in elliptical configurations.

(121) a. Koi khaansa tha lekin mujhe pata nahi kaun / someone.NOM cough.PFV.M.SG be.PST.M.SG but I.OBL.DAT know.PFV.M.SG not who.NOM / *kis=ne.
who.OBL=ERG
'Someone coughed but I don't know who.'

b. Kisi=ne khaansa tha lekin mujhe pata nahi someone.OBL=ERG cough.PFV.M.SG be.PST.M.SG but I.OBL.DAT know.PFV.M.SG not *kaun / kis=ne.
who.NOM / who.OBL=ERG
'Someone coughed but I don't know who.'
(Kidwai 2020:52–53)

We might expect to find an analogous pattern in Icelandic, and this is indeed the case. Wood et al. (2020) note that in non-elliptical contexts, accusative–dative alternations on objects (122) in this language have semantic consequences: dative objects are interpreted as having benefited from the event, whereas accusative ones are interpreted as being physically affected/hurt.

(122) Hún klóraði mig / mér.
she.NOM scratched me.ACC / me.DAT
'She scratched me.' (Icelandic)

As expected, such case alternations are disallowed in elliptical contexts:

(123) A: Hún klóraði mig.
she.NOM scratched me.ACC
'She scratched me.'

B: Mig / *Ég / *Mér líka.
me.ACC / I.NOM / me.DAT too
'Me too.'
(Wood et al. 2020:418)

It thus seems that any time a case alternation in non-elliptical contexts induces an interpretive effect, such case alternations will not be possible under ellipsis. Wood et al.'s (2020) generalization in (124) captures this pattern.

(124) *Case-mismatching generalization:*
Case mismatching is possible when the verb in the antecedent clause may assign more than one case without any syntactic or semantic difference.
(Wood et al. 2020:424)

Therefore, it appears that a post-syntactic analysis of morpho-syntactic material that bear no interpretive effects, such as the complementizer-like element *ki* and DOM, is plausible. The impermissibility of case alternations which seem to be conditioned by meaning is a welcome result for this perspective: we correctly predict that ellipsis should be sensitive to such morpho-syntactic material which alter the interpretation of the antecedent–elliptical clause. I leave a proper formal analysis of case alternations in elliptical contexts such as those above to future work.[21]

One problem for such an account of *ki*, which reduces its optionality under clausal ellipsis to optional post-syntactic insertion, is that it has no obvious explanation for why *ki* is obligatory with CP remnants such as (125-b). (For similar *that*-retention in English CP remnants, see Merchant 2004.)

(125) a. Ali=ne kyaa kaha?
Ali=ERG what said
'What did Ali say?'

b. *(Ki) Neha=ne kisi=ko dekha thaa.
KI Neha=ERG someone=ACC saw be.3SG.PAST.M
'Ali said that Neha saw someone.'

[21] One formulation may be as follows. It is possible that the alternatives denoted by the MaxQUD are not only contextually restricted but make explicit reference to the particular indefinite (à la Onea and Ott 2022). Here, alternatives may be contextually restricted by the thematic roles associated with the relevant case on the nominal. When ergative case is used, the referent of the NP is interpreted as an agent, and when unmarked nominative is used, the referent of the NP is interpreted as an experiencer. Thus, as suggested below, an unmarked nominative remnant, as in (121-a), would have a background such as that in (i-b), which crucially matches the background of its MaxQUD (i-a); conversely, an ergative-marked remnant would have a background such as (i-b), which differs from its MaxQUD in terms of theta roles.

(i) a. $[\![\text{MaxQUD of (121-a)}]\!] = \lambda x : x(i).\ \textit{cough}(x) \wedge \textit{experiencer}(x)$
b. $[\![\text{NOM sluice}]\!] = \lambda x : x(i).\ \textit{cough}(x) \wedge \textit{experiencer}(x)$
c. $[\![\text{ERG sluice}]\!] = \lambda x : x(i).\ \textit{cough}(x) \wedge \textit{agent}(x)$

Mismatches in such cases are thus tantamount to alternations in thematic roles, which ultimately affect the backgrounds of the correlates–remnants, precluding recoverability. Nominative–DOM alternations are expected since such case alternations do not result in a difference of theta roles: in both instances, the referent of the NP is a theme. Scope parallelism in clausal ellipsis (Chung et al. 1995) further enforces a specific interpretation of remnants that receive unmarked nominative case.

c. ~~Ali=ne~~ ~~kaha~~ [$_{CP}$ ki Neha=ne kisi=ko dekha thaa].
Ali=ERG said KI Neha=ERG someone=ACC saw be.3SG.PAST.M
'Ali said that Neha saw someone.'

It is not obvious why *ki* would be obligatory with such CP fragments but not in sluices such as (113) from this perspective. It is possible that for such CP remnants, *ki* becomes obligatory in order to unambiguously mark the CP remnant as an embedded clause, precluding a non-synonymous parse as a non-elliptical matrix clause (126).

(126) Neha=ne kisi=ko dekha thaa.
Neha=ERG someone=ACC saw be.3SG.PAST.M
'Neha saw someone.'

Note that this speculation is entirely compatible with the claim that *ki* is in and of itself a meaningless element; its obligatory presence in CP remnants may nonetheless be due to its disambiguating effect, on the plausible auxiliary assumption that speakers do not posit elided structure in the absence of surface indications of its presence.

4.3.4 Interim summary

Overall, BD has the ability to capture the obligatory P-retention witnessed in elliptical constructions such as sluicing and fragment answers in languages like H/U without having to assume movement of the remnant, as the MDA does purely because of its assumption that PF-deletion targets a syntactic constituent. Thus, *contra* standard assumptions, P-retention under clausal ellipsis does not necessarily evidence underlying $\overline{\text{A}}$-movement (*pace* the PSG). As argued here for H/U, the obligatory presence of morphologically simple PPs in elliptical contexts is merely a by-product of their independent behaviour as clitics, being morpho-phonologically dependent on the surviving lexical host (i.e., the remnant). This implies that what is deleted in the PF component is a prosodic constituent that corresponds with the clausal background. P-omission for those complex PPs which generally may or may not bear a pitch accent of their own is reduced to their optional encliticization to their preceding G-marked lexical host. I further propose that the optionality of the complementizer-like element *ki* under clausal ellipsis cannot similarly be accounted for by assuming it encliticizes to the embedding verb when it surfaces and procliticizes to lexical material in the ellipsis site when it does not. Rather, I adopt the tentative suggestion that *ki* is a particle that is optionally inserted post-syntactically (à la Manetta 2010, 2011), ultimately posing no more of a problem for the MDA as for BD. I speculate that this post-syntactic treatment of *ki* is extendable to the optionality of DOM under clausal ellipsis. These suggestions require further exploration in future work.

4.4 Deriving the strict linearity of multiple remnants

In addition to sluices and fragment answers involving a single remnant, elliptical constructions comprising multiple remnants are productive in H/U (as mentioned in Chapter 3). For instance, the example in (127) demonstrates the phenomenon of 'multiple sluicing', which consists of more than one *wh*-remnant (see also Takahashi 1994; Nishigauchi 1998; Merchant 2001; Hoyt and Teodorescu 2012; Lasnik 2014; Kotek and Barros 2018; Cortés Rodríguez

2022; Abels and Dayal 2023; among others).

(127) A: Koi khushi=se kisi=ko chuum raha thaa.
someone.NOM happiness=with someone=ACC kiss PROG be.3SG.PAST.M
'Someone was happily kissing someone.'

B: Kaun kis=ko?
who.NOM who=ACC
'Who was happily kissing whom?'

B′: *Kis=ko kaun?
who=ACC who.NOM
Intended: 'Who was happily kissing whom?'

The facts in (127) show that the linear order of multiple *wh*-remnants in this language is fixed, stubbornly reflecting that of their correlates in the antecedent clause. By contrast, the non-elliptical counterparts of Speaker B's questions above display no such strict linearity, permitting a free word order (128).

(128) B: Kaun khushi=se kis=ko chuum raha thaa?
who.NOM happiness=with who=ACC kiss PROG be.3SG.PAST.M

B: Kis=ko khushi=se kaun chuum raha thaa?
who=ACC happiness=with who.NOM kiss PROG be.3SG.PAST.M
Both: 'Who was happily kissing whom?'

Wh-remnants born in underlying embedded clauses likewise mirror the linear order of their correlates (129).

(129) A: Mohan=ne kaha [$_{CP}$ ki koi khushi=se kisi=ko chuum raha
Mohan=ERG said that someone.NOM happiness=with someone=ACC kiss PROG
thaa].
be.3SG.PAST.M
'Mohan said that someone was happily kissing someone.'

B: Kaun kis=ko?
who.NOM who=ACC
'Who did Mohan say was happily kissing whom?'

B′: *Kis=ko kaun?
who=ACC who.NOM
Intended: 'Who did Mohan say was happily kissing whom?'

Once again, this is so despite the fact that the non-elliptical counterparts of Speaker B's response permits a flexible linear order of *wh*-phrases (130).

(130) B: Kaun$_i$ kis=ko$_j$ Mohan=ne kaha [$_{CP}$ ki t_i khushi=se t_j chuum raha
who.NOM who=ACC Mohan=ERG said that happiness=with kiss PROG
thaa]?
be.3SG.PAST.M

B: Kis=ko$_j$ kaun$_i$ Mohan=ne kaha [$_{CP}$ ki t_i khushi=se t_j chuum raha
who=ACC who.NOM Mohan=ERG said that happiness=with kiss PROG
thaa]?
be.3SG.PAST.M
Both: 'Who did Mohan say was happily kissing whom?'

This tendency for multiple *wh*-remnants to stubbornly reflect the word order of their correlates in the antecedent clause is not unique to H/U. For instance, we find similar effects in Russian, a multiple *wh*-fronting language that generally does not display superiority effects (see Grebenyova 2009 and Kotek and Barros 2018), as exemplified below.

(131) *Superiority in Russian sluicing: Correlates must match remnants*

a. Každyj priglasil kogo-to na tanec, no ja ne pomnju kto$_1$ kogo$_2$.
everyone invited someone to dance but I not remember who whom

b. *… no ja ne pomnju kogo$_2$ kto$_1$.
but I not remember whom who
'Everyone invited someone to a dance, but I don't know {who whom/*whom who}.'
(Kotek and Barros 2018:785)

Kotek and Barros (2018) argue that rather than being a consequence of some derivational constraint on movement to derive the elliptical variants, such strict linearity is due to a constraint on ellipsis recoverability that is sensitive to inquisitive content. They adopt a QUD-equivalence condition akin to the assumed *Background-matching condition* in §4.1.2, according to which the meaning of unspoken content is recovered iff ⟦QUD⟧ = ⟦Sluiced Q⟧ (p. 794–795). Kotek and Barros (2018) note that multiple *wh*-questions under a pair-list reading carry the following two presuppositions that are sensitive to the hierarchical order of *wh*-phrases (see also Comorovski 1989; Dayal 1996, 2002; Kotek 2019; among others):

(132) a. *Exhaustivity*:
Every member of a higher *wh*-phrase's restriction is paired with a member of the lower *wh*-phrase's restriction.

b. *Uniqueness*:
No member of the higher *wh*-phrase's restriction may be paired with more than one member of the lower *wh*-phrase's restriction.
(Kotek and Barros 2018:796)

Kotek and Barros (2018) assume that pair-list multiple *wh*-questions, such as those above, consist of a 'family of questions', or sub-questions (Roberts 1996, 2012; Büring 2003; Kotek 2019; among others) and that the hierarchy of *wh*-phrases in such questions affects their overall meaning. The presuppositions carried by such questions exhaustively map entities denoted by the higher *wh*-phrase onto the lower one in a one-to-one relation. In other words, the presuppositions in (132) force the structurally higher *wh*-phrase to function as a 'sorting key' for the structurally lower one; thus, the meaning of the sub-questions are restricted by the highest *wh*-phrase. As a result,

constructions comprising a canonical linear order represent distinct question meanings from those that do not, enforcing the strict linear order of remnants under ellipsis (Kotek and Barros 2018:798–796).[22]

To illustrate this for the H/U sluices above, the following 'family of questions' is denoted by the felicitous multiple sluice in (127), where the indefinite correlates in Speaker A's assertion are sorted by possible *kissers* (i.e., the implicit MaxQUD of (127)). For ease of exposition, I have indicated the sorting key using bold font:

(133) *Family-of-questions meaning for MaxQUD in (127) sorted by kissers*
⟦(127)⟧ = {which kissee did **Ram** kiss?, which kissee did **Roy** kiss?}
= {{**Ram** kissed Sita, **Ram** kissed Kiran}, {**Roy** kissed Anita, **Roy** kissed Simran}}

The background of the sluice in Speaker B's question in (127B), in which the agent *kaun* ('who.NOM') linearly precedes, or is structurally superior to, the patient *kis=ko* ('who=ACC') is identical to (i.e., matches) that of the MaxQUD, ensuring recoverability.

This can be contrasted with the background of a multiple sluice with inverted *wh*-remnants relative to its correlates, as in the degraded multiple sluice in (127), which crucially raises a distinct question meaning from (133): since the patient *wh*-phrase *kis=ko* hierarchically dominates the agent *kaun*, its 'family-of-questions' meaning is sorted by *kissees* not *kissers* (134), blocking recoverability.

(134) *Family-of-questions meaning for the degraded sluice in (127B′) sorted by kissees*
⟦(127B′)⟧ = {which kisser kissed **Raj**?, which kisser kissed **Karan**?}
= {{Sita kissed **Raj**, Simran kissed **Raj**}, {Anita kissed **Karan**, Aliya kissed **Karan**}}

Thus, the infelicity of the multiple sluice variant in (127B′) reflects a discrepancy in backgrounds of the elided clause and its antecedent MaxQUD. This asymmetry in meaning is caused by the linear order of the *wh*-remnants, which are not aligned with their corresponding correlates in the antecedent clause, precluding recoverability. If the correlates are scrambled so that *kisi=ko* ('someone=ACC') linearly precedes *kaun* ('someone.NOM') (i.e., if the implicit MaxQUD in (127) is one that is sorted by *kissees*), then the sluice in (127B′) is felicitous, as background matching is satisfied. The strict linear order observed for the multiple sluice formed from an underlying long-distance question in (129) may be accounted for analogously.

In addition to multiple sluicing, we also find multiple fragment answers in this language, which display a fixed-order effect that is identical to that observed for multiple sluices. This is illustrated in (135).

(135) A: Kal kis=ne kis=ko paanii dii thii?
yesterday who=ERG who=ACC water gave be.3SG.PAST.F
'Who had given water to whom yesterday?'
B: Safiina=ne Aisha=ko.
Safina=ERG Aisha=ACC
'Safina had given water to Aisha yesterday.'

[22] Barros and Kotek (2019) later backtrack on this stance, arguing against QUD equivalency and for truth-conditional congruence for ellipsis recoverability à la Merchant's 2001 focus condition; see Griffiths 2020 for a rejoinder defending the approach assumed here.

B′: *Aisha=ko Safiina=ne.
Aisha=ACC Safina=ERG
Intended: 'Safina had given water to Aisha yesterday.'

On a par with multiple sluicing, the linear order of arguments in the non-elliptical counterparts of such multiple fragment answers is, by contrast, interchangeable (136).

(136) a. Kal Safiina=ne Aisha=ko paanii dii thii.
yesterday Safina=ERG Aisha=ACC water gave be.3SG.PAST.F

b. Kal Aisha=ko Safiina=ne paanii dii thii.
yesterday Aisha=ACC Safina=ERG water gave be.3SG.PAST.F
Both: 'Safina had given water to Aisha yesterday.'

For such multiple fragments, the background of the corresponding question of the multiple remnants and that of the MaxQUD (more precisely, their 'family-of-questions' meaning) must match to ensure recoverability. For the antecedent clause in (135A), the agent linearly precedes the patient; thus, this explicit MaxQUD has a 'family-of-questions' meaning sorted by *givers* (137). This equates that of the corresponding question to the multiple fragment answer in (135B), whose linear order of arguments is identical to its correlates.

(137) *Family-of-questions meaning for QUD in (135) sorted by givers*
⟦(135A)⟧ = {which givee did **Safina** give water to?, which givee did **Simran** give water to?}
= {{**Safina** gave water to Aisha, **Safina** gave water to Kiran}, {**Simran** gave water to Anita, **Simran** gave water to Ali}}

This contrasts with the degraded multiple fragments in (135B′), whose linear order of arguments and thereby corresponding sub-question meaning, as shown in (138), is not equivalent to that of the explicit MaxQUD (137), blocking recoverability.

(138) *Family-of-questions meaning for the degraded fragments in (135B′) sorted by givees*
⟦(135B′)⟧ = {which giver gave water to **Aisha**?, which giver gave water to **Ali**?}
= {{Safina gave water to **Aisha**, Roy gave water to **Aisha**}, {Ram gave water to **Kiran**, Ali gave water to **Kiran**}}

Similar to the multiple sluices above, if we scramble the order of the correlates in (135A) such that *kisi=ko* ('someone=ACC') linearly precedes *kisi=ne* ('someone=ERG') (i.e., if the MaxQUD in (135A) is one that is sorted by *givees*), then the multiple fragment answer in (135B′) is acceptable, as QUD equivalence is met.

The same explanation holds for multiple remnants born in subordinate clauses, which demonstrate the same word order effect (139), despite the fact that in non-elliptical contexts no such effect holds (140).

(139) A: Vikram=ne kaha [$_{CP}$ ki kal kisi=ne kisi=ko paanii dii thii].
Vikram=ERG said that yesterday someone=ERG someone=ACC water gave be.3SG.PAST.F
'Vikram said that someone had given someone water yesterday.'

B: Haan, Safiina=ne Aisha=ko.
yes Safina=ERG Aisha=ACC
'Yeah, Vikram said that Safina had given water to Aisha yesterday.'

B′: *Aisha=ko Safiina=ne.
Aisha=ACC Safina=ERG
Intended: 'Yeah, Vikram said that Safina had given water to Aisha yesterday.'

(140) a. Haan, Vikram=ne kaha [$_{CP}$ ki kal Safiina=ne Aisha=ko paanii dii thii].
yes Vikram=ERG said that yesterday Safina=ERG Aisha=ACC water gave be.3SG.PAST.F

b. Haan, Vikram=ne kaha [$_{CP}$ ki kal Aisha=ko Safiina=ne paanii dii thii].
yes Vikram=ERG said that yesterday Aisha=ACC Safina=ERG water gave be.3SG.PAST.F
Both: 'Yeah, Vikram said that Safina had given water to Aisha yesterday.'

Finally, we also find hybrid (*wh*+non-*wh*) remnants such as (141B) in this language that echo the pattern observed above.[23]

(141) A: Kal Eid=ke liye Ali=ne Nadia=ko paisa diya thaa.
yesterday Eid=GEN for Ali=ACC Nadia=ACC money gave be.3SG.PAST.M
'Yesterday, Ali gave money to Nadia for Eid.'

B: (Aur) Wajahat=ne kis=ko?
and Wajahat=ERG who=ACC
'(And) who did Wajahat give money to for Eid yesterday?'

B′: *Kis=ko Wajahat=ne?
who=ACC Wajahat=ERG
Intended: '(And) who did Wajahat give money to for Eid yesterday?'

Again, the non-elliptical counterparts of such remnants allows for either linear order of arguments (142).

(142) a. (Aur) kal Eid=ke liye Wajahat=ne kis=ko paisa diya thaa?
and yesterday Eid=GEN for Wajahat=ERG who=ACC money gave be.3SG.PAST.M

b. (Aur) kal Eid=ke liye kis=ko Wajahat=ne paisa diya thaa?
and yesterday Eid=GEN for who=ACC Wajahat=ERG money gave be.3SG.PAST.M
Both: '(And) who did Wajahat give money to for Eid yesterday?'

I suggest that these are similarly derived under this approach. The sub-question meaning for the implicit MaxQUD of (141A) is shown in (143).

(143) *Family-of-questions meaning for the implicit MaxQUD in (141) sorted by givers*
⟦(141A)⟧ = {which givee did **Ali** give money to?, which givee did **Roy** give money to?}
= {{**Ali** gave money to Nadia, **Ali** gave money to Kiran}, {**Roy** gave money to Anita, **Roy** gave money to Raj}}

[23] Such hybrid multiple remnants sound better with heavy contrastive stress on the non-*wh* remnant.

Here, alternatives are sorted by *givers* as the agent linearly precedes the patient in the antecedent clause. This 'family-of-questions' meaning is equivalent to that denoted by the hybrid remnant in (141B); the only trivial difference here is that the agent is made explicit. Again, if we scramble the order of the correlates in (141A) such that the patient linearly precedes the agent (i.e., if the implicit MaxQUD in (141A) is one that is sorted by *givees*), then the hybrid variant in (141B′) is felicitous, as QUD equivalence is met.

We can contrast this with the degraded fragment answer in (141B′), whose sub-question meaning is sorted by *givees* as a consequence of the patient linearly preceding the agent.

(144) *Family-of-questions meaning for the degraded fragment in (141B′) sorted by givees*
⟦(141B′)⟧ = {which giver gave money to **Nadia**?, which giver gave money to **Aisha**?}
= {{Ali gave money to **Nadia**, Roy gave money to **Nadia**}, {Ram gave money to **Aisha**, Roy gave money to **Aisha**}}

The linear order of hybrid remnants that are born in an underlying embedded clause likewise have a preference to mirror that of their correlates; however, the source of such elliptical constructions is not as clear-cut as those above.

(145) A: Hassan=ne kaha [$_{CP}$ ki kal Eid=ke liye Ali=ne Nadia=ko paisa diya
Hassan=ERG said that yesterday Eid=GEN for Ali=ERG Nadia=ACC money gave
thaa].
be.3SG.PAST.M
'Hassan said that yesterday, Ali gave money to Nadia for Eid.'

B: (Aur) Wajahat=ne kis=ko?
and Wajahat=ERG who=ACC
'(And) who did Hassan say Wajahat gave money to for Eid yesterday?'

B′: *Kis=ko Wajahat=ne?
who=ACC Wajahat=ERG
Intended: '(And) who did Hassan say Wajahat gave money to for Eid yesterday?'

We know that (146-a) below cannot be the source of (145B) since embedded *wh*-phrases fail to obtain matrix scope *in situ* (see Chapter 3). If we extract the *wh*-phrase to the matrix clause and leave the DP *Wajahat=ne* in its canonical position, this remedies the issue of scope but produces the undesired linear order (146-b).

(146) a. *Hassan=ne kaha [$_{CP}$ ki kal Wajahat=ne kis=ko Eid=ke liye paisa diya
Hassan=ERG said that yesterday Wajahat=ERG who=ACC Eid=GEN for money gave
thaa]?
be.3SG.PAST.M
Intended: 'Who did Hassan say Wajahat gave money to for Eid yesterday?'

b. Kis=ko$_i$ Hassan=ne kaha [$_{CP}$ ki kal Wajahat=ne t_i Eid=ke liye paisa diya
who=ACC Hassan=ERG said that yesterday Wajahat=ERG Eid=GEN for money gave
thaa]?
be.3SG.PAST.M
'Who did Hassan say Wajahat gave money to for Eid yesterday?'

Further problematic for (146-b) is that such a source violates the clausemate condition (henceforth, CMC), which requires multiple remnants to originate from the same (finite) clause (see Abels and Dayal 2023). The infelicitous multiple fragments below corroborates the claim that the CMC is active in the language, a fact that, as far as I am aware, has only otherwise been mentioned in passing (see Abels and Dayal 2023:433).

(147) A: HASSAN=ne kaha [$_{CP}$ ki kal Wajahat=ne ALI=KO Eid=ke liye paisa diya
Hassan=ERG said that yesterday Wajahat=ERG Ali=ACC Eid=GEN for money gave
thaa].
be.3SG.PAST.M
'HASSAN said that Wajahat gave money to ALI for Eid yesterday.'

B: *nahiiN, SIMRAN=NE AALIYAH=KO.
NEG Simran=ERG Aaliyah=ACC
Intended: 'No, SIMRAN said that Wajahat gave money to AALIYAH for Eid yesterday.'

B′: nahiiN, SIMRAN=NE kaha [$_{CP}$ ki kal Wajahat=ne AALIYAH=KO Eid=ke liye
NEG Simran=ERG said that yesterday Wajahat=ERG Ali=ACC Eid=GEN for
paisa diya thaa].
money gave be.3SG.PAST.M
'No, SIMRAN said that Wajahat gave money to AALIYAH for Eid yesterday.'

This suggests that the multiple remnants in (145B), unlike what we have seen so far, underlyingly extract to the matrix clause in order to satisfy the CMC.[24] Importantly, when extracting both DPs to the matrix clause, the linear order of arguments is flexible, similar to what was observed above (148).

(148) a. Wajahat=ne$_i$ kis=ko$_j$ Hassan=ne kaha [$_{CP}$ ki kal t_i t_j Eid=ke liye paisa diya
Wajahat=ERG who=ACC Hassan=ERG said that yesterday Eid=GEN for money gave
thaa]?
be.3SG.PAST.M
'Who did Hassan say Wajahat gave money to for Eid yesterday?'

b. Kis=ko$_j$ Wajahat=ne$_i$ Hassan=ne kaha [$_{CP}$ ki kal t_i t_j Eid=ke liye paisa diya
who=ACC Wajahat=ERG Hassan=ERG said that yesterday Eid=GEN for money gave
thaa]?
be.3SG.PAST.M
'Who did Hassan say Wajahat gave money to for Eid yesterday?'

It is important to stress that while the elliptical versions of multiple remnants in H/U stubbornly match the linear order of their correlates, their non-elliptical counterparts consistently do not, irrespective of the remnant type. As discussed in §4.1.2, this is a crucial prediction that background matching under ellipsis makes, namely, that the remnant will acquire whatever restrictions are imposed on its antecedent MaxQUD (here, its 'family-of-questions' meaning). The facts observed in this section thus strongly corroborate the validity of a QUD approach to the identity puzzle, representing yet another 'inheritance-of-content' effect. In the absence of such restrictions,

[24]Note that this is not at odds with the proposal herein which posits remnants will move in elliptical contexts if there is independent justification for such movement. While it remains unclear what causes the CMC in the first place, facts such as (147) seem to suggest multiple remnants in this language need to be clausemates.

flexible constituent orders should be possible, and this is indeed the case, irrespective of remnant type or clause size. BD thus not only accounts for why multiple remnants display strict linearity in the first place but also why such order preservation is confined to elliptical contexts.

4.5 Summary

This chapter argued for a PF-deletion analysis of subsententials in H/U that involves deletion of background material freely and maximally up to recoverability. We saw empirical facts from H/U that substantiate this proposal, including various 'inheritance-of-content' effects and the infelicity of remnants that otherwise $\overline{\text{A}}$-move. This solution—which does not presuppose the remnant's movement—has the potential to capture the island in-sensitivity of sluices and those fragment answers that do not display island effects. The degradation of some (contrastive/non-contrastive) fragment answers was said to be a consequence of the remnant's corresponding question—required for background matching—which is island sensitive.

There are remaining questions. For one, it is unclear what causes cross-linguistic differences in the island sensitivity of non-contrastive fragment answers. It is furthermore a unclear why fragment answers may be anaphoric to short sources whereas sluices must be. Despite these open questions, asymmetries in island effects support the general claim that whatever seems to be causing such effects is not syntactic in nature. The fact that (contrastive/non-contrastive) fragment answers whose correlates are contained in a relative clause island become perfectly acceptable once the antecedent is manipulated and by inserting a sluice that is anaphoric to a short source strongly supports the overall claim that the putative island sensitivity of fragment answers is not due to island-violating movement of the remnant out of the ellipsis site but independent pragmatic constraints on recoverability.

We also saw that BD has the potential to account for P-retention in elliptical contexts, given such elements cliticize to the lexical remnant. This implies that what is targeted for deletion in the ellipsis site is some prosodic constituent that corresponds with the clausal background (i.e., not discourse-Given). Morphologically complex PPs that permit P-omission independently may or may not form their own G-marked ω. Though in principle possible, such a cliticization analysis of the complementizer-like element *ki* does not seem feasible. Rather, I tentatively adopt the view that morpho-syntactic material which bears no syntactic/semantic effects, such as *ki* and DOM, is inserted post-syntactically. Finally, the assumed QUD approach to identity further provides a natural explanation for the strict linearity of multiple remnants in elliptical contexts and the lack thereof in non-elliptical counterparts straightforwardly.

Jis chaman mein tere pag mein kaante chubhe, us chaman se humein phool chunna nahiin.
[The garden in which thorns prick your feet, I don't want to pick flowers from that garden.]

—Anand Bakshi
"Jis gali mein tera ghar na ho balma"
Kati Patang

Chapter 5

An elliptical analysis of correlatives

This chapter extends the proposal developed in Chapter 4 and offers a novel elliptical analysis of correlative constructions in H/U. Such expressions represent a relativization strategy wherein a relative clause (henceforth, CR) is associated with a correlate (ϕ) in its host clause (henceforth, HC), as shown in (1).

(1) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

The discussion begins with a brief overview of the basic properties of such configurations, some of which present an interesting puzzle: correlatives display features that, on the one hand, point to the CR's connectivity into its HC (*viz.*, reconstruction effects) and that, on the other hand, suggest CR and HC are not derivationally related (e.g., the lack of a gap and prosodic separation of CR–HC) (§5.1). I argue that available analyses of such constructions struggle to capture their seemingly conflicting properties, given their assumption that CR and HC are structurally integrated (§5.2). In an effort to resolve this apparent paradox, I adopt Ott's (2014, 2015) analysis of Romance/Germanic left-dislocation, which presents a similar puzzle (§5.3). More precisely, I propose to forgo the conventional assumption that CR and HC are derivationally related and alternatively suggest to treat CR as the remnant of a separate root clause that is reduced under identity with the HC (§5.4). A summary follows in §5.5.

5.1 Some (conflicting) properties of H/U correlatives

In this section, we review basic properties of H/U correlatives. First, the CR and its associated correlate can be separated by other clausal material (2).

(2) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ Raam us (laRkii=ko)$_{\phi}$ jaantaa hai]
which girl standing is Ram that girl=ACC know is
'Ram knows the girl who is standing.'

The correlate itself must minimally contain a demonstrative, as in (1), which is often referred to in the literature as the 'demonstrative requirement' (see Srivastav 1991, Dayal 1996, Bhatt 2003a, among others). Full-phrase correlates are also possible (2), but these must be definite phrases. Indefinite nominals, such as bare nouns and phrases like *do* 'two' are inappropriate correlates (3).[1]

(3) a. *[$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ laRkii$_{\phi}$ lambii hai]
which girl standing is girl tall is

b. *[$_{CR}$ jo laRkiyaaN khaRiii haiN] [$_{HC}$ do$_{\phi}$ lambii haiN]
which girls standing are two tall are
'Two girls who are standing are tall.'
(Srivastav 1991:648–649)

Moreover, the CR can contain multiple relative pronouns that match with the same number of correlates (4). Hereafter, I will refer to such constructions as 'multi-head correlatives' and those like (1–2) as 'single-head correlatives'.

(4) [$_{CR}$ jis laRkii=ne$_i$ jis laRke=ke$_j$ saath khelaa] [$_{HC}$ us=ne$_i$ us=ko$_j$ haraayaa]
which girl=ERG which boy=GEN with played that=ERG that=ACC defeated
lit. Which girl played with which boy, she defeated him.
'Every girl defeated the boy she played with.'
(Dayal 1996:14)

Importantly, correlatives in this language bear additional properties that present an interesting paradox, which any treatment of such constructions must account for: they exhibit characteristics that suggest the CR and its HC are syntactically integrated and others that point to the CR's extra-sententiality. For example, in the case of single-head correlatives, the CR and its correlate cannot be separated by an island boundary.[2] This is shown in (5-a) and (5-b) for complex NP islands and relative clause islands, respectively.

(5) a. *[$_{CR}$ jo vahaaN rehta hai] [$_{HC}$ maiN [yeh baat ki vo$_{\phi}$ nahiiN aayeega] jaantii thii]
which there stay-PR I this matter that he not come-F know-P
Intended: 'as for the person x : x stays there, I knew the fact that x will not come'
(Dayal 1996:183)

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[1]Sentences such as (3-b) may be rescued by turning the correlate into a partitive expression (i).

(i) [$_{CR}$ jo laRkiyaaN khaRiii haiN] [$_{HC}$ un=meN=se do$_{\phi}$ lambii haiN]
which girls standing are that=PARTITIVE=of two tall are
'Two of the girls who are standing are tall.'
(Srivastav 1991:648)

[2]Recall from Chapter 3 that H/U generally exhibits island effects for all major types of islands.

b. *[$_{CR}$ jo vahaaN rehta hai] [$_{HC}$ mujh=ko [vo kahanii [jo us=ne$_{\phi}$ likhii]] pasand
which there stays be.PRS I=DAT that story which that=ERG wrote like
hai]
be.PRS
Intended: 'as for the person x : x stays there, I like the story that x wrote'
(Bhatt 2003a:500)

Additionally, single-head correlatives present apparent reconstruction effects, as demonstrated by the Condition C and A effects in (6-a) and (6-b), respectively.

(6) a. [$_{CR}$ jo laRkii Siita=ko$_{j}$ pyaar kartii hai]$_{i}$ [$_{HC}$ us=ne$_{k/*j}$ us=ko$_{i}$ thukraa diya]
which girl Sita=ACC love does be.PRS that=ERG that=ACC reject gave
'She rejected the girl who loves Sita.'
(Bhatt 2003a:513)

b. [$_{CR}$ jis laRkii=ne un=se$_{i+j}$ baat kii]$_{k}$ [$_{HC}$ Ram$_{i}$ aur Shyam$_{j}$ us=ko$_{k}$ pyaar karte haiN]
which girl=ERG them=with talk did Ram and Shyam that=ACC love do are
'Ram$_{i}$ and Shyam$_{j}$ love the girl who talked to them$_{i+j}$.'

In (6-a), the R-expression 'Sita' in the CR cannot be co-referential with the pronoun *us=ne* 'that=ERG' in the HC. For the sentence in (6-b), the pronominal *un=se* 'them' may be bound by the co-ordinated nominal in its HC. Similarly, a quantifier in the HC can bind a pronominal variable in the CR (7).

(7) [$_{CR}$ jis larke=se voh$_{i}$ mileNge] [$_{HC}$ sab log$_{i}$ us=ko dekheNge]
which boy=with they meet.FUT everyone that=ACC see.FUT
'Everyone will see the boy who they will meet.'

As we will see in the next section, such reconstructions effects have led some (Mahajan 2000, Bhatt 2003a) to propose a movement analysis of such configurations, according to which the CR base-generates adjoined to the demonstrative phrase (DemP) in the HC and subsequently raises to the left periphery of HC, as schematized in (8) for (1).

(8) [$_{HC}$ [$_{CR}$ jo larkii kharii hai]$_{i}$ [$_{DemP}$ vo$_{\phi}$ t$_{i}$] lambii hai]
which girl standing is that tall is

From this vantage point, the CR in (6)–(7) reconstructs to a HC-internal position where it is c-commanded by the pronoun *us=ne* 'that=ERG', the co-ordinated nominal *Ram aur Shyam* 'Ram and Shyam', and the quantifier *sab log* 'everyone', respectively.

On the other hand, CRs display properties that betray their extra-sentential status. At the most basic level, CRs are not associated with a gap in their HC but an overt ϕ, rendering the HC a syntactically complete clause that can stand on its own given a contextually salient antecedent of the correlate (9).

(9) *Context:* Ram and Sita are in a room full of people and are talking to each other. Ram points to a girl standing at the opposite end of the room and says the following:

Vo (laRkii) lambii hai
that girl tall is
'That girl is tall.'

The CR must also linearly precede fronted operators, such as *wh*-phrases, as shown in (10).

(10) a. [$_{CR}$ jo larkii khaRiii hai] [$_{HC}$ kab$_j$ Ram=ne kaha ki Sita=ne us=ko$_\phi$ t_j dekha]?
which girl standing is when Ram=ERG said that Sita=ERG that=ACC saw
'When did Ram say that Sita saw the girl who is standing?'

b. *kab$_j$ [$_{CR}$ jo larkii khaRiii hai] [$_{HC}$ Ram=ne kaha ki Sita=ne us=ko$_\phi$ t_j dekha]?
when which girl standing is Ram=ERG said that Sita=ERG that=ACC saw
Intended: 'When did Ram say that Sita saw the girl who is standing?'

Finally, unlike other clausal constituents in the language, the CR and its HC appear to be prosodically autonomous, resulting in the 'comma' intonation that is generally typical of parentheticals (Dehé 2009). That is, in sentences such as (1), the CR and its HC are separated by an intonational phrase (IP) boundary, as shown in (11).

(11) (jo laRkii khaRiii hai)$_{IP}$ (vo$_\phi$ lambii hai)$_{IP}$
which girl standing is that tall is

These properties strongly suggest that CRs are not syntactically integrated with their HC. If this were so, the HC would not be able to stand on its own, fronted *wh*-phrases would linearly appear before CRs, and CR–HC would not be prosodically separated. Thus, an important challenge for analyses of correlatives in this language is to reconcile such seemingly contradictory facts. We will see in the following section that existing proposals of such configurations indeed struggle to do so, ultimately calling for an alternative solution.

5.2 Previous approaches: base-generation or movement?

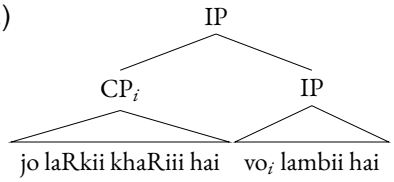
This section provides a critical overview of existing accounts of correlativization in H/U. We will see that these share the presupposition that CRs are syntactically integrated into their HCs, with the crucial theoretical difference being whether the CR is born in its surface position or moves to occupy that spot. Ultimately, neither perspective resolves the paradoxical features of such expressions straightforwardly.

5.2.1 The base-generation account

The earliest accounts of correlative constructions such as (1), repeated in (12), suggest that the CR base-generates as an IP adjunct in the HC, as shown in (13) (Srivastav 1991, Dayal 1996).[3]

(12) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

(13)



From this perspective, the demonstrative in the HC is treated as a variable that is bound by the CR, accounting for the strictly co-referential interpretation of the referent denoted by the CR and that of the demonstrative in its corresponding HC.

An important issue for base-generation accounts is the presence of apparent locality effects that correlativization in this language displays, as observed in (5). In this regard, Dayal (1996:184–185) suggests that the variable bound in the HC is on a par with variables created by movement which require local binding, thus representing a pronounced trace of movement.[4] However, as Bhatt (2003a) notes, variable binding generally does not display island effects in this language, rendering Dayal's (1996) explanation dubious. This is illustrated in (14), where variable binding into a relative clause is generally island in-sensitive.

(14) har larRke=ko$_i$ [vo kahanii [jo Raam=ne us$_i$=ke=baare=meN likhii]] pasand hai.
every boy=DAT that story.F which Ram=ERG that=GEN=about=in write-PFV.F like be.PRS
'Every boy likes the story that Ram wrote about him.'
(Bhatt 2003a:500)

Further problematic for base-generation proposals are the apparent reconstruction effects CRs exhibit. For the Condition C effect in (6-a), it is unclear why the subject pronominal in the HC cannot co-refer with the R-

[3] See Izvorski 1996 for a similar adjunction analysis of correlatives in the Slavic languages and Modern Greek. For her, the CR adjoins to CP, since the correlate occurs in Spec,CP due to *wh*-movement, as shown in (i) for Russian.

(i) [$_{CR}$ Kogo ty predložiš'] togo$_i$ my vyberem t_i (Russian)
which you suggest that.on we will.appoint
'We will appoint who you suggest.'
(Izvorski 1996:145)

[4] Izvorski (1996) adopts the same solution to capture locality effects in Slavic correlatives, with the key difference being that the correlate overtly moves in these languages.

expression in the CR if the former does not c-command the latter at any stage in the derivation. Similarly, it is unclear why a binder in the HC can bind a variable in the CR (as in (6-b) and (7)) from this view, where the latter is merely born as an IP adjunct.

A *prima facie* positive attribute of such accounts is their ability to capture the availability of both single-head and multi-head correlatives without reference to unique representations for both: assuming the CR base-generates as an IP adjunct in principle allows for a single CR to be associated with multiple pronouns in the HC. However, this approach predicts that both single-head and multi-head CRs should exhibit no morpho-syntactic asymmetries, and this prediction is not borne out. Multi-head CRs, unlike single-head ones, do not display putative island and reconstruction effects. This is exemplified by the lack of island effects in relative clause configurations (15-a) and the lack of Condition C effects in (15-b) (cf. (6)–(8)).

(15) a. [$_{CR}$ jis laRkii=ne$_i$ jis laRke=ke$_j$ saath khelaa] [$_{HC}$ mujhe vo khel [$_{RC}$ jis=mein
which girl=ERG which boy=GEN with played I.DAT that game which=in
us=ne$_i$ us=ko$_j$ haraayaa] pasand hai]
that=ERG that=ACC defeated like is
lit. Which girl played with which boy, I like the game in which she defeated him.
'I like the game in which every girl defeated the boy she played with.'

b. [$_{CR}$ jis=ne$_i$ Ram=ko$_j$ jise$_k$ diyaa] [$_{HC}$ us=ne$_j$ us=se$_i$ us=kii$_k$ taariif kii]
which=ERG Ram=ACC which.DAT gave that=ERG that=INSTR that=GEN praise did
'*x* gave Ram to *y*, and Ram praised *y* to *x*.'
(Bhatt 2003a:516)

The locality and reconstruction effects that CRs exhibit render base-generation accounts untenable and warrant an alternative solution. To this end, subsequent approaches of such constructions have suggested that rather than the CR base-generating as an IP adjunct, it base-generates in the HC and moves to occupy that surface left-peripheral position, as we will see in the following section.

5.2.2 The movement-based approach

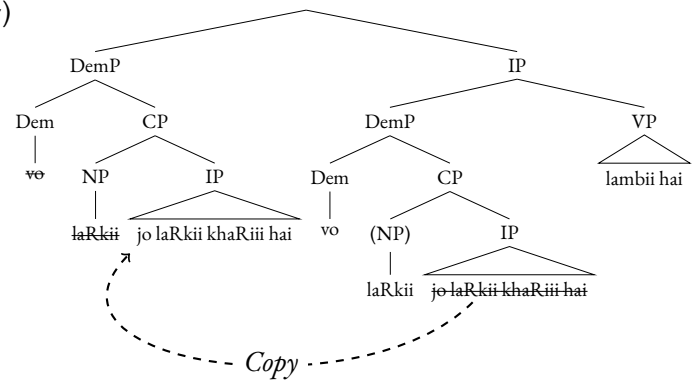
Both Mahajan (2000) and Bhatt (2003a) offer an alternative analysis of sentences such as (1), repeated in (16). For them, the CR is born in some position internal to the HC and subsequently raises to the left periphery.

(16) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_\phi$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

Mahajan (2000) adopts a copy theory of movement (Chomsky 1995) to provide a uniform analysis of all CRs

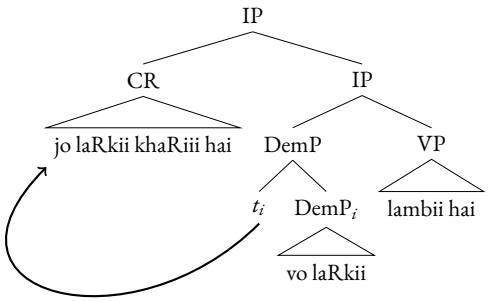
in H/U from headed relatives, which are likewise available in the language.[5] As shown in (17) for (16), the CR base-generates adjoined to the demonstrative phrase (DemP), and the DemP scrambles to an unspecified position in the left periphery. Discontinuous PF-deletion then targets the demonstrative and the head of the raised copy as well as the relative clause in the base copy and (optionally) its head.

(17)



For Bhatt (2003a), the CR is born adjoined to DemP and then moves to adjoin to IP of the HC (18).

(18)



[5]In addition to the single-head and multi-head correlatives in (1) and (4), H/U has post-nominal headed relative clauses (i-a) as well as extraposed relatives (i-b).

(i) a. [$_{NP}$ vo laRkii [$_{RC}$ jo khaRiii hai] lambii hai].
that girl which standing is tall is
b. [$_{IP}$ [$_{NP}$ vo laRkii] lambii hai] [$_{RC}$ jo khaRiii hai].
that girl tall is which standing is
Both: 'The girl who is standing is tall.'

Such relativization strategies differ systematically from the correlatives discussed herein (see Srivastav 1991; Dayal 1996; Mahajan 2000; Bhatt 1997, 2003a). For instance, the relative clause in (i-a) behaves like a nominal modifier and is not prosodically offset from the main clause. Conversely, while the relative in (i-b) is prosodically offset, it seems to bear a unique 'afterthought' interpretation, on a par with other extraposed constituents in the language (Gambhir 1981:320ff). I will not discuss these relativization strategies here, as such asymmetries seem to point to their not being derivationally related to left-peripheral CRs.

Movement analyses of correlativization have a straightforward explanation for the reconstruction effects observed in (6)–(7), as also noted in §5.2, giving them an edge over their base-generation predecessors. In each case, the CR reconstructs at LF to a low position in its HC where it is c-commanded by the relevant binder.

A *prima facie* issue for such accounts is the availability of multi-head correlatives. To which correlate would the CR base-generate as an adjunct in these cases? This problem has been handled in two ways so far in the literature. The first is to either ignore such constructions altogether, as Mahajan (2000:212) does, or suggest that both single-head and multi-head correlatives have unique representations, as Bhatt (2003a) suggests. For the latter, multi-head correlatives, unlike their single-head counterparts, base-generate as adjuncts to IP (akin to the representation in (13)). Indeed, the asymmetries we find between single-head and multi-head correlatives regarding putative locality and reconstruction effects independently corroborate this bifurcate treatment of both forms.

The presence of locality effects in single-head CRs observed in (5), repeated in (19), also seemingly receives a natural explanation from this vantage point.

(19) a. *[$_{CR}$ jo vahaaN rehta hai] [$_{HC}$ maiN [yeh baat ki vo$_{\phi}$ nahiiN aayeega] jaantii thii]
which there stay-PR I this matter that he not come-F know-P
Intended: 'as for the person x : x stays there, I knew the fact that x will not come'
(Dayal 1996:183)

b. *[$_{CR}$ jo vahaaN rehta hai] [$_{HC}$ mujh=ko [vo kahanii [jo us=ne$_{\phi}$ likhii]] pasand hai]
which there stays be.PRS I=DAT that story which that=ERG wrote like be.PRS
Intended: 'as for the person x : x stays there, I like the story that x wrote'
(Bhatt 2003a:500)

In each case, the CR underlyingly passes an island boundary on its way to the left periphery, resulting in ungrammaticality. Crucially, however, such island effects are not robust. For instance, CRs that are associated with a conjunct in a co-ordinate structure in the HC exhibit no island sensitivity (20), despite the fact that co-ordinate structures are independently island sensitive (see Chapter 3).

(20) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ mai=ne kal [us=ko$_{\phi}$ aur Raam=ko] dekha thaa]
which girl standing is I=ERG yesterday that=ACC and Ram=ACC saw was
'The girl who is standing, I saw her and Ram yesterday.'

Note that this is also true for correlates that are non-initial conjuncts (21).

(21) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ mai=ne kal [Raam=ko aur us=ko$_{\phi}$] dekha thaa]
which girl standing is I=ERG yesterday Ram=ACC and that=ACC saw was
'The girl who is standing, I saw Ram and her yesterday.'

A movement account falsely predicts that this should not be so, given that the CR for sentences such as (21) likewise passes an island boundary. This strongly suggests that the ungrammaticality of sentences such as (20) cannot be blamed on island-violating movement of the CR, as is typically assumed, and requires some other explanation.

Moreover, if correlativization does indeed involve movement of the CR from a HC-internal position, one would expect to find a gap created by said movement, but this is not the case: the HC instead contains an anaphoric ϕ, rendering the latter a syntactically complete clause.

Since a movement analysis assumes the CR is syntactically integrated into its HC, it is unclear why CRs must linearly precede fronted *wh*-phrases (see (10)). Indeed, competing base-generation accounts have no natural explanation for this either. According to both approaches, IP adjunction of the CR in the HC predicts such fronted operators should linearly precede the CR, necessarily occupying a position that takes scope over the entire HC, contrary to fact. It is also unclear why CRs bear the unique property of being prosodically separated from their HC (see (11)) assuming syntactic integration of CR and HC, which would predict the opposite as with other types of clausal constituents (e.g., finite complement clauses, post-nominal headed relatives, etc.). It thus seems that akin to base-generation accounts, the movement-based approach is inadequate, suggesting the need for an alternative solution.

5.2.3 Interim summary

The issues outlined in this section render available treatments of H/U correlativization insufficient. A core issue for base-generation proposals is the observed reconstruction and locality effects in such configurations. While movement analyses may have a handle on such facts, they have no natural explanation for why co-ordinate islands showcase no locality effects. Furthermore, since both approaches assume the CR and its HC are combined in the narrow syntax, they do not provide a straightforward explanation for why CRs must linearly precede fronted *wh*-phrases, as well as the fact that CRs are separated from their HCs by a prosodic break. I suggest that therein lies the problem: irrespective of whether one chooses to espouse a base-generation account or a movement-based one, assuming both clauses are syntactically connected will not resolve the paradoxical properties correlativization in this language presents, calling for a different solution altogether.

5.3 Romance/Germanic left-dislocation: an analogue

In the next section, I present a novel analysis of H/U correlatives in an attempt to resolve their apparently conflicting properties. The solution I offer adopts Ott's (2014, 2015) treatment of Romance/Germanic left-dislocation (henceforth, LD) phenomena, such as (22).

(22) [$_{\Sigma}$ Den Peter], [$_{HC}$ den$_{\phi}$ habe ich gestern gesehen].
the Peter.ACC him.ACC have I yesterday seen
'I saw Peter yesterday.' (German; Ott 2014)

Such expressions bear a striking resemblance to H/U correlativization:[6] a 'satellite' phrase (Σ), typically of any major category, appears at the outer edge of a HC that contains a pronominal ϕ. Importantly, Cinque (1990) first noted

[6]For a similar comparison of correlatives and left-dislocation, see Lipták 2009 on Hungarian and Motter 2023 on Hittite.

that LD in such languages presents a puzzle which mirrors that described for correlatives in H/U: Σ bears certain properties that suggest its connectedness to the HC on the one hand and others that betray its extra-sentential status on the other.

One type of connectivity effect observed in dislocated constructions is their obligatory case matching with ϕ, as illustrated in (22), where both Σ and ϕ are necessarily accusative. This *prima facie* suggests the two start out together and receive said case from the same case licensor.

Furthermore, much like H/U correlativization, Romance/Germanic LD displays apparent reconstruction effects that at first blush indicate Σ and its HC are structurally connected. For instance, LD presents Condition C effects, as the Spanish example in (23) illustrates.

(23) *[$_{\Sigma}$ A la hermana de María$_i$], [$_{\text{HC}}$ ella$_i$ aún no la$_{\phi}$ ha visto].
ACC the sister of Maria she still not her.ACC has seen
'Maria's sister, she hasn't seen her yet.' (Spanish; Alcalá 2012)

Here, the dislocated nominal containing the R-expression *María* and the pronominal correlate in the HC cannot co-refer, implying a Condition C violation.

Moreover, local anaphors in Σ can be bound by HC-internal constituents, as demonstrated by the Icelandic example in (24), where a reciprocal in Σ is bound by a pronominal in the HC.

(24) [$_{\Sigma}$ Stoltan afhor öðrum$_i$], [$_{\text{HC}}$ það$_{\phi}$ tel ég þa$_i$ ekki vera].
proud of each other that believe I them not to be
'I don't think they're proud of each other.' (Icelandic; Zaenen 1997)

Similarly, HC-internal quantifiers may bind variable pronominals in Σ (25).

(25) [$_{\Sigma}$ Tin mitera tu$_i$], [$_{\text{HC}}$ kathenas$_i$ tin$_{\phi}$ agapai].
ACC mother his everyone her.ACC loves
'Everyone loves their mother.' (Greek; Anagnostopoulou 1997)

On a par with CRs in H/U, effects of this kind have led to LD being traditionally analyzed in a manner similar to movement approaches of the former (see Rizzi 1997, Cecchetto 2000, Benincà and Poletto 2004, Belletti 2005, among others). In other words, the dislocated constituent is typically suggested to base-generate in the HC and subsequently raises to assume its surface left-peripheral position. From this perspective, the facts above receive a natural explanation: Σ reconstructs at LF to a HC-internal position that is within the scope of its relevant binder. Akin to correlativization in H/U, putative locality effects in Romance/Germanic LD are suggested to corroborate a movement analysis. This is illustrated for the relative-clause island in (26), whereby the dislocated constituent cannot be associated with an island-bound correlate (see also Villalba 2000).

(26) *[$_{\Sigma}$ A Carlo], [$_{\text{HC}}$ ti parlerò del le persone [che gli$_{\phi}$ piacciono]].
to Carlo to you talk.ISG.FUT of the people that to him appeal
Intended: 'I will talk to you about the people that appeal to Carlo.' (Italian; Cinque 1990)

From this perspective, sentences such as (26) are ungrammatical because Σ has undergone island-violating movement in its traversal to the left periphery of its HC. Much like what we saw for CRs in H/U, however, Ott (2017) notes that the island in-sensitivity of co-ordinated configurations such as (27), despite their general island sensitivity, challenge this claim, once again requiring an alternative explanation for the ungrammaticality of sentences such as (26).

(27) [$_{\Sigma}$ Dem Peter], [$_{HC}$ dem und seiner Frau vertraue ich nicht].
the.DAT Peter him.DAT and his.DAT wife trust I not
'I don't trust Peter and his wife.' (German; Ott 2017)

In contrast to the above-mentioned connectivity effects, Ott (2014, 2015) argues that Romance/Ger-manic LD displays properties that are problematic for movement analyses that presuppose syntactic integration of Σ–HC and which alternatively point to Σ's extra-sentential status, akin to correlativization in H/U. For instance, Σ in such constructions is not associated with a gap created by movement but an overt pronominal, with the HC being a syntactically complete sentence. In addition, Σ is prosodically divorced from its HC, as is generally observed in parenthetical expressions. Moreover, Σ must precede fronted operators, such as *wh*-phrases (28).

(28) a. [$_{\Sigma}$ Den Peter], [$_{HC}$ woher kennst du den]?
ACC Peter from.where know you him
'Where did you meet Peter?' (German; Ott 2015)

b. *Woher, den Peter, kennst du den?
from.where ACC Peter know you him

Thus, similar to existing accounts of H/U CRs, a movement analysis of LD that assumes Σ and its HC are connected in the narrow syntax fails to comprehensively capture their discordant properties, likewise demanding an alternative solution. To this end, Ott (2014, 2015) proposes to forgo the standard assumption that Σ and its HC are syntactically combined. Rather, he suggests the former is really contained in a separate elliptical clause (EC), with Σ functioning as its sole surviving remnant that is juxtaposed in discourse with its HC. This is schematized in (29) for the LD construction in (22).

(29) [$_{EC}$ ~~ich habe gestern~~ [$_{\Sigma}$ den Peter] ~~gesehen~~], [$_{HC}$ den$_{\phi}$ habe ich gestern gesehen].
I have yesterday the Peter.ACC seen him.ACC have I yesterday seen
'I saw Peter yesterday.' (= (22))

Importantly, from this vantage point, local case/binding relations are established within the EC. This is shown in (30) for (23), where the R-expression 'María' in Σ is illicitly bound by a tacit pronominal, leading to a Condition C violation.

(30) *[$_{EC}$ ~~ella$_i$ aún no ha visto~~ [$_{\Sigma}$ a la hermana de María$_i$]], [$_{HC}$ ella$_i$ aún no la$_{\phi}$ ha visto].
she still not has seen ACC the sister of Maria she still not her.ACC has seen
'Maria's sister, she hasn't seen her yet.' (= (23))

Similarly, as illustrated in (31) for the sentence in (24), the pronominal variable in Σ is bound by a universal quantifier

in EC, which is PF-deleted.

(31) [$_{EC}$ ~~kathenas$_i$~~ ~~agapai~~ [$_{\Sigma}$ tin mitera tu$_i$]], [$_{HC}$ kathenas tin$_{\phi}$ agapai].
everyone loves ACC mother his everyone her.ACC loves
'Everyone loves their mother.' (= (24))

This type of ellipsis is suggested to be on a par with that found in other kinds of clausal ellipsis, including fragment answers and sluicing (Ross 1969; Merchant 2001, 2004; Weir 2014; Griffiths 2019, among others), given that all of the ostensible 'movement' properties found in LD are likewise observed in such constructions. As a result, one need not, and should not, appeal to structural integration and movement in order to capture said effects, which really seem to represent ellipsis-mediated connectivity.

Crucially, unlike alternative movement analyses, this proposal simultaneously has the power to explain the extra-sentential properties of LD. The lack of a gap in HC, the prosodic separation of Σ and HC, and the fact that Σ must precede fronted operators all naturally follow from the assumption that the two clauses are paratactic, being connected solely at the level of discourse.

5.4 A novel solution: correlatives as elliptical remnants

5.4.1 The basics

In an effort to resolve the discordant properties of H/U correlativization, I adopt Ott's (2014, 2015) treatment of Romance/Germanic LD. More precisely, I suggest that single-head correlatives such as (1), repeated in (32), do not involve syntactic integration of the CR and its HC; rather, such constructions constitute independent clauses that are connected in the information-structural domain rather than the narrow syntax.

(32) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

CRs such as that in (32) can alternate with dislocated headed relatives (33).

(33) [vo laRkii jo khaRii hai], [$_{HC}$ vo$_{\phi}$ lambii hai].
that girl which standing be-PR she/that tall be-PR
'Which girl is standing, she is tall.'
(Cinque 2009:4)

I thus treat the CR in (32) as an (internally) headed relative clause. As shown in (34), I assume that CRs are born in argument position in a separate EC that is largely isomorphic to the HC. Non-pronunciation then targets all morpho-syntactic material, excluding the CR itself.

(34) [EC [CR jo laRkii khaRiii hai] ~~lambii hai~~] [HC vo$_{\phi}$ lambii hai]
which girl standing is tall is that tall is
'The girl who is standing is tall.'

Following Ott (2014, 2015), I suggest that the ellipsis operation in (34) is akin to that independently found in sluicing and fragment answers in H/U (see Bhattacharya and Simpson (2012); Manetta 2013, 2020; Gribanova and Manetta 2016; Bhatia and Iyer 2018; Mishra 2022, 2024, among others). That such relatives may otherwise surface as fragment answers in the language (35) independently supports analyzing them as such elliptical remnants under correlativization.[7]

(35) A: kaunsii laRkii lambii hai?
which girl tall is
'Which girl is tall?'
B: jo laRkii khaRii hai.
which girl standing is
'The girl who is standing is tall.'

This proposal not only immediately explains why the HC in correlatives does not contain a gap and represents a grammatical standalone sentence but also captures the nature of the correlate in the HC, which alternative base-generation and movement analyses fail to do. Only a definite ϕ is felicitous in such configurations, as only such expressions may generally resume a pre-existing discourse topic (in this case, that denoted by the CR). Indefinite expressions, such as 'some', 'one', or bare NPs (which are indefinite in H/U) typically do not (36)–(37).

(36) a. I like Mary$_i$. That girl$_i$/She$_i$ doesn't lie.
b. I like Mary$_i$. #A/some girl$_i$ doesn't lie.

(37) a. Mujhe Siita$_i$ pasand hai. Vo$_i$ / vo laRkii$_i$ jhooth nahiiN bolti.
I.DAT Sita like is that that girl lie NEG says
'I like Sita$_i$. She$_i$/that girl$_i$ doesn't lie.'
b. Mujhe Siita$_i$ pasand hai. #LaRkii$_i$ / ek laRkii$_i$ / koi laRkii$_i$ jhooth nahiiN bolti.
I.DAT Sita like is girl one girl some girl lie NEG says
'I like Sita$_i$. #A/one/some girl$_i$ doesn't lie.'

There is good evidence that supports the claim that the relation between the CR and its correlate is truly one

[7] Remnants such as (35B) are only permissible for some speakers if they occur with the associated ϕ (i) (as judged to be the case in Wali 1982, as well as for Rajesh Bhatt (p.c.)).

(i) A: kaunsii laRkii lambii hai?
which girl tall is
'Which girl is tall?'
B: jo laRkii khaRii hai *(vo).
which girl standing is that
'The girl who is standing is tall.'

I leave an explanation for this speaker variation to future work.

of cross-sentential anaphora. For instance, the HC permits verb agreement mismatches relative to the CR. To illustrate, in a standard relative construction, the verb/auxiliary in the relative as well as the matrix verb/auxiliary agree in the person, number, and gender features of the head noun. This is illustrated in (38), where the main verb necessarily bears the third-person plural feminine features of the head noun and cannot bear default third-person singular masculine agreement.

(38) [jo laRkiiyaN vahaN khaRiiN haiN] kal chalii jayeNgii / *chala jayegaa.
which girls there standing.3PL.F be.3PL tomorrow walk.F go.FUT.3PL.F go.M go.FUT.3SG.M
'The girls who are standing there will leave tomorrow.'

Crucially, for the correlative configuration in (39), the verbal complex in the HC necessarily agrees with the HC-internal demonstrative, not the head noun in the CR, nor can it bear default third-person singular masculine agreement. This is clarified by the optional presence of an overt nominal in the HC.

(39) *Context:* Ram and Sita are in a room full of people. There is a group of girls standing at one end of the room. Ram says the following to Sita:

[$_{CR}$ jo majma vahaN khaRaa hai] [$_{HC}$ voh (laRkiyaN)$_{\phi}$ kal
which group.3SG.M there standing.M.3SG be.3SG.PRES those girls tomorrow
chalii jayeNgii / *chala jayegaa].
walk.F go.FUT.3PL.F walk.M go.FUT.3SG.M
'The group that is standing there, they/those girls will leave tomorrow.'

Such mismatches in verb agreement are precisely not what we would expect under existing approaches that treat CR–HC as syntactically integrated. If that were the case, the verb in the HC in (39) would necessarily agree in ϕ features with the head noun in the CR, on a par with (38), contrary to fact (Belyaev 2014:281 reports similar facts for South Ossetian).

Correlativization in H/U is thus proposed to be on a par with Romance/Germanic LD, and their above-mentioned shared properties seem to strongly support such a claim. The following section discusses a crucial asymmetry between both phenomena, however: LD in Romance/Germanic is generally optional, whereas correlativization in H/U is usually not.

5.4.2 When and why correlatives must dislocate

There is an important difference between Romance/Germanic LD and H/U CRs: unlike the former, the latter typically cannot appear HC-internally. For instance, the dislocated relative in (40-a) may replace the correlate in the HC (40-b).

(40) a. [$_{\Sigma}$ Wem Peters$_{i/*k}$ Bruder vertraut] [$_{HC}$ dem hilft er$_{k}$]
who.DAT Peter's brother trusts him.DAT helps he
'He helps whoever Peter's brother trusts.' (German)

b. [$_{HC}$ er$_k$ hilft [$_{\Sigma}$ wem Peters$_{i/*k}$ Bruder vertraut]]
he helps who.DAT Peter's brother trusts
'He helps whoever Peter's brother trusts.'

By contrast, we cannot substitute the ϕ in (41-a) with the CR, as shown in (41-b).

(41) a. [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ us=ne$_{\phi}$ Siita=ko dekha thaa]
which girl standing is that=ERG Sita=ACC saw be.3SG.PST.M
'The girl who is standing saw Sita.'

b. *[$_{HC}$ [$_{CR}$ jo laRkii khaRiii hai] Siita=ko dekha thaa]
which girl standing is Sita=ACC saw be.3SG.PST.M
Intended: 'The girl who is standing saw Sita.'

That is, according to the analysis offered in the previous section, the CR in (41-a) must dislocate. Why should this be so? Indeed, a similar question can be asked of the base-generation account discussed in §5.2.1: what causes the kind of clausal adjunction suggested for correlatives from this alternative view? In her base-generation account of such expressions, Dayal (1996:189ff) suggests that clausal adjunction of CR is due to Stowell's (1981) *Case resistance principle* (henceforth, CRP), which disallows CPs from appearing in Case positions.

(42) *Case resistance principle:*
CPs cannot appear in Case-marked positions.
(Stowell 1981)

Dayal (1996) thus suggests that clausal adjunction of CR, which she assumes is a CP, to IP of the HC is enforced to obviate violating the CRP, on a par with finite complement clauses that obligatorily surface post-verbally in H/U (43), despite the fact that this is otherwise an SOV language.

(43) a. Raam=ne kaha [$_{CP}$ ki Ali=ne Siita=ko dekha thaa].
Ram=ERG said that Ali=ERG Sita=ACC saw be.3SG.PST.M
'Ram said that Ali saw Sita.'

b. *Raam=ne [$_{CP}$ ki Ali=ne Siita=ko dekha thaa] kaha.
Ram=ERG that Ali=ERG Sita=ACC saw be.3SG.PST.M said
Intended: 'Ram said that Ali saw Sita.'

In other words, any time a CP wants to appear in a Case-licensing position, the CRP effectively 'kicks' said CP out of argument position: in the case of finite complement clauses, such CPs are extraposed, and in the case of correlatives, such CPs base-generate as IP adjuncts in the left periphery of the HC, according to Dayal (1996). This can be contrasted with non-finite complements, which can surface pre-verbally (44). That such clausal complements can appear with overt case morphology suggests that unlike finite CPs, such clauses are really nominalized IPs that would thereby be invulnerable to the CRP.

(44) Raam=ne us=ko [$_{IP}$ jaane]=kaa hukm diyaa.
Ram=ERG he=ACC go.INF=GEN order gave
lit. 'Ram gave him an order of going.'
'Ram ordered him to go.'
(Dayal 1996:27)

For the proposal herein, I share the intuition that CRs are necessarily expelled from an argument position in the HC; however, as shown in the previous section, I assume that they are altogether removed from the HC and are part of a separate root clause (*viz.*, EC) that is reduced at PF under identity with HC. This allows us to simultaneously capture the apparent reconstruction effects of CRs (as we will see in the following section) as well as their extra-sentential properties. I propose that the CR is generally exiled from the HC not because of the CRP, which seems to only be sensitive to abstract Case, but because of a categorial mismatch. Post-positional case markers in this language require a nominal complement, which, following Dayal (1996), I assume is not what CR is; on the contrary, CRs are bare CPs. In this way, utterances like (41-b) are disallowed due to a categorial mismatch: the CR, being a CP, appears in a position that otherwise licenses ergative case which generally requires a DP host (45).

(45) Aisha*(=ne) Siita=ko dekha thaa.
Aisha=ERG Sita=ACC saw be.3SG.PST.M
'Aisha saw Sita.'

An important prediction that this proposal makes is that where overt case morphology is not at stake, CRs should be able to surface HC-internally, and this prediction is borne out. For instance, as noted in the previous chapter, H/U is a split-ergative language that is conditioned by aspect (see Anand and Nevins 2006). In perfective contexts, such as (43-b), the subject is ergative-marked, and in non-perfective contexts, it receives unmarked nominative case (46).

(46) Ram Siita=ko dekh raha thaa.
Ram.NOM Sita=ACC saw be.PST.M
'Ram was seeing Sita.'

Importantly, the same verb in (43-b) in non-perfective contexts readily permits both dislocated relatives as well as HC-internal relative subjects (47).

(47) a. [$_{CR}$ jo laRkii khaRii hai] [$_{HC}$ vo$_{\phi}$ Siita=ko dekh rahi hai].
which girl standing is that Sita=ACC see PROG is
'The girl who is standing is seeing Sita.'

b. [$_{HC}$ [$_{CR}$ jo laRkii khaRii hai] Siita=ko dekh rahi hai].
which girl standing is Sita=ACC see PROG is
'The girl who is standing is seeing Sita.'

Similarly, we saw in Chapter 4 that DOM in H/U is optional with inanimate objects (48) (see Baker 2021, among others).

(48) Ali kitaab(=ko) paRegaa.
Ali book-DOM read.FUT.MASC
'Ali will read the book.'

In the absence of such case morphology, CRs need not dislocate and may appear HC-internally (49).[8]

(49) a. [$_{CR}$ jo kitaab mez=par hai] [$_{HC}$ Ali vo$_{\phi}$ paRegaa].
which book table=on is Ali that read.FUT.MASC
'Ali will read the book that is on the table.'

b. [$_{HC}$ Ali [$_{CR}$ jo kitaab mez=par hai] paRegaa].
Ali which book table=on is read.FUT.MASC
'Ali will read the book that is on the table.'

Thus, correlativization in H/U is obligatory in configurations where the CR occupies a position in the HC that otherwise licenses overt case morphology due to a categorial mismatch (as in (41-b)) and is optional when it does not (as in (47) and (49)).

If the relative occurs in an argument position within the EC, how do we handle the unavailability of overt case morphology to appear on the CR? To this end, I suggest that ellipsis repairs the presence of such illicit case morphology that is induced by a categorial discrepancy by way of 'extra deletion' (henceforth, ED) à la An 2016, 2019. The latter operation was originally proposed to represent an adjacency effect that, as schematized in (50), permits deletion of morpho-syntactic material which is adjacent to content that is independently PF-deleted.

(50) *(X) (Y) Δ
(An 2019:337)

The schema in (50) suggests that Y, but not X, may delete under adjacency to an ellipsis site (Δ). Such ED was proposed to account for the fact that fragment answers in Korean optionally surface with overt case morphology:

(51) Q: Nwu-ka John-ul manna-ss-ni?
who-NOM John=ACC meet-PAST-Q
'Who met John?'

A: Cho-(ka).
Cho-NOM
'Cho (met John).' (Korean)

(An 2019:338)

As shown in (52) for the fragment answer in (51), An (2016, 2019) proposes that the nominative case marker deletes due to its proximity to morpho-syntactic material that is otherwise targeted for non-pronunciation.

(52) [$_{FocP}$ [**Cho** ~~-ka~~] ~~[t John-ul manna-ss-e]~~]
Cho-NOM John=ACC meet-PAST-DEC
(An 2019:339)

[8] This is what we would expect if DOM is inserted post-syntactically, as suggested in the previous chapter.

For the analysis of CRs offered here, I suggest such ED is purely a repair process that applies as a "last resort", given pronunciation of overt case marking on CR would result in ungrammaticality. The correlative construction in (43-a) thus has the representation in (53), where the ergative case marker on CR deletes under adjacency with the ellipsis site.

(53) [$_{EC}$ [$_{CR}$ jo laRkii khaRiii hai]~~=ne Siita=ko dekha thaa~~] [$_{HC}$ us=ne$_{\phi}$ Siita=ko dekha thaa]
which girl standing is Sita=ACC saw be.3SG.PST.M that=ERG Sita=ACC saw be.3SG.PST.M
'The girl who is standing saw Sita.'

This claim is independently corroborated by the fact that CR fragments in H/U obligatorily surface without overt case morphology (54).

(54) A: kis=ne us=ko dekha thaa?
who=ERG that=ACC saw be.3SG.PST.M
'Who saw him/her?'
B: [$_{EC}$ [$_{CR}$ jo laRkii khaRii hai](*=ne) ~~us=ko dekha thaa~~]
which girl standing is ERG that=ACC saw be.3SG.PST.M
'The girl who is standing saw him/her.'

It is important to note that since ED is strictly an ellipsis repair process here, it will not apply to DP/PP fragments that necessarily surface with overt case morphology (see Chapter 3). In the latter instances, there is nothing to repair: DPs/PPs represent categories that are compatible with post-positional case markers in the language, posing no need for ED to be operative. From this perspective, we might expect other contexts where ellipsis necessarily strips a remnant of its case morphology; however, I am not aware of any such cases and leave this to future work.

The obligatory dislocation of CRs that is ultimately due to a categorial mismatch as proposed here is similar to certain LD constructions in Romance/Germanic languages. For instance, Spanish doubling constructions such as (55) are a kind of LD, as suggested in Ott 2015.

(55) Leer un libro, Juan quiere hacer eso.
read a book Juan wants do that
'Juan wants to read a book.' (Spanish)
(Anikó and Vicente 2009:671)

The verb *hacer* generally selects an NP complement and cannot take VP complements (56).

(56) Juan quiere hacer eso / *leer un libro.
Juan wants do that read a book
'Juan wants to do that/read a book.'
(Anikó and Vicente 2009:671)

As Ott (2015:244) notes, such facts support a paratactic analysis of Romance/Germanic LD and pose a problem for

alternative movement accounts of such phenomena which suggest Σ and ϕ are derivationally related (on a par with movement analyses of CRs). More precisely, this confirms that it is indeed ϕ that satisfies HC-internal selectional restrictions, not Σ. Relevant here is the fact that dislocation in (55) is obligatory given this clash in selectional needs. Since *hacer* cannot take the VP *leer un libro* as a complement in (56), said VP must dislocate, with the anaphoric resumptive pronominal *eso* satisfying the selectional needs of the HC-internal verb. Similarly, the verb *dekh* in (43) requires a nominal subject to which it can assign ergative case. Since CR is of category CP, which are typically case-resistant, it too must dislocate to avoid ungrammaticality, with the nominal ϕ in the HC instead being case-marked.[9]

5.4.3 Reconstruction effects are ellipsis-mediated

An elliptical analysis of correlativization straightforwardly derives the reconstruction effects witnessed in §5.1. This was illustrated for Condition C and A effects by the examples repeated below.

(57) a. [$_{CR}$ jo laRkii Siita=ko$_j$ pyaar kartii hai]$_i$ [$_{HC}$ us=ne$_{k/*j}$ us=ko$_i$ thukraa diya]
which girl Sita=ACC love does be.PRS that=ERG that=ACC reject gave
'She rejected the girl who loves Sita.'
(Bhatt 2003a:513)

b. [$_{CR}$ jis laRkii=ne un=se$_{i+j}$ baat kii]$_k$ [$_{HC}$ Ram$_i$ aur Shyam$_j$ us=ko$_k$ pyaar karte haiN]
which girl=ERG them=with talk did Ram and Shyam that=ACC love do are
'Ram$_i$ and Shyam$_j$ love the girl who talked to them$_{i+j}$.'

As shown in (58-a), the Condition C effect in (57-a) arises as a consequence of the R-expression 'Sita' being illicitly bound by the underlying pronominal *us=ne*. Likewise, the pronominal *un-se* in (57-b) is interpreted as being bound by the co-ordinated NP 'Ram and Shyam', because the latter underlyingly binds said pronoun in EC (58-b).

(58) a. [$_{EC}$ ~~us=ne$_{k/*j}$~~ [$_{CR}$ jo laRkii Siita=ko$_j$ pyaar kartii hai]$_i$~~=ko thukraa diya~~] [$_{HC}$ us=ne$_{k/*j}$
that=ERG which girl Sita=ACC love does is=ACC reject gave that=ERG
us=ko$_i$ thukraa diya].
that=ACC reject gave
'She rejected the girl who loves Sita.'

b. [$_{EC}$ ~~Ram$_i$ aur Shyam$_j$~~ [$_{CR}$ jo (laRkii) un=se$_{i+j}$ baat kartii hai]$_k$~~=ko pyaar karte haiN~~] [$_{HC}$
Ram and Shyam which girl that=with talk does be=ACC love do be
Raam$_i$ aur Shyaam$_j$ us laRkii=ko$_k$ pyaar karte haiN]
Ram and Shyam that girl=ACC love do be
'Ram$_i$ and Shyam$_j$ love the girl who talks to them$_{i+j}$.'

The reconstruction effect observed in (7), repeated in (59), receives a similar explanation.

[9] A different way of avoiding case marking on CR in EC would be to assume all morphological case markers in H/U are realized post-syntactically, with ellipsis applying before case-insertion. However, genitive case, which shows agreement with the possessed noun and thus seems syntactic, may perhaps pose a problem for such an alternative. I leave the plausibility of this suggestion to future work.

(59) [$_{CR}$ jis larke=se voh$_i$ mileNge] [$_{HC}$ sab log$_i$ us=ko dekheNge]
which boy=with they meet.FUT everyone that=ACC see.FUT
'Everyone will see the boy who they will meet.'

The pronominal variable in the CR is bound by an underlying universal quantifier in EC that is PF-deleted (60).

(60) [$_{EC}$ ~~sab log$_i$~~ [$_{CR}$ jis larke=se voh$_i$ mileNge]~~=ko~~ ~~dekheNge~~] [$_{HC}$ sab log$_i$ us=ko dekheNge]
everyone which boy=with they meet.FUT=ACC see.FUT everyone that=ACC see.FUT
'Everyone will see the boy who they will meet.'

The proposed reanalysis of H/U correlativization derives its seemingly discordant properties, which existing mono-sentential proposals that are predicated on either base-generation or movement struggle to do. As Ott (2014, 2015) also argues for Romance/Germanic LD, the extra-sentential properties of such configurations strongly suggest that CR and HC should not be treated as derivationally related constituents. The apparent reconstruction effects CRs exhibit are not definitive evidence of movement, as is typically assumed. Rather, on a par with the observed reconstruction effects in sluicing and fragment answers seen in Chapter 3, such effects are ellipsis-mediated.

5.4.4 Deriving locality effects

I propose that the apparent island effects that correlatives exhibit may be accounted for in the same manner as those witnessed for other types of fragment answers that we saw in Chapter 4. Recall that the solution offered there adopted Griffiths's (2019) analysis, which suggests putative locality effects in elliptical contexts are not a consequence of island-violating movement of the remnant, as is the standard assumption, but are due to the assumed identity condition in (61) not being satisfied.

(61) *Background-matching condition on clausal ellipsis*:
Given a question q in the MaxQUD with background Q and a clause α with background A, clausal ellipsis is recoverable in α iff A $\sqsubseteq$ Q.
(Griffiths 2019:10)

To see how this may work for the proposed ellipsis analysis of correlatives, consider the baseline sentence in (1), repeated in (62).

(62) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_\phi$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

Following Büring 2003, for the sentence in (62), I propose that CRs are contrastive topics that indicate/presuppose a (possibly implicit) multiple question, which may be expressed as Q1 below. The CR in A1 triggers an accommodated implicit sub-question (Q2), which the HC in turn answers (A2). Both A1 and A2 cumulatively resolve the Q1, licensing recoverability.

(63) Q1: kis laRkii=mein kaunse gun haiN?
which girl=in which properties are
'Which girl has which properties?'

A1: [EC [CR jo laRkii khaRiii hai] ~~lambii hai~~].
which girl standing is tall is
'The girl who is standing…'

Q2: us=mein kaunse gun haiN?
her=in which properties are
'Which properties does the girl who is standing have?' = *accommodated sub-question*

A2: [HC vo_{ϕ} lambii hai].
that tall is
'…she is tall.'

Following Ott 2017, I suggest that the proposed ellipsis operation is on a par with standard backward clausal ellipsis that is independently productive in this language (64).

(64) mujhe nahiiN pata (ki) ~~Raam=ne~~ kis=ko ~~dekha thaa~~, lekin Raam=ne kisi=ko dekha
I.DAT NEG know that Ram=ERG who=ACC saw be.PST.M but Ram=ERG someone=ACC saw
thaa.
be.PST.M
'I don't know who, but Ram saw someone.'

That is, recoverability will only be possible once the postcedent HC has been uttered.

Crucially, as discussed in Chapter 4, QUDs must strictly comprise grammatical questions to enter the push-down stack (65).

(65) *QUD-syntax correspondence conjecture*:
Regardless of whether they are explicit or implicit, the questions in the MaxQUD from which the meaning of clausal ellipsis is recovered are always syntactically derived.
(Griffiths 2019:11)

Griffiths (2019) thus proposes that what are typically considered to be island effects in clausal ellipsis are truly instances of the identity condition in (61) not being satisfied. Thus, similar to what was said for the island sensitivity of non-clausal fragment answers in Chapter 4, I suggest that such effects in correlative constructions (66) are not a consequence of island-violating movement of CR, as is typically assumed, but are epiphenomenal.

(66) a. *[CR jo vahaaN rehta hai] [HC maiN [yeh baat ki vo_{ϕ} nahiiN aayeega] jaantii thii]]
which there stay-PR I this matter that he not come-F know-P
Intended: 'as for the person *x* : *x* stays there, I knew the fact that *x* will not come'
(Dayal 1996:183)

b. *[$_{CR}$ jo vahaaN rehta hai] [$_{HC}$ mujh=ko [vo kahanii [$_{CR}$ jo us=ne$_{\phi}$ likhii]] pasand hai]
which there stays be.PRS I=DAT that story which that=ERG wrote like be.PRS
Intended: 'as for the person *x* : *x* stays there, I like the story that *x* wrote'
(Bhatt 2003a:500)

More precisely, the accommodated multiple questions of (66) are island-sensitive (67), requiring the *wh*-phrase that corresponds to the correlate to illicitly extract to the matrix clause in order to obtain wide scope. Once again, this is expected given that *wh*-questions are generally island-sensitive in this language (see Chapter 3).

(67) a. *kaun$_i$ tum [yeh baat ki t_i nahiiN aayeega] jaantii thii?
who you this matter that not come-F know-P
Intended: 'which entity *x*.you knew the fact that *x* will not come'

b. *kis=ne$_i$ tum=ko [vo kahanii [$_{CR}$ jo t_i likhii]] pasand hai?
who=ERG you=DAT that story which wrote like be.PRS
Intended: 'which entity *x*.you like the story that *x* wrote'

Note that the corresponding *in situ* variants of (67) are also ungrammatical (68).

(68) a. *tum [yeh baat ki kaun$_i$ nahiiN aayeega] jaantii thii?
you this matter that who not come-F know-P
Intended: 'which entity *x*.you knew the fact that *x* will not come'

b. *tum=ko [vo kahanii [$_{CR}$ jo kis=ne$_i$ likhii]] pasand hai?
you=DAT that story which who=ERG wrote like be.PRS
Intended: 'which entity *x*.you like the story that *x* wrote'

Therefore, comparable to what was said for the island sensitivity of non-clausal fragment answers in Chapter 4, we do not need to assume extraction of CR remnants to capture apparent locality effects in such configurations, as is typically the case. Indeed, the lack of island effects with co-ordinated islands seen in (20), repeated in (69) despite their independent island sensitivity strongly supports the claim that illicit movement in the narrow syntax cannot be the true culprit here.

(69) a. [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ mai=ne kal [us=ko$_{\phi}$ aur Raam=ko] dekha thaa]
which girl standing is I=ERG yesterday that=ACC and Ram=ACC saw be.PST.M
'The girl who is standing, I saw her and Ram yesterday.'

b. [$_{EC}$ ~~mai=ne kal~~ [jo laRkii khaRiii hai]~~=ko aur Raam=ko dekha thaa~~] [$_{HC}$
I=ERG yesterday which girl standing is=ACC and Ram=ACC saw be.PST.M
mai=ne kal [us=ko$_i$ aur Raam=ko] dekha thaa]
I=ERG yesterday her and Ram=ACC saw be.PST.M
'The girl who is standing, I saw her and Ram yesterday.'

To account for the island in-sensitivity of expressions such (69-a), recall from the previous chapter that within the QUD framework, each conjunct in a co-ordinated structure represents an individual, partial answer to the QUD

(see Hartmann et al. 2021, among others). In other words, both function as individual focus alternatives of the same set. I suggest that the relative remnant in (69-b) thus partly answers the accommodated multiple question in (70), whose corresponding set of focus alternatives is shown in (71).

(70) tum=ne kab kis=ko dekha thaa?
you=ERG when who=ACC saw be.PST.M
'Who did you see when?'

(71) {You saw Ram yesterday, you saw the girl who is standing yesterday …}

Unlike the other island types in (66), the implicit QUD that licenses the co-ordinated construction in (69) is grammatical (see (70)) and thus can enter the pushdown stack, ensuring recoverability. The answer, being a focus alternative that belongs to the same set that the accepted conjunct in the antecedent belongs to, functions as a partial response to this question.

Overall, it seems that a paratactic ellipsis analysis of H/U correlativization has the potential to explain the observed asymmetries in island effects. As discussed in Chapter 3 for the MDA regarding non-clausal fragment answers, analyses of correlativization that assume superfluous movement of CRs have no straightforward explanation of such facts, as well as competing base-generation accounts. The novel paratactic ellipsis analysis of correlativization in H/U here has an explanatory edge over competing base-generation and movement analyses. If CRs are elliptical remnants whose recoverability is contingent on syntax-external factors, then asymmetries in putative locality effects are expected.

5.4.5 Multi-head correlatives are hanging topics

Recall from §5.1 that we also find multi-head CRs in this language, such as (4), repeated in (72).

(72) [$_{CR}$ jis laRkii=ne$_i$ jis laRke=ke$_j$ saath khelaa] [$_{HC}$ us=ne$_i$ us=ko$_j$ haraayaa]
which girl=ERG which boy=GEN with played that=ERG that=ACC defeated
lit. Which girl played with which boy, she defeated him.
'Every girl defeated the boy she played with.'
(Dayal 1996:14)

On a par with single-head correlatives, both clauses in such constructions are separated by a prosodic break (i.e., an IP boundary). Furthermore, the CR is not associated with a gap in the HC but overt pronominals, and the HC functions as a grammatical standalone sentence. Given these properties, I propose that CR in such configurations is likewise not syntactically integrated into HC but represents an independent constituent that linearly precedes it.

We saw in §5.1 that an important difference between single-head CRs and multi-head ones is that unlike the former, the latter generally display no island or reconstruction effects. Thus, a verbatim ellipsis analysis of single-head CRs to multi-head ones is not justified, given the assumption that such effects are ellipsis-mediated. What is the CR in (72) then? To answer this, I follow Motter's (2023) analysis of CRs in Hittite (73).

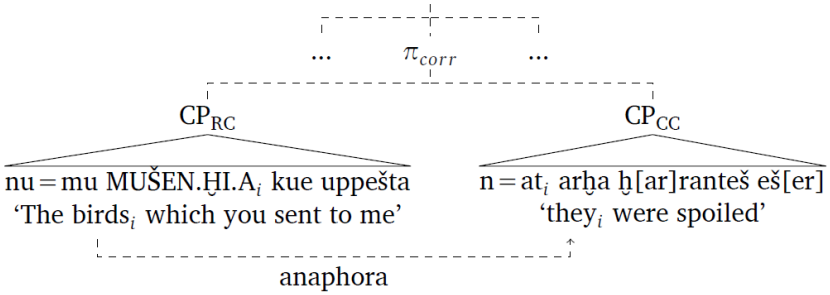
(73) [nu=mu MUŠEN.ḪI.A kue uppešta]$_i$ n=at$_i$ arḫa ḫ[ar]ranteš eš[er]
CONN=me birds which you.sent CONN=they spoiled were
'[The birds which you sent me]$_i$, they$_i$ were spoiled.' (Hittite)
(AT 125 11–12 (NH); Hoffner 2009:373)

In line with the present proposal, Motter (2023) offers a paratactic solution of sentences such as (73), whose independent root clauses are juxtaposed in discourse. Following Lipták 2009 on Hungarian correlativization, Motter (2023) proposes that correlative constructions such as (73) are a type of hanging topic (henceforth, HT), a phenomenon that is independently found in the language (74).

(74) ^{m}Ḫuidudduwalliš n=an ^{URU}Šallašna ašašer
Ḫuidudduwalli.NOM CONN=him.ACC in.Šallašna they.settled
'(As for) Ḫuidudduwalli, they settled him in the city of Šallašna.' (Hittite)
(HKM 113 Vo 14–15 (MH/MS); Melchert and Hoffner 2008:408)

Though superficially similar in form, HTs systematically differ from LD (see Cinque 1990). For instance, a HT and its corresponding correlate typically do not exhibit case connectivity (74), while LDed constituents do. Furthermore, HTs tend not to exhibit locality and reconstruction effects, while LDed elements do (see §5.2). Importantly, correlatives in Hittite are likewise assumed to not display island[10] and reconstruction effects (Motter 2023:27). Motter (2023) thus analyzes CRs/HTs in this language as bare NPs/CRs that base-generate as constituents that are crucially not syntactically but discourse integrated with their HCs, as shown in (75) for (73).

(75)



In (75), the correlative construction in its entirety forms a discourse constituent (π_{corr}) that is joined in the information-structural domain (represented by the dashed lines), with the relative clause being discourse anaphoric to its corresponding correlate.

Similarly, I suggest that multi-head correlatives in H/U are bare HTs. Following Cinque 1983, I assume such HTs are non-elliptical, independent discourse units. That is, the CR in (72) merely functions as a device that is used to establish the discourse topic. Crucially, the fact that single-head and multi-head CRs diverge when it comes to the presence of putative reconstruction and locality effects independently corroborates their proposed differential morpho-syntax.

[10] The claim that Hittite correlatives do not showcase locality effects of course should be taken with a grain of salt, given the methodological constraints of analyzing an extinct/corpus language such as Hittite (Motter 2023:19).

If multi-head CRs are not elliptical remnants as single-head ones are, we expect that they should not be able to independently function as fragment answers, unlike single-head ones, as exemplified in (54) and repeated in (76).

(76) A: kis=ne us=ko dekha thaa?
who=ERG that=ACC saw be.3SG.PST.M
'Who saw him/her?'

B: [$_{EC}$ [$_{CR}$ jo laRkii khaRii hai](*=ne) ~~us=ko~~ ~~dekha thaa~~]
which girl standing is ERG that=ACC saw be.3SG.PST.M
'The girl who is standing saw him/her.'

Indeed, the ungrammatical example in (77) shows that this prediction is borne out (see also Wali 1982).

(77) A: kis=ne kis=ko haraayaa?
who=ERG who=ACC defeated
'Who defeated whom?'

B: *jis laRkii=ne jis laRke=ke saath khelaa us=ne us=ko.
which girl=ERG which boy=GEN with played that=ERG that=ACC
Intended: 'Every girl defeated the boy she played with.'

Single-head and multi-head CRs are thus similar in that they both determine the trajectory of conversation. Importantly, however, they diverge when it comes to their form: single-head CRs are elliptical remnants of a clause that is meaning-equivalent to the HC, and multi-head CRs are bare HTs.

5.5 Summary

This chapter explored correlativization (e.g., *The girl who is standing$_i$, she$_i$ is tall*) in H/U, which was shown to present paradoxical properties that, on the one hand, suggest the CR and its HC are syntactically integrated and, on the other, point to the CR's extra-sentential nature. I argued that available analyses of such constructions, including base-generation and movement-based accounts, do not comprehensively capture the facts. This is so given their presupposition that CRs are syntactically integrated into their HC. In an effort to resolve this puzzle, I suggest to forgo this standard assumption and alternatively treat CRs as juxtaposed root clauses that are connected not in the narrow syntax but at the level of discourse (e.g., *The girl who is standing$_i$* ~~*is tall*~~*. She$_i$ is tall*.), giving this proposal an explanatory edge over existing accounts. To the extent that such a paratactic ellipsis analysis is valid, it remains to be seen whether this proposal is extendable to correlativization in other natural languages.

And here, poor fool! with all my lore I stand, no wiser than before.

—Johann Wolfgang Von Goethe
Faust

Chapter 6

Conclusion

In this thesis, I argued for treating clausal ellipsis in H/U not as PF-deletion of a syntactic constituent, as is so often assumed, but free and maximal deletion of morpho-syntactic material surrounding the remnant that corresponds with the clausal background. This has the consequence of allowing remnants to remain *in situ* in the narrow syntax, thereby avoiding issues related to exceptional movement, which existing accounts must contend with.

The discussion began with a critical review of the state of the art in Chapter 2. It was argued that a non-structural approach to subsententials, which is driven by the need for a parsimonious theory, is too reductionist. The presence of various connectivity effects (e.g., case and binding effects) conversely corroborate the assumption that short forms comprise sentential structure beyond what is seen/heard. In other words, their derivation involves true clausal ellipsis, or PF-deletion, as suggested in Ross's (1969) seminal work on sluicing. Using cross-linguistic data, I showed that Merchant's (2001, 2004) structuralist approach involving deletion of a syntactic constituent, the so-called MDA, is too strong, unnecessarily forcing the remnant to escape the ellipsis site it is born in prior to PF-deletion (1).

(1) A: Who does Arthur hate? B: Micah$_i$ [$_{TP}$ ~~Arthur hates t_i~~].

Over and above such conceptual superfluity, asymmetries in locality effects militate against the idea that remnants must displace in the narrow syntax, with it falsely predicting widespread island sensitivity. By contrast, an *in situ* theory of clausal ellipsis represents a practical middle ground, as it does not enforce ellipsis-specific movement (2).

(2) A: Who does Arthur hate? B: [$_{TP}$ ~~Arthur hates~~ Micah].

In this way, an *in situ* theory more accurately reflects Ross's (1969) original proposal of sluicing, according to which the latter involves *wh*-question formation followed by PF-deletion; that is, the *wh*-question is formed, whether that be via an *in situ* or *ex situ* mechanism, and then PF-deletion eliminates all clausal material up to the remnant. However, *in situ* theories must account for the presence of locality effects under ellipsis where present (though see Griffiths 2019).

Moreover, I argued that Merchant's (2001) identity condition on clausal ellipsis, namely, his focus condition, is sub-optimal, as it presupposes deletion of a syntactic constituent, raising the above-mention-ed issues. Recent approaches to recoverability which alternatively suggest ellipsis identity is sensitive to inquisitive content (Krifka 2006, AnderBois 2014, Weir 2018, among many others) do not make such a detrimental presupposition and simply require meaning equivalency between the elliptical clause and that of its at-issue question. They further capture

various 'inheritance-of-content' effects found under ellipsis, as well as the availability of extra-propositional material as elliptical remnants, such as MPs in German. Most current theorizing further assumes some degree of morpho-syntactic isomorphism over and above meaning equivalency, further capturing the unavailability of structural alternations under ellipsis (diathesis shift, etc.).

Finally, the separate though related issue of ellipsis licensing, which concerns the grammatical distribution of elliptical constructions such as sluicing, continues to perplex. While the E-feature solution to this puzzle is descriptively adequate, it does no more than re-state the problem. Conversely, the QUD approach to ellipsis identity makes the correct general prediction that clausal ellipsis should only ever be licensed in questions and answers; however, its empirical coverage remains far from clear.

Chapter 3 introduced sluicing and fragment answers in H/U. Here, I argued that such elliptical expressions warrant a PF-deletion analysis on the basis of connectivity effects (case connectivity, binding effects, P-retention, etc.). We also saw that a 'pseudo-ellipsis' analysis of subsententials (à la Merchant 1998) is not feasible for H/U, given discrepancies in truncated clefts and short forms in this language.

Within the purview of a PF-deletion approach, I argued against existing analyses of clausal ellipsis in H/U, all of which adopt some version of the MDA. We saw that theories which assume sentential ellipsis is fed by independently available $\overline{\text{A}}$-movements (scrambling and topicalization) are untenable. This was not only due to the fact that such movements alter the information structure of the elliptical source but also because certain movements (e.g., scrambling) induce unwanted interpretive effects with respect to, for example, specificity and scope. Although covert-movement analyses attempt to resolve the issue of exceptional *wh*-movement in this otherwise *wh*-in situ language, they merely reallocate the issue of exceptionalism to the PF component, reducing clausal ellipsis in this language to an instance of exceptional top-copy pronunciation of a movement chain. Assuming a uniform theory of sluicing and fragment answers, it further remains unclear how such covert-movement analyses would be extendable to fragment answers while avoiding the above-mentioned alterations to information structure/interpretation. Furthermore, I argued against alternative PF-movement accounts, according to which remnant movement is a "last resort" process that applies to satisfy conflicting PF instructions, given the conceptual and empirical issues it raises (including its inability to handle the strict linearity of multiple remnants).

Finally, we saw apparent asymmetries in locality effects that further pose an issue for such MDA accounts, which *a priori* make the false prediction that all elliptical remnants should display island effects. More precisely, sluicing seems to not showcase island sensitivity. Likewise, echo/reprise sluices and fragment answers are not island-sensitive. Conversely, (contrastive/non-contrastive) fragment answers seem to be island-sensitive, with the exception of co-ordinate configurations. Merchant's (2001) PF-theory of islands, which attempts to capture similar asymmetries in English, suggests ellipsis repairs defective traces left in the wake of the remnant's island-violating movement out of the ellipsis site. I argued that this explanation is insufficient, failing to capture differences in locality effects within and across island types (reprise vs. non-reprise remnants, etc.). By contrast, it is not *prima facie* obvious how an alternative *in situ* approach would be able to capture the apparent presence of island effects whenever we do see them (though see Griffiths 2019).

My proposal in Chapter 4 adopts the *in situ* framework and suggests that clausal ellipsis in this language does not target a syntactic constituent. Rather, PF-deletion affects morpho-syntactic material freely and maximally up

to recoverability. Following existing QUD approaches of ellipsis identity (Krifka 2006, Weir 2018, among others), I suggested that recoverability itself is bound by the background status of PF-deleted content, which excludes any discourse-new material, contrastive foci, and extra-propositional content that does not enter into the calculation of truth conditions, such as German MPs. In other words, although PF-deletion is blind to syntactic constituency, it is constrained by recoverability, rendering clausal ellipsis background deletion. I showed evidence from various 'inheritance-of-content' effects in H/U clausal ellipsis that independently corroborate the assumption that recoverability involves background matching, where the background of the antecedent at-issue QUD (or "MaxQUD") must generally entail that of the remnant (à la Weir 2018, Griffiths 2019). The question as to why clausal ellipsis involves maximal deletion was tentatively answered by assuming Heim's (1991) notion of *Maximize Presupposition!*; however, a proper explanation of this issue remains to be developed. BD was shown to avoid the infelicity of analyzing remnants as having undergone $\overline{\text{A}}$-movement. Moreover, it accounts for why the discourse marker *=to*, which generally cannot appear on subsententials, can surface on remnants that are not discourse-Given.

With respect to locality effects, I adopted an island evasion approach (Merchant 2001, Barros et al. 2014, among others) and suggested that sluices are not island-sensitive because they are amenable to a short source that both licenses the requisite case morphology of the remnant and has a background that matches that of the MaxQUD, licensing recoverability. I further suggested that the island sensitivity of fragment answers is not due to illicit movement of the remnant in the narrow syntax, as is typically assumed. Rather, such effects are epiphenomenal in that they are a consequence of the requisite MaxQUD being island-sensitive (à la Griffiths 2019); this claim is independently supported by the presence of widespread island effects in the language. By contrast, the island sensitivity of fragment answers was suggested to be due to the fact that the corresponding question of such remnants is an island-sensitive one. The fact that (contrastive/non-contrastive) fragment answers whose correlates are contained in a relative clause island may be rescued by manipulating the correlate in the antecedent and by inserting a sluiced question with an underlying short source before the fragment answer strongly supports the claim that apparent island sensitivity in fragment answers is superficial, truly being due to factors extraneous to the narrow syntax. In this regard, two questions remain open for future research: (i) Why does the island sensitivity of non-contrastive fragment answers differ cross-linguistically? (ii) Why is it that fragment answers can be anaphoric to a short source whereas sluices must be?

If PF-deletion targets morpho-syntactic material freely and maximally, whence P-retention? In this regard, I argued that a Griffiths (2019)-style structured-meaning approach, which reduces all PPs cross-linguistically to either lexical or functional categories, is dubious. By contrast, I suggested that P-retention evidences the adopted claim that what is actually deleted in the PF component is some prosodic constituent (Bruening 2015), which corresponds with the clausal background. The retention of post-positions on elliptical remnants then is nothing more than P^0 encliticizing to the lexical remnant, akin to its behaviour in non-elliptical contexts. Complex PPs that permit P-omission so long as the remnant is genitive-marked despite the fact that the P^0 and its complement generally cannot be separated under movement further corroborate the proposed *in situ* account. I suggested that such P-omission is due to the fact that these PPs independently form their own G-marked prosodic word that gets deleted, rather than encliticizing to the remnant. Though in principle possible, I argued against treating the optionality of the complementizer-like element *ki* in a similar fashion, given its optionality is found in non-elliptical contexts as well.

Conversely, I suggested that morpho-syntactic material which does not impose syntactic/semantic effects, such as *ki* and DOM, are inserted post-syntactically (à la Manetta 2010, 2011). This speculation requires further attention in future work.

Finally, I showed that multiple remnants are permissible in H/U, which demonstrate the following two patterns: (i) the linear order of such remnants strictly matches that of its correlates despite a flexible linear order in non-elliptical contexts, and (ii) the CMC is active in H/U. By adopting Kotek and Barros's (2018) analysis of similar strict linearity of multiple remnants in Russian, I showed that such facts further support the assumed QUD approach to ellipsis identity. The separate question as to why the CMC holds in H/U remains open.

An immediate strength of this proposal relative to its MDA counterpart is its generalizability to languages beyond H/U. Since background deletion assumes clausal ellipsis is discourse-licensed, it is insensitive to language-specific syntactic operations. It thus captures, for instance, sluicing in *wh*-ex situ languages, such English; *bona fide wh*-in situ languages, such as Turkish; and those with a mixed system, such as H/U without any *ad hoc* stipulations regarding movement. Furthermore, it does not enforce the prediction that *wh*-in-situ languages will only ever have 'sluicing-like constructions' and not genuine sluicing.

In Chapter 5, I provided a novel elliptical analysis of correlativization in H/U, whereby a left-peripheral correlative (CR) is associated with a correlate in a following host clause (HC) (3).

(3) [$_{CR}$ jo laRkii khaRiii hai] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is that tall is
'The girl who is standing is tall.'
(Srivastav 1991:639)

I showed that such configurations seemingly display paradoxical properties that mirror those of Romance/Germanic LD, where a left-dislocated constituent is similarly associated with a HC-internal correlate. Both phenomena, on the one hand, display properties that show the dislocated constituent's connectivity into the HC (e.g., binding effects) and, on the other hand, those that betray its extra-sentential status (e.g., the dislocated XP's extra-clausal positioning and its prosodic separation from the HC). I argued that existing accounts, which treat CR–HC as syntactically integrated (4) do not capture all of the facts straightforwardly.

(4) [$_{CP}$ [$_{IP}$ jo laRkii khaRiii hai vo$_{\phi}$ lambii hai]]
which girl standing is that tall is

Base-generation accounts of CR (Srivastav 1991, Dayal 1996) have no natural explanation for observed reconstruction and locality effects, while movement analyses (Mahajan 2000, Bhatt 2003a) have no straightforward way of deriving observed asymmetries in island effects. Moreover, existing mono-clausal analyses do not account for the extra-sentential properties of such utterances straightforwardly, nor do they have a natural explanation for why ϕ must be definite.

Following recent analyses of LD in Romance/Germanic languages (Ott 2014, 2015), I alternatively suggested that the CR is born in a separate elliptical clause (EC) which is parenthetically juxtaposed to its HC (5) (see also Motter 2023).

(5) [$_{EC}$ [$_{CR}$ jo laRkii khaRiii hai] ~~lambii hai~~] [$_{HC}$ vo$_{\phi}$ lambii hai]
which girl standing is tall is that tall is

This proposal not only captures the definite status of ϕ, given only such pronominals resume an existing discourse referent, but also the extra-sentential properties of correlativization without *ad hoc* stipulations. I further suggested that CRs, unlike LD, usually must dislocate due to constraints on case licensing in HC. Post-positional case markers in H/U, which require a nominal host, are incompatible with CRs, which I take to be bare CPs (following Dayal 1996), forcing such relatives to dislocate. This analysis was independently supported by the fact that when such overt case morphology is not at stake, CRs may appear HC-internally. Such an approach was shown to handle putative reconstruction effects, wherein local binding relations are established in EC. Similar to the above-mentioned approach to the island sensitivity of fragment answers, I proposed locality effects in such constructions are not due to syntactic movement of CR but failure to recover unspoken content (à la Griffiths 2019). The post-positional case marking of the relative in EC was suggested to be repaired by ellipsis, given its adjacency to the ellipsis site (An 2016, 2019). It remains to be seen whether such a paratactic ellipsis analysis is extendable to correlativization in other natural languages.

While this thesis raises a number of important questions, I hope to have convinced the reader that the most productive path towards developing an explanatorily adequate theory of clausal ellipsis, which is our ultimate goal, is one that lets go of unwarranted assumptions that mistreat certain properties of the phenomenon as syntactic in nature. It is thus important to not lose sight of the following question in this endeavor: is what we are looking at truly syntax or something else?

References

Abe, J. (2015). *The in-situ approach to sluicing*. John Benjamins Publishing Company.

Abe, J. (2016). Make short answers shorter: Support for the in situ approach. *Syntax*, 19(3):223–255.

Abe, J. and Hornstein, N. (2012). "Lasnik-effects" and string-vacuous ATB movement. *Ways of structure building*, pages 169–205.

Abe, J. and Tancredi, C. (2013). Non-constituent deaccenting and deletion: A phase–based approach. *Manuscript, Tohoku Gakuin University and Keio University. Retrieved from: https://sites. google. com/site/jabeling27/recent-works*.

Abels, K. and Dayal, V. (2023). On the syntax of multiple sluicing and what it tells us about *wh*-scope taking. *Linguistic Inquiry*, 54(3):429–477.

Aelbrecht, L. (2010). *The syntactic licensing of ellipsis*. Amsterdam: John Benjamins Publishing Company.

Alcalá, C. R. (2012). Topics first: a derivational approach to CLLD topicalization in Romance. Paper presented at *Linguistic Symposium on Romance Languages 42*, Southern Utah University.

Almeida, D. A. d. A. and Yoshida, M. (2007). A problem for the preposition stranding generalization. *Linguistic Inquiry*, pages 349–362.

Alzaidi, M. S., Xu, Y., and Xu, A. (2019). Prosodic encoding of focus in Hijazi Arabic. *Speech Communication*, 106:127–149.

An, D.-H. (2016). Extra deletion in fragment answers and its implications. *Journal of East Asian Linguistics*, 25:313–350.

An, D.-H. (2019). On certain adjacency effects in ellipsis contexts. *Linguistic Inquiry*, 50(2):337–355.

Anagnostopoulou, E. (1997). Clitic left dislocation and contrastive left dislocation. In Anagnostopoulou, E., Zwarts, F., and van Riemsdijk, H., editors, *Materials on left dislocation*, pages 151–192. Amsterdam: John Benjamins Publishing Company.

Anand, P. and Nevins, A. (2006). The locus of ergative case assignment: Evidence from scope. In *Ergativity*, pages 3–25. Springer.

AnderBois, S. (2010). Sluicing as anaphora to issues. In *Semantics and linguistic theory*, volume 20, pages 451–470.

AnderBois, S. (2011). *Issues and alternatives*. PhD thesis, University of California, Santa Cruz.

AnderBois, S. (2014). The semantics of sluicing: Beyond truth conditions. *Language*, pages 887–926.

Anikó, L. and Vicente, L. (2009). Pronominal doubling under topicalization. *Lingua*, 119:650–686.

Aoun, J. and Benmamoun, E. (1998). Minimality, reconstruction, and PF movement. *Linguistic Inquiry*, 29(4):569–597.

Arregui, A., Clifton Jr, C., Frazier, L., and Moulton, K. (2006). Processing elided verb phrases with flawed antecedents: The recycling hypothesis. *Journal of memory and language*, 55(2):232–246.

Asif, K. (Director). (1960). *Mughal-e-Azam* [Film]. Sterling Investment Corporation.

Bains, G. S. (1989). *Complex structures in Hindi-Urdu: Explorations in government and binding theory*. PhD thesis, New York University.

Baker, M. (2021). On dependent case and the sometimes independence of ergative and differential object marking.

Barros, M. (2012). Sluiced fragment answers: another puzzle involving islands and ellipsis. *Snippets*, 25.

Barros, M. (2014). *Sluicing and identity in ellipsis*. Rutgers, The State University of New Jersey, New Brunswick.

Barros, M., Elliott, P., and Thoms, G. (2014). There is no island repair. *Ms. Rutgers, UCL, University of Edinburgh*.

Barros, M. and Kotek, H. (2019). Ellipsis licensing and redundancy reduction: A focus-based approach. *Glossa: a journal of general linguistics*, 4(1).

Barros, M. V. (2013). Harmonic sluicing: Which remnant/correlate pairs work and why. In *Semantics and Linguistic Theory*, pages 295–315.

Bartos, H. (2000). VP-ellipsis and verbal inflection in Hungarian. *Acta Linguistica Hungarica*, 47(1):3–23.

Bashir, E. (1999). The urdu and hindi ergative postposition ne: Its changing role in the grammar. *The yearbook of South Asian languages and linguistics*, 1999:11–36.

Beavers, J. and Sag, I. A. (2004). Coordinate ellipsis and apparent non-constituent coordination. In *Proceedings of the 11th International Conference on Head-Driven Phrase Structure Grammar, Center for Computational Linguistics, Katholieke Universiteit Leuven*, pages 48–69.

Beck, S. and Berman, S. (2000). Wh-scope marking: Direct vs. indirect dependency. In Lutz, U., Müller, G., and von Stechow, A., editors, *Wh-scope marking*, pages 17–44. John Benjamins Amsterdam/Philadelphia.

Belletti, A. (2005). Extended doubling and the VP periphery. *Probus*, 17:1–35.

Belyaev, O. (2014). Anaphora in ossetic correlatives and the typology of clause combining. In *On diversity and complexity of languages spoken in Europe and North and Central Asia*, pages 275–310. John Benjamins Publishing Company.

Benincà, P. and Poletto, C. (2004). Topic, focus, and V2: defining the CP sublayers. In Rizzi, L., editor, *The structure of CP and IP*, pages 52–75. Oxford: Oxford University Press.

Bhatia, S. (2014). Multiple focus in hindi-urdu. *Formal Approaches to South Asian Languages*, 4.

Bhatia, S. and Iyer, J. (2018). Scope parallelism in a surface-scope language: Evidence from Hindi-Urdu sluicing. In *Formal Approaches to South Asian Languages, 7*.

Bhatt, R. (1997). Matching effects and the syntax-morphology interface: Evidence from Hindi correlatives. *MIT Working Papers in Linguistics*, 31:53–68.

Bhatt, R. (2003a). Locality in correlatives. *Natural Language & Linguistic Theory*, 21(3):485–541.

Bhatt, R. (2003b). Topics in the syntax of the modern Indo-Aryan languages. *Passivization Handout) URL: http://web. mit. edu/rbhatt/www/24.956*.

Bhatt, R. (2003c). *Topics in the Syntax of the Modern Indo-Aryan Languages*. Lecture handouts, MIT, Cambridge, MA.

Bhatt, R. and Dayal, V. (2007). Rightward scrambling as rightward remnant movement. *Linguistic Inquiry*, 38(2):287–301.

Bhatt, R. and Dayal, V. (2014). Polar kyaa: Y/N or speech act operator? In *Workshop on Non-Canonical Questions and Interface Issues, Kloster Hegne Universität Konstanz*.

Bhattacharya, T. and Simpson, A. (2012). Sluicing in Indo-Aryan: an investigation of Bangla and Hindi. In Merchant, J. and Simpson, A., editors, *Sluicing: Cross-linguistic perspectives*, pages 183–218. Oxford: Oxford University Press.

Biezma, M. and Rawlins, K. (2012). Responding to alternative and polar questions. *Linguistics and Philosophy*, 35(5):361–406.

Bobaljik, J. D. (2002). A-chains at the PF-interface: Copies and covert movement. *Natural Language & Linguistic Theory*, 20(2):197–267.

Boone, E. (2013). Exceptional movement is unexceptionally local. In *Proceedings of NELS*, volume 44, pages 55–68.

Boone, E. (2014). The licensing condition on clausal ellipsis. *Linguistics in the Netherlands*, 31(1):13–25.

Bošković, Z. and Nunes, J. (2007). The copy theory of movement. *The copy theory of movement*, 107:13.

Bruening, B. (2015). Non-constituent coordination: Prosody, not movement. *University of Pennsylvania working papers in linguistics*, 21(1):5.

Büring, D. (2003). On D-trees, beans, and B-accents. *Linguistics and philosophy*, 26:511–545.

Butt, M. and King, T. H. (1996). Structural topic and focus without movement. *Online Proceedings of LFG*.

Butt, M. and King, T. H. (1997). Null elements in discourse structure. Unpublished manuscript intended for publication in the Proceedings of the NULLS Seminar.

Butt, M. and King, T. H. (2004). The status of case. In *Clause structure in South Asian languages*, pages 153–198. Springer.

Cable, S. (2010). *The grammar of Q: Q-particles, wh-movement, and pied-piping*. Oxford University Press.

Cecchetto, C. (2000). Doubling structures and reconstruction.

Cecchetto, C. and Donati, C. (2015). *(Re)labeling*. Cambridge, MA: MIT Press.

Chandra, P. (2011). Left dislocation in Hindi-Urdu: Movement or construal. *Indo-Aryan linguistics*, pages 123–34.

Chomsky, N. (1977). On *wh*-movement. In Cullicover, P., Wasow, T., and Akmajian, A., editors, *Formal Syntax*, pages 71–132. New York: Academic Press.

Chomsky, N. (1981). Lectures on government and binding. *Chomsky Lectures on Government and Binding 1981*.

Chomsky, N. (1993). A minimalist program for linguistic theory. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, pages 195–227.

Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Massachussettes: MIT Press.

Chomsky, N. (2000). Minimalist inquiries: The framework (mitopl 15). In Roger Martin, D. M. and Uriagereka, J., editors, *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, pages 89–155. Cambridge, MA: MIT press.

Chung, S. (2006). Sluicing and the lexicon: The point of no return. In Cover, R. T. and Kim, Y., editors, *Annual meeting of the Berkeley Linguistics Society*, volume 31, pages 73–92.

Chung, S. (2013). Syntactic identity in sluicing: How much and why. *Linguistic Inquiry*, 44(1):1–44.

Chung, S., Ladusaw, W. A., and McCloskey, J. (1995). Sluicing and logical form. *Natural language semantics*, 3(3):239–282.

Ciardelli, I., Groenendijk, J., and Roelofsen, F. (2018). *Inquisitive semantics*. Oxford University Press.

Cinque, G. (1983). 'Topic' constructions in some European languages and 'connectedness'. In Anagnostopoulou, E., van Riemsdijk, H., and Zwarts, F., editors, *Materials on left dislocation*, pages 93–118. John Benjamins Publishing Company.

Cinque, G. (1990). *Types of A-bar dependencies*. Cambridge MA: MIT Press.

Cinque, G. (2009). Five notes on correlatives. In *Universals and Variation. Proceedings of Glow in Asia VII*, pages 1–20. EFL University Press.

Comorovski, I. (1989). *Discourse and the syntax of multiple constituent questions*. PhD thesis, Cornell University.

Cortés Rodríguez, Á. (2022). Multiple sluicing and islands: a cross-linguistic experimental investigation of the clausemate condition. *The Linguistic Review*, 39(3):425–455.

Cruttenden, A. (2006). The de-accenting of given information: a cognitive universal? *Empirical Approaches To Language Typology*, 20(8):311.

Culicover, P. W. and Jackendoff, R. (2005). *Simpler syntax*. New York: OUP Oxford.

Dalrymple, M., Shieber, S. M., and Pereira, F. (1991). Ellipsis and higher-order unification. *Linguistics and philosophy*, 14:399–452.

Davison, A. (1999). Lexical anaphors and pronouns in Hindi/Urdu. In Lust, B. C., Wali, K., Gair, J. W., and Subbarao, K., editors, *Empirical Approaches to Language Typology*, pages 397–470. Mouton de Gruyter.

Davison, A. (2000). Lexical anaphors and pronouns in Hindi/Urdu. In Lust, B. C., Wali, K., Gair, J. W., and Subbarao, K. V., editors, *Lexical Anaphors and Pronouns in Selected South Asian Languages: A Principled Typology*, pages 397–470. Walter de Gruyter, Berlin, New York.

Davison, A. (2015). Hindi-Urdu: Central issues in syntax. *Syntax - Theory and Analysis*, pages 1478–1517.

Dayal, V. (1994). Binding facts in hindi and the scrambling phenomenon. *Theoretical perspectives on word order in South Asian languages*, pages 237–262.

Dayal, V. (1996). *Locality in* WH *quantification: Questions and relative clauses in Hindi*, volume 62. Springer Science & Business Media.

Dayal, V. (2002). Single-pair versus multiple-pair answers: *Wh*-in-situ and scope. *Linguistic inquiry*, 33(3):512–520.

Dayal, V. (2017). Does hindi-urdu have feature-driven wh-movement to spec, vp? *Linguistic Inquiry*, 48(1):159–172.

de Swart, H. (1998). Licensing of negative polarity items under inverse scope. *Lingua*, 105(3-4):175–200.

de Vries, G. C. A. M. (1992). *On coordination and ellipsis*. PhD thesis, Tilburg University.

Dehé, N. (2009). Clausal parentheticals, intonational phrasing, and prosodic theory. *Journal of Linguistics*, 45(3):569–615.

den Dikken, M., Meinunger, A., and Wilder, C. (2000). Pseudoclefts and ellipsis. *Studia linguistica*, 54(1):41–89.

Deo, A. (2022). Could be stronger: Raising and resolving questions with Hindi =*to*. *Language*, 98(4):716–748.

Dowty, D. (1988). Type raising, functional composition, and non-constituent conjunction. *Categorial grammars and natural language structures*, 32:153–197.

Dwivedi, V. D. (1994). *Syntactic dependencies and relative phrases in Hindi*. PhD thesis, University of Massachusetts Amherst.

Eckardt, R. (2007). Inherent focus on wh-phrases. In *Proceedings of Sinn und Bedeutung*, volume 11, pages 209–228.

Enç, M. (1991). The semantics of specificity. *Linguistic inquiry*, pages 1–25.

Erschler, D. (2016). Typology of sluicing in *wh-* and non-*wh* questions. In *Proceedings from the Annual Meeting of the Chicago Linguistic Society*, volume 52, pages 187–202. Chicago Linguistic Society.

Féry, C., Pandey, P., and Kentner, G. (2016). The prosody of focus and givenness in Hindi and Indian English. *Studies in Language*, 40(2):302–339.

Fiengo, R. and May, R. (1994). *Indices and identity*. MIT press.

Fortin, C. R. (2007). *Indonesian sluicing and verb phrase ellipsis: Description and explanation in a minimalist framework.* PhD thesis, University of Michigan.

Fortin, C. R. (2011). We need LF copying: A few good reasons why. In *Proceedings of the 28th West Coast Conference on Formal Linguistics, ed. Mary B. et al Washburn*, pages 87–95.

Fox, D. (1999a). Focus, parallelism and accommodation. In *Semantics and linguistic theory*, pages 70–90.

Fox, D. (1999b). Reconstruction, binding theory, and the interpretation of chains. *Linguistic inquiry*, 30(2):157–196.

Fox, D. and Katzir, R. (2011). On the characterization of alternatives. *Natural language semantics*, 19(1):87–107.

Franks, S. (1998). Clitics in Slavic. position paper presented at the Comparative Slavic Morphosyntax Workshop, bloomington.

Frazier, M., Potter, D., and Yoshida, M. (2012). Pseudo noun phrase coordination. In *Proceedings of the 30th West Coast Conference on Formal Linguistics*, pages 142–152. Cascadilla Proceedings Project Somerville, MA.

Frota, S. and de Moraes, J. A. (2016). Intonation in European and Brazilian portuguese. *The handbook of Portuguese linguistics*, pages 141–166.

Gambhir, V. (1981). *Syntactic restrictions and discourse functions of word order in standard Hindi*. University of Pennsylvania.

Ginzburg, J. (1992). *Questions, queries and facts: A semantics and pragmatics for interrogatives*. PhD thesis, Stanford University.

Ginzburg, J. and Sag, I. (2000). *Interrogative investigations*. Stanford: CSLI Publications.

Grebenyova, L. (2009). Sluicing and Multiple Wh-fronting. In *The Fifth Asian Generative Linguistics of the Old World Conference Proceedings (GLOW in Asia)*, pages 219–242.

Gribanova, V. and Manetta, E. (2016). Ellipsis in wh-in-situ languages: Deriving apparent sluicing in hindi-urdu and uzbek. *Linguistic Inquiry*, 47(4):631–668.

Grice, H. P. (1989). *Studies in the Way of Words*. Cambridge, MA: Harvard University Press.

Griffiths, J. (2019). A q-based approach to clausal ellipsis: Deriving the preposition stranding and island sensitivity generalisations without movement. *Glossa: a journal of general linguistics*, 4(1).

Griffiths, J. (2020). Questions underpin deletion: A response to Barros and Kotek (2019). In Konietzko, A. and Winkler, S., editors, *Information structure and ambiguity*. Berlin: de Gruyter Mouton.

Griffiths, J., Güneş, G., and Lipták, A. (2023). Reprise fragments in English and Hungarian: Further support for an *in-situ* Q-equivalence approach to clausal ellipsis. *Language*, 99(1):154–191.

Groenendijk, J. (2007). Inquisitive semantics: Two possibilities for disjunction. In Bosch, P., Gabelaia, D., and Lang, J., editors, *International Tbilisi Symposium on Logic, Language, and Computation*, pages 80–94. Springer: Berlin.

Groenendijk, J. and Roelofsen, F. (2009). Inquisitive semantics and pragmatics. In *Meaning, content, and argument: Proceedings of the ILCLI International Workshop on Semantics, Pragmatics, and Rhetoric*.

Groenendijk, J. and Stokhof, M. (1980). A pragmatic analysis of specificity. In *Ambiguities in Intensional contexts*, pages 153–190. Springer.

Grosz, P. G. (2020). Discourse particles. In Matthewson, L., Meier, C., Rullmann, H., and Zimmermann, T. E., editors, *Materials on left dislocation*, pages 1–34. Oxford: John Wiley & Sons.

Halle, M. and Marantz (1993). Distributed morphology and the pieces of inflection. In Hale, K. and Keyser, S. J., editors, *The View from Building 20*, pages 111–176. Cambridge, MA: MIT press.

Hamblin, C. L. (1973). Questions in Montague English. *Foundations of language*, 10(1):41–53.

Hankamer, J. and Sag, I. A. (1976). Deep and surface anaphora. *Linguistic inquiry*, 7(3):391–428.

Hardt, D. (1999). Dynamic interpretation of verb phrase ellipsis. *Linguistics and philosophy*, pages 185–219.

Hardt, D. F. (1993). *Verb phrase ellipsis: Form, meaning, and processing*. PhD thesis, University of Pennsylvania.

Harnsberger, J. D. (1994). Towards an intonational phonology of hindi. *Ms., University of Florida*.

Harnsberger, J. D. (1999). The role of metrical structure in hindi intonation. *South Asian Language Analysis Roundtable, University of Illinois, Urbana-Champaign*.

Hartmann, K., Pfau, R., and Legeland, I. (2021). Asymmetry and contrast: Coordination in sign language of the Netherlands. *Glossa: a journal of general linguistics*, 6(1).

Hayes, B. and Lahiri, A. (1991). Bengali intonational phonology. *Natural language & linguistic theory*, 9:47–96.

Heim, I. (1982). *The semantics of definite and indefinite NPs*. PhD thesis, University of Massachussettes, Amherst.

Heim, I. (1991). Artikel und definitheit. *Semantik*, pages 487–535.

Hoffner, H. A. (2009). *Letters from the Hittite kingdom*. Society of Biblical Literature.

Horn, L. R. (1989). *A natural history of negation*. Stanford: CSLI Publications.

Horvath, J. (1986). *FOCUS in the Theory of Grammar and the Syntax of Hungarian*. Foris Publications: Dordrecht.

Hoyt, F. and Teodorescu, A. (2012). How many kinds of sluicing, and why? single and multiple sluicing in Romanian, English, and Japanese. In Merchant, J. and Simpson, A., editors, *Sluicing: Cross-linguistic perspectives*, pages 83–103. Oxford: Oxford University Press.

İnce, A. (2012). Sluicing in Turkish. In Merchant, J. and Simpson, A., editors, *Sluicing: Cross-linguistic perspectives*, pages 248–269. Oxford: Oxford University Press.

Inoue, K. (1976). *Kenkei bunpoo to nihongo*. Taishukan: Tokyo.

Inoue, K. (1978). *Nihongo-no bunpoo kisoku*. Taishukan: Tokyo.

Izvorski, R. (1996). The syntax and semantics of correlative proforms. In *North East Linguistics Society*, volume 26, page 11.

Jackendoff, R. S. (1972). *Semantic interpretation in generative grammar*. Camebridge MA: MIT Press.

Jacobs, J. (1983). *Fokus und Skalen: Zur Syntax und Semantik der Gradpartikeln im Deutschen*. Tübingen: Niemeyer.

Jacobson, P. (2016). The short answer: Implications for direct compositionality (and vice versa). *Language*, pages 331–375.

Jayaseelan, K. A. (1996). Question-word movement to focus and scrambling in Malayalam. *Linguistic Analysis*, 26(27):63–83.

Kachru, Y. (1987). Ergativity, subjecthood and topicality in Hindu-Urdu. *Lingua*, 71(1-4):223–238.

Kahnemuyipour, A. (2001). On wh-questions in Persian. *Canadian Journal of Linguistics/Revue canadienne de linguistique*, 46(1-2):41–61.

Kamp, H. (1981). A theory of truth and discourse representation. In Groenendijk, J., Stokhof, M., and Janssen, T., editors, *Formal methods in the study of language*, number 135, pages 277–332. Amsterdam: Mathematical Centre.

Keine, S. (2007). Reanalysing hindi split ergativity as a morphological phenomenon. *Linguistische Arbeits Berichte*, 85:73–127.

Kidwai, A. (2000). *XP-adjunction in Universal Grammar: Scrambling and binding in Hindi-Urdu*. Oxford University Press, USA.

Kidwai, S. (2020). Case-mismatching in Urdu sluicing. *Cambridge Occasional Papers in Linguistics*, pages 47–78.

Kimura, H. (2007). Interface conditions and triggers of pied-piping: A case study of sluicing. *MA thesis, Tohoku Gakuin University, Sendai, Japan*.

Kimura, H. (2010). A *wh*-in-situ strategy for sluicing. *English Linguistics*, 27(1):43–59.

Kimura, H. (2013). Phonological adjacency as a trigger of movement. *English Linguistics*, 30(2):677–698.

Kiss, K. É. (1995). *Discourse configurational languages*. Oxford University Press.

Kiss, K. É. (2002). *The syntax of Hungarian*. Cambridge University Press.

Kizu, M. (2000). A note on sluicing in wh-in-situ languages. *MIT Working Papers in Linguistics*, 36:143–159.

Kornfilt, J. (2013). *Turkish*. Routledge.

Kotek, H. (2019). *Composing questions*, volume 80. MIT Press.

Kotek, H. and Barros, M. (2018). Multiple sluicing, scope, and superiority: Consequences for ellipsis identity. *Linguistic Inquiry*, 49(4):781–812.

Krifka, M. (2006). Association with focus phrases. In Molnár, V. and Winkler, S., editors, *The architecture of focus*, volume 82, pages 105–135.

Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3-4):243–276.

Kroll, M. (2020). *Comprehending ellipsis*. University of California, Santa Cruz.

Kuwabara, K. (1996). Multiple wh-phrases in elliptical clauses and some aspects of clefts with multiple foci. In *Formal approaches to Japanese linguistics*, volume 2, pages 97–116. Department of Linguistics and Philosophy, MIT Cambridge, Massachusetts.

Landau, I. (2006). Chain resolution in Hebrew V(P)-fronting. *Syntax*, 9(1):32–66.

Lasnik, H. (2014). Multiple sluicing in English? *Syntax*, 17(1):1–20.

Lipták, A. (2009). On the correlative nature of Hungarian left-peripheral relatives. In Shae, B., Cook, P., Frey, W., and Maienborn, C., editors, *Dislocated elements in discourse: syntactic, semantic, and pragmatic perspectives*, pages 398–430. New York: Routledge.

Lipták, A. (2015). Identity in ellipsis: An introduction. *Lingua*, 166(B):155–171.

Lobeck, A. C. (1995). *Ellipsis: Functional heads, licensing, and identification*. Oxford: Oxford University Press.

López, L. (2016). Dislocations and information structure. In Féry, C. and Ishihara, S., editors, *The Oxford Handbook of Information Structure*. Oxford University Press.

Lutz, U., Müller, G., and Von Stechow, A. (2000). *Wh-scope marking*, volume 37. John Benjamins Publishing.

Mahajan, A. (1997). Rightward scrambling. *Rightward movement*, pages 185–213.

Mahajan, A. K. (1990). *The A/A-bar distinction and movement theory*. PhD thesis, Massachusetts Institute of Technology.

Mahajan, A. K. (2000). Relative asymmetries and Hindi correlatives. In Alexiadou, A., Law, P., Meinunger, A., and Wilder, C., editors, *The syntax of relative clauses*, pages 201–230. Amsterdam: John Benjamins Publishing Company.

Malhotra, S. (2009). Sluicing in hindi-urdu. *South Asian Languages Analysis Roundtable, University of North Texas, October*.

Malhotra, S. (2010). Sluicing is PF deletion: Evidence from Hindi/Urdu. In *West Coast Conference on Linguistics (WECOL), Fresno State, CA*.

Malhotra, S. (2011). *Movement and intervention effects: Evidence from Hindi/Urdu*. PhD thesis, University of Maryland, College Park.

Malhotra, S. and Chandra, P. (2007). A short note on wh-scope-marking. *University of Maryland working papers in linguistics*, 16:46–62.

Manetta, E. (2010). *Wh*-expletives in Hindi-Urdu: the vP phase. *Linguistic Inquiry*, 41(1):1–34.

Manetta, E. (2011). *Peripheries in Kashmiri and Hindi-Urdu*. John Benjamins Publishing Company.

Manetta, E. (2013). Copy theory in wh-in-situ languages: Sluicing in hindi-urdu. *Journal of South Asian Linguistics*, 6.

Manetta, E. (2020). *Rarely used structures and lesser-studied languages: Insights from the margins*. Routledge.

Melchert, C. and Hoffner, H. J. (2008). *A Grammar of the Hittite Language*. Winona Lake, IN: Eisenbrauns.

Merchant, J. (1998). Pseudosluicing: elliptical clefts in Japanese and English. *ZAS working papers in linguistics*, 10:88–112.

Merchant, J. (2001). *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press.

Merchant, J. (2004). Fragments and ellipsis. *Linguistics and philosophy*, 27(6):661–738.

Merchant, J. (2013). Voice and ellipsis. *Linguistic Inquiry*, 44(1):77–108.

Merchant, J. (2018). Ellipsis: A survey of analytical approaches. In van Craenenbroeck, J. and Temmerman, T., editors, *The Oxford handbook of ellipsis*, pages 19–45. Oxford: Oxford University Press.

Mishra, A. (2022). The syntax of Hindi-Urdu sluicing. *Coyote Papers*.

Mishra, A. (2024). *Sluicing in Hindi-Urdu and Bangla: Syntactic and Theoretical Implications*. PhD thesis, The English and Foreign Languages University.

Mohanan, T. (1994). *Argument structure in Hindi*. Center for the Study of Language (CSLI).

Morgan, J. (1973). Sentence fragments and the notion 'sentence'. *Issues in Linguistics*, pages 719–751.

Morgan, J. (1989). Sentence fragments revisited. *CLS*, 25:228–241.

Motter, T. (2023). Hittite correlatives are paratactic. *Glossa: a journal of general linguistics*, 8(1):1–43.

Müller, G. (2011). *Constraints on displacement*. Amsterdam: John Benjamins Publishing Company.

Murphy, A. (2016). Subset relations in ellipsis licensing. *Glossa: A journal of general linguistics*, 1(1):1–34.

Nishigauchi, T. (1998). 'Multiple sluicing' in Japanese and the functional nature of wh-phrases. *Journal of East Asian Linguistics*, 7(2):121–152.

Nishiyama, K., Whitman, J., and Yi, E.-Y. (1996). Syntactic movement of overt wh-phrases in Japanese and Korean. *Japanese/Korean Linguistics*, 5:337–351.

Nunes, J. and Zocca, C. (2009). Lack of morphological identity and ellipsis resolution in Brazilian Portuguese. In Nunes, J., editor, *Minimalist essays on Brazilian Portuguese syntax*, pages 215–236. Amsterdam: John Benjamins Publishing Company.

Onea, E. and Ott, D. (2022). Nominal appositives in grammar and discourse. *Language*, 98(2):359–391.

Ott, D. (2014). An ellipsis approach to contrastive left-dislocation. *Linguistic Inquiry*, 45(2):269–303.

Ott, D. (2015). Connectivity in left-dislocation and the composition of the left periphery. *Linguistic Variation*, 15(2):225–290.

Ott, D. (2017). The syntax and pragmatics of dislocation: A non-templatic approach. In *Proceedings of the 2017 annual conference of the Canadian Linguistic Association.< http://cla-acl. ca/actes-2017-proceedings*.

Ott, D. and Struckmeier, V. (2016). Deletion in clausal ellipsis: Remnants in the middle field. *University of Pennsylvania Working Papers in Linguistics*, 22(1):25.

Ott, D. and Struckmeier, V. (2018). Particles and deletion. *Linguistic Inquiry*, 49(2):393–407.

Patil, U., Kentner, G., Gollrad, A., Kügler, F., Féry, C., and Vasishth, S. (2008). Focus, word order and intonation in Hindi. *Journal of South Asian Linguistics*, 1.

Pesetsky, D. (1998). Some optimality principles of sentence pronunciation. In Barbosa, P., Fox, D., Hagstrom, P., McGinnis, M., and Pesetsky, D., editors, *Is the best good enough? Optimality and competition in syntax*, pages 337–383. Cambridge MA: MIT Press.

Portner, P. (2007). Imperatives and modals. *Natural language semantics*, 15:351–383.

Rahmani, H., Rietveld, A., and Gussenhoven, C. (2018). Post-focal and factive deaccentuation in Persian.

Rauh, G. (1993). On the grammar of lexical and non-lexical prepositions in English. In Zelinskiy-Wibbelt, C., editor, *The semantics of Prepositions: From Mental Processing to Natural Language Processing*, pages 99–150. Berlin: Mouton de Gruyter.

Richards, N. (1997). In full pursuit of the unspeakable. In *Proceedings of NELS*, volume 28.

Rizzi, L. (1997). The fine structure of the left periphery. *Elements of grammar: Handbook in generative syntax*, pages 281–337.

Roberts, C. (1996). Information structure in discourse: Toward a unified theory of formal pragmatics. *Ohio State University Working Papers in Linguistics*, 49:91–136.

Roberts, C. (2012). Information structure: Towards an integrated formal theory of pragmatics. *Semantics and pragmatics*, 5:6–1.

Romero, M. (1998). *Focus and reconstruction effects in wh-phrases*. PhD thesis, University of Massachusetts Amherst.

Rooth, M. (1992). A theory of focus interpretation. *Natural language semantics*, pages 75–116.

Rosenbaum, P. S. (1965). *The grammar of English predicate complement constructions.* PhD thesis, Massachusetts Institute of Technology.

Ross, J. R. (1967). *Constraints on variables in syntax.* PhD thesis, Massachusetts Institute of Technology, Cambridge.

Ross, J. R. (1969). Guess who? In *Proceedings from the Annual Meeting of the Chicago Linguistic Society*, volume 5, pages 252–286. Chicago Linguistic Society.

Roussou, A. (2010). Selecting complementizers. *Lingua*, 120(3):582–603.

Saab, A. and Lipták, A. (2016). Movement and deletion after syntax: Licensing by inflection reconsidered. *Studia Linguistica*, 70(1):66–108.

Saab, A. L. (2010). (Im)possible deletions in the Spanish DP. *Iberia: An International Journal of Theoretical Linguistics*, 2(2):45–83.

Sag, I. A. (1976). *Deletion and logical form*. PhD thesis, Massachusetts Institute of Technology.

Sag, I. A., Gazdar, G., Wasow, T., and Weisler, S. (1985). Coordination and how to distinguish categories. *Natural Language & Linguistic Theory*, 3:117–171.

Sag, I. A. and Hankamer, J. (1984). Toward a theory of anaphoric processing. *Linguistics and philosophy*, pages 325–345.

Sailor, C. and Thoms, G. (2014). On the non-existence of non-constituent coordination and non-constituent ellipsis. In *Proceedings of WCCFL*, volume 31, pages 361–370. Citeseer.

Saito, M. and Murasugi, K. (1990). N'-deletion in Japanese: A preliminary study. *Japanese/Korean Linguistics*, 1:285–301.

Sato, Y., Goto, N., and Kitada, S.-I. (2018). On the in-situ theory of sluicing in English: A new perspective from "immobile" elements. *English Linguistics*, 35(1):96–121.

Sauerland, U. (2004). Don't interpret focus! why a presuppositional account of focus fails and how a presuppositional account of givenness works. In *Proceedings of Sinn und Bedeutung*, volume 9, pages 370–384.

Sauerland, U. and Elbourne, P. (2002). Total reconstruction, PF movement, and derivational order. *Linguistic Inquiry*, 33(2):283–319.

Schwarzschild, R. (1999). Givenness, AvoidF and other constraints on the placement of accent. *Natural language semantics*, 7(2):141–177.

Selkirk, E. (1996). The prosodic structure of function words. In Morgan, J. L. and Demuth, K., editors, *Signal to syntax: bootstrapping from speech to grammar in early acquisition*, pages 187–214. New Jersey: Lawrence Erlbaum Associates, Inc.

Selkirk, E. (2011). The syntax-phonology interface. *The handbook of phonological theory*, pages 435–484.

Shimoyama, J. (1995). On 'sluicing' in Japanese. Ms., University of Massachusetts, Amherst.

Srivastav, V. (1991). The syntax and semantics of correlatives. *Natural Language & Linguistic Theory*, 9(4):637–686.

Stigliano, L. (2022). P-omission in ellipsis in spanish: Evidence for syntactic identity. *Natural Language & Linguistic Theory*, 40(4):1353–1389.

Stowell, T. A. (1981). *Origins of phrase structure*. PhD thesis, Massachusetts Institute of Technology.

Takahashi, D. (1994). Sluicing in japanese. *Journal of East Asian Linguistics*, 3(3):265–300.

Tancredi, C. D. (1992). *Deletion, deaccenting, and presupposition*. PhD thesis, Massachusetts Institute of Technology.

Thoms, G. (2010). 'Verb floating' and VP-ellipsis: Towards a movement account of ellipsis licensing. *Linguistic variation yearbook*, 10(1):252–297.

Thoms, G. (2015). Syntactic identity, parallelism and accommodated antecedents. *Lingua*, 166:172–198.

Toosarvandani, M. (2008). *Wh*-movement and the syntax of sluicing. *Journal of Linguistics*, 44(3):677–722.

Tuite, K., Agha, A., and Graczyk, R. (1985). Agentivity, transitivity, and the question of active typology. In *Papers from the parasession on causitives and agentivity at the 21st regional meeting of the Chicago Linguistics Society*, pages 252–270.

Uribe-Echevarria, M. (1994). *Interface licensing conditions on negative polarity items: A theory of polarity and tense interactions*. PhD thesis, University of Connecticut.

Valmala, V. (2007). The syntax of little things. In *17th Colloquium on Generative Grammar, Girona*.

van Craenenbroeck and Merchant, J. (2013). Ellipsis phenomena. In den Dikken, M., editor, *The Cambridge handbook of generative syntax*, pages 701–745. Cambridge: Cambridge University Press.

van Craenenbroeck, J. (2010). Invisible last resort: A note on clefts as the underlying source for sluicing. *Lingua*, 120(7):1714–1726.

Van Craenenbroeck, J. and Lipták, A. (2008). On the interaction between verb movement and ellipsis: New evidence from Hungarian. In *Proceedings of the 26th west coast conference on formal linguistics*, pages 138–146. Cascadilla Somerville, MA.

van Craenenbroeck, J. and Lipták, A. (2013). What sluicing can do, what it can't and in which language: On the cross-linguistic syntax of ellipsis. In Cheng, L. L.-S. and Corver, N., editors, *Diagnosing syntax*, pages 502–536. Oxford: Oxford University Press.

Vicente, L., Barros, M., Messick, T., and Saab, A. (2021). On a nonargument for cleft sources in sluicing. *Linguistic Inquiry*, 52(4):867–880.

Villalba, X. (2000). *The syntax of sentence periphery*. Universitat Autònoma de Barcelona.

von Stechow, A. (1990). Focusing and backgrounding operators. *Discourse particles*, 6:37–84.

Wagner, M. (2012). Focus and givenness: A unified approach. In Kučerová, I. and Neeleman, A., editors, *Contrasts and positions in information structure*, pages 102–147. Camebridge Univesity Press.

Wali, K. (1982). Marathi correlatives: A conspectus. *South Asian Review*, 6(3):78–88.

Weir, A. (2014). *Fragments and clausal ellipsis*. PhD thesis, University of Massachusetts, Amherst.

Weir, A. (2018). Cointensional questions, fragment answers, and structured meanings. In *Proceedings of Sinn und Bedeutung*, volume 21, pages 1289–1306.

Williams, E. S. (1977). Discourse and logical form. *Linguistic inquiry*, pages 101–139.

Wood, J., Barros, M., and Sigurðsson, E. F. (2020). Case mismatching in Icelandic clausal ellipsis. *Journal of Linguistics*, 56(2):399–439.

Xu, Y. (2011). Post-focus compression: Cross-linguistic distribution and historical origin. In *ICPhS*, pages 152–155. Citeseer.

Yoshida, M., Nakao, C., and Ortega-Santos, I. (2015). The syntax of *why*-stripping. *Natural Language & Linguistic Theory*, 33:323–370.

Zaenen, A. (1997). Contrastive dislocation in Dutch and Icelandic. In Anagnostopoulou, E., Zwarts, F., and van Riemsdijk, H., editors, *Materials on left dislocation*. Amsterdam: John Benjamins Publishing Company.

Zagona, K. T. (1983). *Government and proper government of verbal projections*. PhD thesis, University of Washington.