The syntax of sluicing-like constructions in English*

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1. Introduction

Sluicing is exemplified in example (1), which has been adapted from Ross 1969. Everything but the *wh*-constituent of an embedded question is omitted on the promise of recoverability.

(1) He is writing something, but you can't imagine what $\langle IP | \text{he is writing } x \rangle$

An influential analysis of sluicing—and arguably the standard analysis—is the Move-and-Delete approach (Ross 1969, Merchant 2001). The proposal, also illustrated by (1), is that expected \overline{A} -movement extracts the *wh*-remnant from an elided clausal constituent.

Research on sluicing has also identified sluicing-like constructions (SLCs). This term generally refers to constructions that resemble sluicing but which appear in wh-in-situ languages. Investigations into SLCs have largely been concerned with the derivation of the wh-remnant. Among the proposals that have found representatives in the literature are proposals that the wh-remnant undergoes scrambling or focus-driven movement as part of the usual Move-and-Delete analysis, that ellipsis targets an underlying (pseudo)cleft construction, and that ellipsis of a non-constituent spares the in-situ wh-constituent.

We will enter this discussion here, but do so from the perspective of English, a canonical wh-fronting language. Section 2 introduces English SLCs in the form of utterances like the one from speaker B in (2i). This example receives an interpretation comparable to the unreduced response that is presented in (2ii), where the wh-constituent appears in-situ.

^{*}Thank you to Bronwyn Bjorkman, Diti Bhadra, Tom Grano, James Griffiths, Marcel den Dikken, Claudia Pilarski, Ingo Reich, Sam Rosenthall, Martin Salzmann, Ur Shlonsky, Volker Struckmeier, Tanja Temmerman, Andrew Weir, Hedde Zeijlstra, and Erik Zyman for helpful comments and discussion. Thank you also to the reviewers for NELS 53 and its audience at Georg-August-Universität for instructive comments and questions on the research presented here. Portions of this research have also benefited from exposure to audiences at the Universität zu Köln for DGfS 2023 and at Oakland University. The responsibility for any errors or misrepresentations of the ideas of others lies solely with the author.

¹See Merchant and Simpson 2012 and Gribanova and Manetta 2016 for a cross-linguistic sample of the literature on SLCs.

(2) A: So, I think Anne invited someone.

Despite resembling a sluicing configuration, the *wh*-remnant in (2i) appears in an environment that is well-known to not permit *wh*-fronting; see (2iii). Thus, we are faced with the question of whether the *wh*-remnant is generated via a Move-and-Delete derivation or if these data motivate an analysis that relies, perhaps, on neither movement nor ellipsis.

The fact that wh-fronting is otherwise not permitted in this syntactic environment rightly attracts skepticism regarding what might be seen as stipulated exceptional movement in the context of ellipsis (e.g., Valmala 2007, Ott and Struckmeier 2018). Regardless, I will demonstrate that such an analysis finds support from standard diagnostics, which are presented in section 3 and link the ex-situ bare wh-remnant to elided syntactic material.

In section 4, I argue in favor of a particular conception the Move-and-Delete approach that avoids postulating exceptional ellipsis-licensed movement. I argue that phonologically in-situ single *wh*-constituents undergo covert partial *wh*-scrambling (e.g., Kotek 2019, Abels and Dayal 2022). Just like genuine sluicing, then, syntactic movement of the remnant in (3a) is independently licensed.

(3) a. ... and [
$$_{CP}$$
 you think [$_{CP}$ < $_{\buildrel \buildrel \buildr$

In the context of ellipsis, this otherwise covert movement is pronounced in an exceptionally high position (Richards 1997, Temmerman 2013, Gribanova and Manetta 2016, Abels and Dayal 2022; cf. Abe 2015). Thus, what is exceptionally licensed under ellipsis in (3b) is not the movement of the *wh*-remnant, but its pronunciation in a derived position. In section 5, we will see that standard indicators of movement, including island-sensitivity and intervention effects, converge on the conclusion that the *wh*-remnant in English SLCs in fact undergoes syntactic movement. The paper concludes with section 6.

2. The puzzle of sluicing-like constructions in English

The idea to be pursued is ultimately that English SLCs are a species of bare remnant ellipsis that arise from *wh*-in-situ constructions. In anticipation of the discussion to come, it will be useful to first establish some background on English *wh*-in-situ constructions.

2.1 Background on *wh*-in-situ in English

Despite being considered a canonical wh-fronting language, English has several semanticopragmatically and prosodically distinguished wh-in-situ strategies. Most familiar among these are likely to be echo-questions, an example of which is provided in (4):

- (4) A: Randall invited Bigfoot.
 - B: Randall invited **/who**?

Echo-questions are utterances that echo an immediately preceding utterance and signal—by way of a *wh*-constituent—an intent to address an issue in the discourse known to have been previously resolved (Sobin 2010, Beck and Reis 2018). The *wh*-constituent in echoquestions is prosodically prominent, carrying a pitch accent that represents narrow focus. Echo-questions often involve a rising pitch contour on the *wh*-constituent, though this is not a necessary property of these constructions (Bartels 1999, Beck and Reis 2018).

English also has several non-echoic *wh*-in-situ configurations, which I will refer to collectively as "follow-up" questions (Bartels 1999, Ginzburg and Sag 2001, Pires and Taylor 2009, Bobaljik and Wurmbrand 2015, Biezma 2020, and references). The utterance from B in (5) provides an example. While B's utterance does not echo the preceding utterance in the discourse, a *wh*-constituent nonetheless grammatically appears in-situ.

- (5) A: So, Carrie is having a party this weekend.
 - B: Yeah, and she invited **who**?

(adapted from Pires and Taylor 2009:206, (11))

Follow-up questions differ from echo questions in that they presupposes an open issue in the discourse and signal the intent to resolve it. In the case of B's utterance, the open issue is who Carrie invited to the party and this is signaled to be the current topic of discussion. Here, too, the *wh*-constituent is narrowly focused, making it prosodically prominent. While the *wh*-constituent of B's utterance can be presented with a falling pitch contour, other prosodic profiles are possible as well (Bartels 1999, Pires and Taylor 2009, Biezma 2020).

At a purely intuitive level, wh-in-situ constructions have the conversational value of matrix-level interrogatives.² We see this in a comparison of an embedded wh-in-situ construction in (6) with a partial wh-fronting construction in (7).

- (6) So, Anne invited someone and Susie said [CP she invited **who**]?
 - a. *Matrix Scope*: "... and who did Susie say that she invited?"
 - b. *Embedded Scope: "... and Susie said who she invited."
- (7) So, Anne invited someone and Susie said [CP who₁ she invited x_1]
 - a. *Matrix Scope: "... and who did Susie say that she invited?"
 - b. Embedded Scope: "... and Susie said who she invited."

The in-situ wh-constituent is interpreted as if it takes root scope; the speech-act of the right conjunct in (6) serves as a request for information. Partial wh-movement, however,

 $^{^{2}}$ An issue that deserves significantly more attention than it can be afforded here is the extent to which all English wh-in-situ strategies can be treated equivalently. My suspicion is that echo questions may prove to be the occasional odd one out (e.g., Sudo 2007). To avoid any potential confounding factors I encourage follow-up question interpretations by establishing contexts that signal open issues in the discourse.

results only in an embedded question; the speech speech-act in the right conjunct of (7) is a declarative.

A point of debate in the literature concerns whether or not *wh*-in-situ constructions in English are genuinely interrogatives with respect to their syntax and semantics. In section 4.1, I argue that they are compositionally interrogatives and that the in-situ *wh*-constituent achieves root-scope.

Still, there is good reason to think that wh-in-situ and wh-fronting are compositionally distinct strategies. This is clear from the perspective of clause-embedding predicates. Bobaljik and Wurmbrand (2015) observe that an interrogative-selecting predicate, like wonder in (8), cannot embed a wh-in-situ construction. This is in contrast to a declarative-selecting predicate, such as think in (9), which can only embed a wh-in-situ strategy.

- (8) a. *Anne invited someone and Susie wonders $[CP C^0_{[-Q]}]$ she invited **who**]?
 - b. Anne invited someone and Susie wonders [CP who₁ $C^0_{[+Q,wh]}$ she invited x_1]
- (9) a. Anne invited someone and Susie thinks $[CP C^0_{[-Q]}]$ she invited **who**]?
 - b. *Anne invited someone and Susie thinks $[CP] = \mathbf{who_1} \cdot \mathbf{C}^0_{[+Q,wh]}$ she invited x_1

Like Bobaljik and Wurmbrand (2015), I propose that wh-in-situ and wh-fronting strategies are syntactico-semantically distinguished, in part, by the identity of the local complementizer. Section 4 will fill in some of the other details regarding the wh-in-situ strategy. However, this is enough to understand the contrasts in (8) and (9) as an issue of selection. The predicate wonder embeds CPs headed by $C^0_{[+Q,wh]}$, which forces wh-fronting. The predicate think embeds CPs headed by $C^0_{[-Q]}$, which permits wh-in-situ, but does not license wh-fronting.

2.2 Bare *wh*-remnant ellipsis

The idea, again, is that English SLCs are ontologically related to bare remnant ellipsis. Such constructions, commonly referred to also as "stripping," involve the omission of a clause with the exception of a single remnant constituent, as in (10).

(10) Ted drinks tea, and possibly [he drinks coffee].

As also illustrated in (10), it is common to understand the omission of the clause here to be another result of ellipsis (e.g., Hankamer and Sag 1976, Depiante 2000).

It has been observed that the complement clauses of a non-factive predicates permit embedded bare remnant ellipsis (Weir 2014, Wurmbrand 2017). Several examples are presented in (11):

(11) Anne invited someone and

Susie { thinks / believes / claimed } [she invited Mark]

Sluicing-like constructions in English

This also happens to be a syntactic environment that hosts in-situ *wh*-constituents. Moreover, this is an environment that permits these *wh*-constituents to surface as bare remnants.³ Observe that both the reduced and unreduced version of (12a) are grammatical.

Susie { thinks / believes / claimed }
$$\left\{\begin{array}{l} a. & \text{she invited who} \\ b. & \text{who she invited} \end{array}\right\}$$
?

Example (12b) demonstrates that the clausal complements of these predicates are environments in which fronting a *wh*-constituent results in ungrammaticality. These, then, are our English SLCs. A bare *wh*-remnant survives what is ostensibly an instance of ellipsis, but in a syntactic environment that otherwise only permits *wh*-in-situ.

While section 3 will present evidence that the bare wh-remnant is connected to elided syntactic material, it is worth observing here that there is a correlation between where bare argument ellipsis is permitted and where bare wh-remnants are permitted. Example (13a) serves to demonstrate that an in-situ wh-constituent can appear in an NP-complement clause. This is not, however, an environment in which bare argument ellipsis is permitted nor is it an environment where a bare wh-remnant can surface; see (13b).

Susie heard
$$\left\{\begin{array}{l} a. & \text{the rumor } [_{CP} \text{ (that) she invited } \{\text{ Mark / who? }\}\] \\ b. & \text{*the rumor } [_{CP} \text{ (that) } \{\text{ Mark / who? }\}\] \end{array}\right\}$$

These facts collectively suggest that there is a shared-source for bare remnant ellipsis and English SLCs. They are also the initial motivation for pursuing a clausal-ellipsis approach.

3. Evidence of Move-and-Delete

The claim made here is that bare *wh*-remnants in English SLCs are derived by way of a Move-and-Delete derivation (Ross 1969, Merchant 2001). In fact, this is the type of analysis that Depiante (2000) proposes for bare remnant ellipsis. The specific proposal to be substantiated in this and the following sections is that the *wh*-remnant undergoes independently motivated scrambling to a position where it is spared deletion by IP-ellipsis.

(14) ... and
$$[CP C^0]$$
 you think $[CP who_1 C^0_{[-Q]} \langle P Anne invited x_1 \rangle]$?

This approach finds support from the standard diagnostics that link the ex-situ remnant to elided syntactic material. These include selectional restrictions, connectivity effects, and sensitivity to island boundaries.

In his initial investigation of sluicing, Ross (1969) observed that the selectional properties of the embedding predicate cannot be satisfied by the bare *wh*-remnant alone. For example, the *wh*-constituent *who* in (15), fails to satisfy the selectional requirements of the

³On the basis of personal communication with James Griffiths, future work will be required to contend with some amount of dialectal variation regarding the ability to embed in-situ *wh*-constituents.

predicate wonder (i.e., *Susie wonders him). By treating the wh-constituent as a remnant of clausal ellipsis, however, a reduced interrogative clause can be understood to provide the required complement type.

(15) So, Anne invited someone and

Susie wonders [CP who
$$C^0_{[+Q,wh]}$$
 $\langle IP | Anne invited \rangle$]

- a. *Matrix Scope: "... and who does Susie wonder that she invited?"
- b. Embedded Scope: "... and Susie wonders who she invited."

The same reasoning can be applied to English SLCs. The selectional requirements of *think* in (16) are not met by *who* (i.e., **Susie thinks him*). Although, these requirements are met if we understand *who* to be the remnant of an elided CP complement.

- (16) So, Anne invited someone and Susie thinks $[CP C^0_{-Q]} \langle P Anne invited \rangle$ who]?
 - a. Matrix Scope: "... and who does Susie think that she invited?"
 - b. *Embedded Scope: "... and Susie thinks who she invited."

These data reveal a second interesting selectional property of sluicing and SLCs. Like the data in (6) and (7) above, the embedding predicates in (15) and (16) "select" for the scope of the *wh*-remnant. The *wh*-remnant of sluicing in (15) is interpreted with embedded scope while the *wh*-remnant of the SLC in (16) is interpreted as if it takes matrix scope. This is what we expect if, as shown, the embedding predicates are selecting for compositionally distinct clausal complements, as argued in section 2.1. The only difference is that, here, these embedded clauses are reduced by IP-ellipsis.

Next, the *wh*-remnant is subject to the selectional restrictions of antecedent material. Example (17a) demonstrates that a PP can surface as the *wh*-remnant of an SLC. The choice of preposition, though, cannot be determined by the local embedding predicate *think* in (17b). Instead, it is subject to the lexical-selectional properties the verb *react*.

(17) So, Ron reacted to something and you think
$$\left\{\begin{array}{l} a. & \left[_{CP} \left\langle_{IP} \text{ he reacted} \right\rangle \text{ to what } \right] \right\} \\ b. & *\left[_{CP} \left\langle_{IP} \text{ he reacted} \right\rangle \text{ of what } \right] \right\}$$

An ellipsis-based analysis provides us with a straightforward understanding of this contrast. The *wh*-remnant *to what* is selected for by a local, although elided, instance of *react*.

Finally, the *wh*-remnant of an SLC is sensitive to island boundaries under ellipsis; see example (18):

- (18) So, Denise hired [DP the person that runs a non-profit] but ...
 - a. you think [CP] she hired [DP] the person that runs **a what**]]?
 - b. *you think [CP a what₁ $\langle \text{IP she hired } [\text{DP the person that runs } x_1] \rangle$]?

We have already seen that an in-situ wh-constituent can grammaticality be contained inside a Complex-NP, as in (18a). It cannot, however, be made a remnant in (18b) by way of

eliding the island domain. This is a result that one would expect if the *wh*-remnant is derived by way of extraction from elided syntactic structure (Barros et al. 2014; cf. Griffiths 2019).⁴

4. Exceptional pronunciation under ellipsis

Despite the evidence for a Move-and-Delete analysis, the impossibility of *wh*-fronting in this syntactic environment is problematic. This one critique, among others, that is offered as evidence against Move-and-Delete approaches and, possibly, against ellipsis generally (e.g., Valmala 2007, Ott and Struckmeier 2018). A common recourse for Move-and-Delete proponents is to postulate that remnants undergo exceptional focus-driven movement or phonological movement that is licensed in the context of ellipsis. Although, as Ott and Struckmeier (2018) discuss, this strategy risks being little more than a stipulation.

I will instead argue in favor of an alternative conception of the Move-and-Delete analysis that avoids any such stipulation. This analysis adopts particular theories of both *wh*-in-situ and the pronunciation of movement chains. I introduce each of these component in turn before demonstrating how they interact with ellipsis to derive English SLCs.

4.1 A theory of *wh*-in-situ

Much of the recent literature on single *wh*-in-situ constructions in English and beyond has converged on the idea that they are syntactically and semantically declarative utterances. Any perceived interrogative conventionally implicated via pragmatic means (e.g., Bobaljik and Wurmbrand 2015, Beck and Reis 2018, Biezma 2020).

In line with proposals by Ginzburg and Sag (2001), Pires and Taylor (2009) and Sobin (2010), I argue to the contrary that the interrogative force of a single wh-in-situ construction is derived from its syntactic and semantic representation. More specifically, I argue for the type of analysis that has been motivated for multiple-wh constructions by Kotek (2019) and Abels and Dayal (2022). Phonologically in-situ wh-constituents undergo covert scrambling into a position where they are interpretable by mechanisms associated with the left periphery of the root clause, as sketched in (19). Because this movement is both island-sensitive and clause-bounded, an embedded in-situ wh-constituents scrambles as far as the edge of its containing clause, where it is interpreted ($\bullet \sim \sim \bullet$) by a dedicated root $C^0_{[\sim Q]}$.

(19) Covert wh-scrambling into an interpretable position
$$\begin{bmatrix} \operatorname{CP} C^0_{[\sim Q]} & \dots & [\operatorname{CP} < \operatorname{wh} > C^0_{[-Q]} & \dots & [& \dots & \operatorname{wh} & \dots &] \end{bmatrix} \end{bmatrix}$$

This picture of wh-in-situ emerges from the selective intervention effects that arise when an embedded in-situ wh-constituent appears in the scope of sentential negation. Cur-

⁴See Potter 2017 and Wu in preparation for discussion and contrasting views regarding the island-sensitivity of stripping. Thank you to Andrew Weir (p.c.) for helpful discussion of example (18).

⁵Kotek (2019) argues that an in-situ *wh*-constituent in multiple-*wh* questions moves only as much as is necessary for interpretation. Thus, movement may only target a the edge of *v*P. Like Abels and Dayal 2022, the analysis presented in section 4.3 depends on movement as far as the edge of the containing clause.

rent wisdom, including Pires and Taylor 2009 and Beck and Reis 2018, holds that single *wh*-in-situ configurations in English do not show intervention effects from tauto-clausal negation, as in (20a). However, when negation appears in a higher clause, as in (20b), *wh*-in-situ is significantly degraded (see also Kotek 2019 and Abels and Dayal 2022).

- (20) a. So, Beth says that Phil didn't read some of the articles; and she thinks [CP] (that) he didn't read which articles]?
 - b. So, Beth says that Phil read only some of the articles; ??/* but she does**n't** think [CP (that) he read **which articles**]?

Intervention effects are notoriously delicate. It is useful, then, to contrast the data in (20) with the pair of embedded question constructions in (21). Sentential negation appears in either the root or the embedded clause without an effect on acceptability.

- (21) a. Beth says that Phil didn't read some of the articles and she asked [CP which articles he didn't read]
 - b. Beth says that Phil read only some of the articles but she didn't \underline{ask} [CP which articles he read]

This is a contrast among contrasts that is predicted from the treatment of wh-in-situ sketched above.⁶ The LF representations for the wh-in-situ constructions of (20) are presented in (22). Intervention effects from tauto-clausal negation are avoided by the postulated covert scrambling of the wh-constituent in (22a) to a position that is outside the scope of negation. This is in opposition to (22b), where the clause-boundedness of wh-scrambling means that the wh-constituent is unable to escape the scope of root clause negation.

(22) a. ...
$$[CP \ C^0_{[\sim Q]}]$$
 she thinks $[CP \ which articles \ C^0_{[-Q]}]$ he didn't read x $]]$ b. *... $[CP \ C^0_{[\sim Q]}]$ she doesn't think $[CP \ which articles \ C^0_{[-Q]}]$ he read x $]]$

The lack of intervention effects in the embedded question constructions of (21), on the other hand, can be understood to follow from the different mechanisms available for interpreting wh-constituents. Fronted wh-constituent in embedded questions are interpreted by the local $C^0_{[+Q,wh]}$. Thus, the placement of negation in either the embedded or root clause cannot intervene in the interpretation of the wh-constituent.

4.2 A theory of chain pronunciation

Turning to the second component of the analysis, we adopt a particular algorithm for determining where a moved constituent is pronounced. This algorithm presupposes that syntac-

⁶As a contrast among contrasts, and given the delicacy of the judgements, it is clear that more rigorous quantitative methods will be necessary as this project moves forward.

tic movement, as illustrated below in (23), is the creation of a chain consisting of multiple copies of a syntactic element (e.g., Chomsky 1993, et seq.).

(23) [CP Susie asked [CP who
$$C^0_{[+Q,wh]}$$
 Anne [vP who invited who]]]?

The decision of which copy in a movement chain to pronounce is implemented at PF. We will follow Richards (1997) in regard to how this decision is made by appealing to a distinction between strong and weak positions along a movement chain (e.g., Chomsky 1993, Richards 1997). With only the immediate purposes of this analysis in mind, I adopt the following definition a strong position:

- (24) Some XP_F is in a strong position *iff*
 - i. XP_F is in a derived specifier of some YP and
 - ii. the content of XP_F agrees with the local head Y_F^0 .

In other words, movement of some XP into a position where it agrees with the local head results in a strong position. Anything else is regarded as a weak position.

With this in hand, we also adopt insights from Gärtner (2002) and Abels and Dayal (2022) to adapt the PF conditions on the pronunciation of a movement chain that are proposed in Richards 1997. We will implement these conditions using the algorithm in (25):

- i. Pronounce the copy in the highest strong position of a movement chain.
 - ii. If there is no strong position, pronounce the lowest possible weak position.

Finally, we will treat ellipsis as a mechanism for non-pronunciation that is also implemented at PF. The desired effect that we will see is that a movement chain may be pronounced in an exceptionally high position if ellipsis eliminates lower candidates (Richards 1997, Temmerman 2013, Gribanova and Manetta 2016, Abels and Dayal 2022).

4.3 Exceptional chain pronunciation

We are in a position now to see how these components conspire to generate SLCs in English. However, let us consider first a non-elided embedded question with obligatory wh-fronting in (26). Agreement with the local $C^0_{[+Q,wh]}$ motivates movement of the wh-constituent to the embedded Spec,CP.

(26) ... and Susie [
$$_{\nu P}$$
 said [$_{CP}$ who $C^0_{[+Q,wh]}$ Anne [$_{\nu P}$ < who $>$ invited < who $>$]]]?

As a derived specifier that agrees with the local $C^0_{[+Q,wh]}$, the copy in Spec,CP is in a strong position. As the highest strong position in the movement chain, PF necessarily pronounces this copy and the movement is rendered overt.

In (27) below is an instance of an embedded wh-in-situ question. As a clause headed by a $C^0_{[-Q]}$, the wh-constituent scrambles as far as possible for interpretive purposes.

(27) ... and Susie
$$[_{\nu P} \text{ said } [_{CP} < \frac{\text{who}}{} > C^0_{[-Q]} \text{ Anne } [_{\nu P} < \frac{\text{who}}{} > \text{ invited } \boxed{\text{who}}]]]?$$

Due to its clause-boundedness, wh-scrambling terminates in the embedded Spec, CP. Given a lack of agreement between the wh-constituent and any local head, there are no strong positions along this movement chain. Thus, PF pronounces the lowest possible copy of the wh-constituent, meaning the movement is necessarily rendered covert.

We now introduce ellipsis into the derivation. In the instance of sluicing in (28), agreement with $C^0_{[+Q,wh]}$ again motivates wh-movement that terminates in the embedded Spec,CP.

(28) ... and Susie
$$[_{vP}$$
 asked $[_{CP} \boxed{\mathbf{who}} C^0_{[+Q,wh]} \langle_{IP} \boxed{\mathbf{Anne}} [_{vP} < \mathbf{who} > \mathbf{invited} < \mathbf{who} >] \rangle]]$

Just as above, the copy in Spec,CP is in the highest strong position and is chosen for pronunciation by PF. In this case, the decision comes in the context of IP-Ellipsis, which instructs PF to not pronounce all IP-internal material. While the movement of the *wh*-constituent is ultimately string-vacuous, it is nonetheless rendered overt.

Finally, we can see in example (29) below how English SLCs are derived. Being derived via a wh-in-situ strategy means the embedded clause is headed by a $C^0_{[-Q]}$. To ensure its interpretation, the wh-constituent scrambles as far as possible, terminating in Spec,CP.

(29) ... and Susie
$$[\nu_P \text{ thinks } [CP] \text{ who}] C^0_{[-Q]} \langle_{IP} \text{ Anne } [\nu_P < \text{who} > \text{invited} < \text{who} >] \rangle]]?$$

There are again no strong positions along the movement chain of the *wh*-constituent. This leaves PF to resort to pronunciation of the lowest possible weak position. This comes again in the context of IP-Ellipsis, which provides instruction to not pronounce IP-internal material. The only viable copy for pronunciation, therefore, is the copy that resides in Spec,CP. Thus, what is usually an instance of covert movement, like we saw in (27) above, is here rendered exceptionally overt in the context ellipsis.

5. Detecting covert movement

This analysis is being presented in the context of a growing literature that provides various in-situ approaches to the conundrum faced here (e.g., Weir 2014, Ott and Struckmeier 2018, Griffiths 2019, Griffiths et al. 2023). Despite their differences, these analyses applied to English SLCs would share the idea that the *wh*-remnant remains syntactically in-situ.

This raises questions regarding the evidence that *wh*-remnants in English SLCs move at all. I argue in this section that standard indicators of movement, including islands and intervention effects, converge on the conclusion that they do undergo syntactic movement.

 $^{^{7}}$ Ingo Reich (p.c.) points out that nothing in principle precludes an additional movement step to vP and that this could provide a more straightforward implementation of the analysis. This is, in fact, the idea proposed by Gribanova and Manetta (2016) for Hindi and entertained by Abels and Dayal (2022) for English, but space precludes satisfactory discussion it here.

5.1 Selective island sensitivity

Recall the island-sensitivity data presented in example (18) above. The island-sensitivity of a bare *wh*-remnant appears to contradict the conventional wisdom regarding *wh*-in-situ. The ability of a *wh*-constituent to sit comfortably in-situ within a complex-NP, for example, has lead to analyses in which the interpretation of those *wh*-constituents does not involve syntactic movement (Pires and Taylor 2009, Beck and Reis 2018).

This lack of island effects observed with single *wh*-in-situ constructions is, in fact, entirely consistent with the analysis presented in section 4. As a clause-bounded and island-sensitive movement, scrambling of the *wh*-constituent, shown in (30), only moves as far as the edge of the embedded clause and, therefore, will not induce an island violation.

Interestingly, what is expected under the present analysis is that an in-situ *wh*-constituent becomes sensitive to island-boundaries specifically in the derivation of an SLC. The representation in (31) shows how movement of the *wh*-remnant to a position that provides an eligible copy for pronunciation under ellipsis will necessarily induce an island violation.

$$(31) \quad *[_{CP} C^0_{[\sim Q]} \text{ you think} \\ \quad [_{CP} \textbf{a what} \langle_{IP} \text{ she hired } [_{DP} \text{ the person } [_{CP} \text{ that runs } < a \text{ what} >]]} \rangle \]] ? \\ \quad \bullet \\ \sim \\ \sim \\ \text{Island Violation}$$

Thus, the movement component of the analysis presented here provides a straightforward account for the selectivity of island effects (cf. Griffiths 2019).

5.2 Selective intervention effects

The treatment of in-situ *wh*-constituents that is part of the proposed analysis of English SLCs, also makes an interesting prediction regarding intervention effects. If the *wh*-remnant of English SLCs undergoes syntactic movement, it should show the same selective sensitivity to intervention that was observed in the non-elided *wh*-in-situ constructions of section 4.1. This prediction is borne out in the data below.

Observe that intervention effects do not arise in the SLC construction in (32a), where negation is interpreted in the elided embedded clause. On the other hand, when negation appears in the root clause, as in (32b), the result is an ungrammatical SLC.

(32) a. So, Beth says that Phil did**n't** read some of the articles; and she <u>thinks</u> [$_{CP}$ which articles₁ \langle_{IP} Phil did**n't** read $x_{I} \rangle$]? b. So, Beth says that Phil read only some of the articles; ??/* but she does**n't** think [$_{CP}$ which articles₁ \langle_{IP} Phil read $x_{I} \rangle$]?

Moreover, the position of negation again does not affect grammaticality in the context of a question-embedding predicate. Both of the sluicing constructions in (33) are grammatical.

- (33) a. Beth says that Phil didn't read some of the articles and she <u>asked</u> [CP which articles₁ $\langle \text{IP Phil didn't read } x_1 \rangle$]
 - b. Beth says that Phil read only some of the articles but she didn't ask [CP which articles $1 \langle IP | Phil read x_1 \rangle$]

The account of these facts are the same as above, the substantive difference being that IP-Ellipsis licenses exceptionally high pronunciation of the *wh*-constituent. Example (34) provides the proposed LFs for the English SLCs in (32). The bare *wh*-remnant undergoes clause-bounded movement that is interpreted by a root $C^0_{[\sim Q]}$. Only with tauto-clausal negation in (34a) does this movement place the *wh*-remnant outside the scope of negation.

(34) a. ...
$$[CP \ C^0_{[\sim Q]} \ \text{she } \underline{\text{thinks}} \ [CP \ \text{which articles} \ C^0_{[-Q]} \ \langle_{IP} \ \underline{\text{Phil did}} \ \underline{\text{hink}} \ [CP \ \underline{\text{think}} \ [CP \ \underline{\text{which articles}} \ C^0_{[-Q]} \ \langle_{IP} \ \underline{\text{Phil read}} \ \underline{x} \ \rangle \]]$$
b. *... $[CP \ C^0_{[\sim Q]} \ \text{she doesn't} \ \underline{\text{think}} \ [CP \ \underline{\text{which articles}} \ C^0_{[-Q]} \ \langle_{IP} \ \underline{\text{Phil read}} \ \underline{x} \ \rangle \]]$

Regarding the genuine sluicing configurations in (33), we understand these in the same way as above as well. The position of negation will not factor into the equation for interpreting sluicing constructions because the wh-element is interpreted by the local $C^0_{[+Q,wh]}$. While a non-movement analysis for deriving a wh-remnant might be fitted with the

While a non-movement analysis for deriving a *wh*-remnant might be fitted with the necessary mechanisms to produce the selective intervention effects observed here, they are a direct consequence of the Move-and-Delete style of analysis that is being endorsed.

6. Conclusion

This paper has proposed that *wh*-in-situ phenomena in English give rise to sluicing-like constructions. Bare *wh*-remnants are derived by a type of Move-and-Delete derivation whereby otherwise covert movement is rendered exceptionally overt in the context of ellipsis (Richards 1997, Temmerman 2013, Gribanova and Manetta 2016, Abels and Dayal 2022). This analysis is presented in response to justified criticism against analyses that stipulate exceptional movement in the context of ellipsis (see Valmala 2007, Ott and Struckmeier 2018, and references). In the case at hand, it is not the application of movement that is exceptional, it is instead the high pronunciation of this independently motivated movement that is exceptional.⁸ Given the analogy drawn between English SLCs and stripping, future research might investigate the extent to which other bare remnant ellipses may be treated as instances of exceptionally high realization of otherwise covert movements.

⁸LaCara 2017 points out that, if ellipsis licenses the higher pronunciation of movement chains, then exceptionally high pronunciation under ellipsis should also be licensed by, for instance, VP-Ellipsis. While space precludes giving the deserved attention to this point, I would nonetheless like to offer a possible *wh*-pseudogapping construction as a relevant example of this: *So, Maurice can play the trumpet and you think* [CP Tina can [VP the what $\langle VP | play | x \rangle$]?

Sluicing-like constructions in English

To the extent that analyses of this type are well-motivated, they demonstrate that accommodating data that seem to counter-exemplify the standard Move-and-Delete analysis is not a zero-sum scenario. When faced with apparently immoveable remnants, positing exceptional focus-driven movement or abandoning movement-based analyses altogether are not the only analytical possibilities. We can at least entertain the possibility that apparently immoveable remnants are, in fact, only otherwise covertly moveable.

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