Ellipsis, identity, and accommodation*

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Abstract

This paper examines the antecedent or identity condition on ellipsis by focusing on the conditions under which mismatches between an ellipsis site and its antecedent are allowed. The main empirical contribution comes from the interaction between sluicing, clefts and morphological case marking, but this basic data pattern is extended to nominal and verbal ellipses. Mismatches between an ellipsis site and its antecedent are analyzed as involving the creation of an accommodated antecedent (along the lines of Fox (1999) and Johnson (2012)) and it is argued that material that is extracted from an ellipsis site cannot be part of such an accommodated antecedent. In the final part of the paper this analysis is extended to cases of elliptical mismatches involving voice (Merchant, 2012) and preposition stranding (**?**).

1 Introduction

Consider the VP-ellipsis example in (1).

(1) John can play the oboe, but Suzy cannot $[_{VP}$ _].

It is clear that the elided VP in the second conjunct (indicated by the underscore) can only be interpreted by virtue of the pronounced VP *play the oboe* in the first conjunct. More specifically, a constituent can only remain unpronounced if it is identical—in some yet-to-be-defined sense—to a previously uttered constituent.[1] This identity relation is sometimes referred to as the antecedent condition on ellipsis and it forms the central topic of this paper. The

*This paper has been long in the making and has gone through several different incarnations over the past few years. I would like to thank audiences at NYU, LUCL/Leiden University, Yale, Santa Cruz, Chicago, the 2009 DGfS workshop on Repairs, MIT, Amherst, UCL, and in particular Klaus Abels, Mark Baltin, Matt Barros, Marcel den Dikken, Danny Fox, Bob Frank, Anastasia Giannakidou, Vera Gribanova, Kyle Johnson, Richard Kayne, Ivona Kučerová, Anikó Lipták, Jason Merchant, Arhonto Terzi, Luis Vicente, and Guido Vanden Wyngaerd for their comments, questions and suggestions. Moreover, I would also like to thank Artemis Alexiadou, Rajesh Bhatt, Barbara Citko, Jakub Dotlačil, Anastasia Giannakidou, Maria Gouskova, Vera Gribanova, Stella Gryllia, Dany Jaspers, Kyle Johnson, Timo Klein, Marika Lekakou, Anikó Lipták, Lutz Marten, Tatjana Marvin, Ora Matushansky, Martha McGinnis, Jairo Nunes, Julien Perrez, Johan Rooryck, Martin Salzmann, Radek Šimík, Tanja Temmerman, Luis Vicente, Guido Vanden Wyngaerd, and Malte Zimmermann for kindly providing me with native speaker judgments. All errors and shortcomings are my own.

[1] A couple of general remarks and disclaimers are in order: (i) Apart from the identity requirement discussed here, there is another restriction on eliding syntactic constituents, known

antecedent condition has been the subject of extensive debate ever since the earliest generative work on ellipsis, with one of the key bones of contention being the question in which component of the grammar ellipsis identity is imposed or evaluated. Simplifying somewhat (but see below for a more refined view on the matter), the issue boils down to whether the identity between antecedent and ellipsis site is semantic (the two have to mean the same thing) or syntactic (the two have to have the same syntactic structure). A central role in this debate is played by mismatches between ellipsis sites and their antecedents, i.e. contexts in which the two do not seem to be perfectly identical. Consider in this respect the example in (2).

(2) We hate John$_i$ and he$_i$ doesn't know why.

This is case of sluicing, whereby the entire TP is missing. However, if we posit in the ellipsis site a TP identical to the one found in the first conjunct, we incorrectly predict this example to be out due to a condition C violation (see (3-a)). Instead, the ellipsis site seems to contain a TP which is similar, but not identical to the antecedent TP in that the R-expression *John* has been replaced by the coreferential pronoun *him* as in (3-b) (a phenomenon referred to as vehicle change by Fiengo and May (1994)).

(3) a. *We hate John$_i$ and he$_i$ doesn't know why we hate John$_i$.
b. We hate John$_i$ and he$_i$ doesn't know why we hate him$_i$.

At first glance, examples such as these provide strong support for semantic accounts of the antecedent condition: the two TPs in (3-b) mean the same thing, but they are not syntactically identical. Recently, however, a number of papers have emerged arguing that the lack of syntactic isomorphism in these and similar examples is only apparent, and that at the relevant level of representation (or abstraction), the syntactic identity condition is met (see Merchant (2012, to appear); Johnson (2012); Elbourne (2001, 2008)). This paper wishes to continue in this tradition, and argues (building on Fox (1999) and Johnson (2012)) that ellipsis sites are sometimes syntactically isomorphic to an antecedent that is *accommodated* on the basis of what was spoken, but not itself spoken. Moreover, I show that material extracted from an ellipsis site cannot partake in the construction of such an accommodated antecedent. The empirical basis for this account comes from the interaction between sluicing, clefts, and morphological case, but I extend the data set to include NP-ellipsis, VP-ellipsis, and other known cases of antecedent-ellipsis mismatches.

The paper is organized as follows. In section 2 I present the main theoretical background for my proposal. In particular, I introduce Rooth (1992)'s dual approach to the antecedent condition and Fox (1999)'s attempt to reduce this duality to a single condition. Section 3 contains the main empirical contribution of this paper. It describes in three steps the conditions under which a sluice with a non-cleft antecedent can have a cleft in the ellipsis site and how this interacts with morphological case marking on the wh-phrase. The data set is expanded

as licensing. I will not discuss licensing at all in this paper, see Lobeck (1995) and Aelbrecht (2010) for discussion. (ii) Throughout this paper I will be adopting an analysis of ellipsis whereby elided material is syntactically present but unpronounced, i.e. the so-called PF-deletion approach. See **?** for discussion and arguments. (iii) By using the phrase *a previously uttered constituent* I do not wish to rule out the possibility of backwards deletion, though I will not discuss such facts in this paper.

in section 4, where I discuss data from nominal and verbal ellipsis that show the same pattern as the sluicing-cleft data from section 3. In section 5 I present my analysis and show how it can account for the central data, while section 6 extends this analysis to include cases of ellipsis-antecedent mismatches involving voice and preposition stranding. Section 7 concludes and examines some broader prospects of the type of theory advocated here.

2 Theoretical background

2.1 Rooth (1992)

Rooth (1992) discusses both deaccenting and ellipsis and examines the degree of similarity between the two. Following an early version of Fiengo and May (1994) he proposes that while both constructions are subject to a semantic identity—or in Rooth's parlance, redundancy—relation that (typically) applies at the clausal level, only ellipsis is in addition also subject to a syntactic condition requiring that the ellipsis site be syntactically isomorphic to its antecedent. Let us take a closer look at both conditions on the basis of the example in (4).

(4) Jerry$_i$ should bring his$_i$ maracas and Luigi$_j$ should [~~bring his$_j$ maracas~~] too.

Rooth's semantic redundancy relation can be formulated as in (5).

(5) **Rooth's Focus-Background Condition**
Take an ellipsis site e with an ellipsis antecedent a in the discourse. Ellipsis requires that there be some phrase E containing the ellipsis e and some phrase A containing the ellipsis antecedent a such that $[\![A]\!]$ is or contextually implies a member of F(E) (Hardt, 2004, 67).[2]

In order to apply the Focus-Background Condition (henceforth FBC) to (4), we first need to determine the value of F(IP$_E$). Given that *Luigi* is F-marked, F(IP$_E$) is the set of denotations of the form *x should bring x's maracas*. As $[\![\text{IP}_A]\!]$ is clearly a member of this set, the FBC—and with it, the first half of the antecedent condition—is satisfied.

The second redundancy relation can be phrased as in (6).

(6) **Fiengo and May (1994)'s syntactic reconstruction**
The ellipsis site e has to be structurally/syntactically isomorphic to an antecedent a (modulo indices and vehicle change).

Given that [$_{VP_E}$ bring his$_j$ maracas] is structurally isomorphic to [$_{VP_A}$ bring his$_i$ maracas] (modulo the indices on the possessive pronoun), the requirement in (6) is also met. This means that Rooth's bipartite antecedent condition is now fully satisfied and the ellipsis illustrated in (4) is recoverable.

[2] The focus semantic value of α, represented as F(α), is the set of denotations produced by replacing all F(ocus)-marked constituents in α by variables of the appropriate type. As indicated in the main text, I'm giving Hardt (2004)'s reformulation of Rooth's condition here. The original formulation runs as follows: "some phrase identical with or dominating the reconstructed phrase can be related by the $\sim$ relation to some phrase identical with or dominating the reconstruction antecedent" (Rooth, 1992, 18).

Recall that while the FBC is a semantic condition, the one in (6) is a syntactic one. According to Rooth, this means that the former doesn't demand strict structural isomorphism, while the latter does. In particular, the FBC can also be satisfied in contexts that involve implicational bridging/accommodation/inference[3] (cf. the phrase *or contextually implies* in (5)). This can best be illustrated by contrasting deaccenting (to which only the FBC applies) with ellipsis (which is subject to both the FBC and syntactic reconstruction). Consider first a deaccenting example involving accommodation (deaccenting is indicated by means of a smaller font and italics):

(7) First John told MARY$_i$ I was bad-mouthing her$_i$ and then SUE$_j$ *heard I was bad-mouthing her$_j$*.

The focus semantic value of IP$_E$, i.e. F(IP$_E$), is the set of denotations of the form *x heard that I was bad-mouthing x*.[4] The denotation of IP$_A$ is clearly not a member of this set. However, given that from *A tells B about C* we can infer that *B hears about C*, there is an accommodated antecedent, call it IP$_{A_{AC}}$, of the form *Mary$_i$ heard that I was bad-mouthing her$_i$*, and this accommodated antecedent *is* a member of F(IP$_E$). Given that the FBC is a semantic condition, it allows for this type of accommodation, and deaccenting is licit.

If we now turn to the ellipsis counterpart of the example in (7) (see (8)), things are different. While the FBC is satisfied here along the lines described above, the syntactic condition in (6) clearly is not, as there is no way in which [$_{VP_E}$ hear I was bad-mouthing her$_j$] is structurally isomorphic to [$_{VP_A}$ told MARY$_i$ I was bad-mouthing her$_i$]. As a result, (one half of) the antecedent condition is not satisfied and ellipsis is illicit.

(8) *First John told MARY$_i$ I was bad-mouthing her$_i$ and then SUE$_j$ did [~~hear I was bad-mouthing her$_j$~~]

2.2 Fox (1999)

Fox (1999) wants to do away with the differential treatment of deaccenting and ellipsis by proposing a single mechanism that applies to both.[5] In a nutshell, the reason why deaccenting allows accommodation much more freely than ellipsis is the fact that accommodation needs a trigger and this trigger is more easily found in deaccenting contexts than in ellipsis ones. Fox formulates the relevant condition as follows:

(9) Accommodation of a new antecedent for [a sentence] *S*, *AC*, must have a trigger.

(10) Accommodation has a trigger when *S* contains accommodation-seeking material, i.e., when *S* contains pronounced non-F-marked material which is absent in [the antecedent-containing clause] *A*.

In other words, the difference between (7) and (8) is not so much the fact that the former is an instance of deaccenting, while the latter contains ellipsis.

[3] I'm using these terms as synonyms here. For expository purposes, I will stick to one of them—accommodation—in the rest of the paper.

[4] Note that *Sue* is F-marked.

[5] A slightly more condensed version of this proposal can be found in Fox (2000, chapter 3).

Rather, it is the fact that by pronouncing words signaling that accommodation is necessary, (7) contains a trigger for accommodation that (8) does not. Note that according to (10) accommodation-seeking material has to meet three criteria: it should be (a) overt, (b) non-F-marked, and (c) absent from the antecedent-containing clause. It is worth going over these three criteria, as they will play a role further on in the paper as well. First of all, it is clear that triggering material should be overt, because deleted or otherwise non-overt material doesn't signal anything. Secondly, it should be non-F-marked, because F-marked material is explicitly identified as containing new information and hence cannot—and even must not—be part of the ellipsis antecedent. Thirdly, it should be absent from the antecedent-containing clause, because if it is identical, it cannot signal that accommodation—as in: a deviation from the actual antecedent—is required. In the example in (7) the verb *heard* functions as an accommodation trigger: it is overt, non-F-marked and absent from the first conjunct. Compare and contrast this to (8), where the only overt elements are *Sue* and *did*. The former is F-marked, and the latter (finite past tense) is also present in the antecedent-containing clause. This means that neither can act as a trigger and accommodation is correctly ruled out. Note that this also predicts that if (8) were modified such that the accommodation trigger *heard* were to sit outside the ellipsis site, accommodation should be fine even in an elliptical context. The following example (from Rooth (1992, 16)) shows that this is indeed the case:

(11) First John told MARY$_i$ I was bad-mouthing her$_i$ and then SUE$_j$ heard I was [~~bad-mouthing her$_j$~~]

This example contains an instance of VP-ellipsis not in the matrix, but in the embedded clause. As a result, the matrix verb *heard* is not part of the ellipsis site and can act as a trigger for accommodation.

Summing up, by presenting a unified account of the antecedent condition for deaccenting and ellipsis, Fox (1999) in effect proposes a theory of where and under what circumstances discrepancies between an ellipsis site and its antecedent are allowed.[6] It is this theory that I will take as a starting point in section 5 for the data presented in sections 3 and 4.

3 The data: sluicing, clefts and case

3.1 Introduction

This section contains a detailed discussion of cases of clausal ellipsis whereby accommodation is or is not possible. In particular, I focus on elliptical clefts in sluicing contexts with a non-cleft antecedent. The presentation of the data proceeds in three steps. First, in section 3.2, I show that this type of accommodation is indeed possible. Section 3.3 presents a systematic exception to this

[6] Other proposals arguing for a unified account of deaccenting and ellipsis include Tancredi (1992); Hardt (2004, 2007) and Sauerland (2004). Tancredi's proposal is similar in spirit to Fox's, while the latter two propose that accommodation doesn't need a lexical trigger, but can only be used to repair an otherwise illicit derivation or representation. For reasons of space, I do not present a detailed discussion of these proposals here, but I return to them in footnote 15.

type of accommodation, while section 3.4 in turn discusses ways of circumventing this exception.

3.2 Accommodation: clefts as repair for P-stranding violations

The data presented in this subsection are known from the literature, so I can be fairly brief about them. The discussion takes as its starting point Merchant (2001, 92)'s Preposition Stranding Generalization (PSG):

(12) A language L will allow preposition stranding under sluicing iff L allows preposition stranding under regular wh-movement.

The PSG describes a correlation that exists between the obligatory or optional nature of prepositions in sluiced wh-phrases on the one hand and preposition stranding in non-elliptical wh-questions on the other. Consider for example the English sentences in (13) and the Greek data in (14) (Merchant, 2001, 94).

(13) a. Peter was talking with someone, but I don't know (with) who.
b. Who was Peter talking with?

(14) a. *I Anna milise me kapjon, alla dhen ksero *(me) pjon.*
the Anna spoke with someone but not I.know with who
'Anna spoke with someone, but I don't know with who.'
b. **Pjon milise me?*
who she.spoke with
INTENDED: 'Who did she speak with?'

The example in (13-a) shows that English allows P-stranding in non-elliptical clauses, and accordingly, it also allows the preposition to be missing (or in Merchant's analysis: stranded) in a sluicing context, cf. (13-b). In contrast, Greek disallows both P-stranding in non-elliptical (14-a) and elliptical (14-b) contexts. The contrast between (13) and (14) thus nicely illustrates the PSG.

However, as is already clear from some of the judgments and footnotes in Merchant (2001, 94–100), some languages seem less well-behaved than English and Greek with respect to the PSG. In such languages P-stranding in non-elliptical contexts is categorically excluded, but under sluicing it seems much better. As is clear from the data in (15) and (16), Spanish is one of these languages.

(15) **Qué chica rubia ha hablado Juan con?*
what girl blonde has talked Juan with
INTENDED: 'What blonde girl did Juan talk to?'

(16) *Juan ha hablado con una chica rubia, pero no sé cuál.*
Juan has talked with a girl blonde but not I.know which
'Juan has talked to a blonde girl, but I don't know which.'

At first glance, data such as these pose a serious threat to the PSG. However, Vicente (2008) and Nevins et al. (2007) propose that the problem is only apparent. They argue that the structure underlying the sluice in (16) is not a preposition-stranding (and hence PSG-violating) full wh-question, but rather a

short cleft[7] such as the following:

(17) *Juan ha hablado con una chica, pero no sé cuál* ~~*es*~~ ~~pro~~
Juan has talked with a girl but not I.know which is it
'Juan talked to a girl, but I don't know which girl it was.'

If this analysis is on the right track, then the datum in (16) no longer poses a threat to the PSG: there is no preposition in the elided structure in (16) and accordingly, there is no (otherwise illicit) instance of P-stranding in this example either.[8]

From the perspective of this paper, what the data in (15)–(17) show is that sluicing in Spanish allows for an accommodated antecedent in the form of a cleft. Moreover, as argued by Vicente (2008); Nevins et al. (2007); Gribanova (2012); Craenenbroeck (2010), and **??**, the same holds for French, Brazilian Portuguese, Uzbek, English and Polish. What we have here, then, is a well-established instance of an ellipsis-antecedent mismatch.

3.3 No accommodation: cleft repair and morphological case

If the approach sketched in the previous section is on the right track, the presence of an accommodated cleft antecedent should be eminently detectable in languages with morphological case marking (or more precisely, in languages where the wh-complement of a preposition bears a different case from that of the wh-pivot of an interrogative cleft, see also section 3.4.1). Surprisingly, such supporting evidence cannot be found. I will illustrate this on the basis of Greek. Recall from example (14-b) (repeated below) that Greek does not allow for P-stranding in non-elliptical wh-questions.

(18) **Pjon milise me?*
who.acc she.spoke with
INTENDED: 'Who did she speak with?'

[7] In this paper, I remain agnostic about whether the structure underlying the sluice in (16) is a cleft or a copular clause. From the perspective of this paper it doesn't matter much, given that both options involve accommodation. See Gribanova (2012), though, for careful discussion of the various options in Uzbek. For expository purposes, I will consistenly refer to the structure in (17) (and similar structures in other languages) as a cleft, but this does not imply a commitment towards a particular analysis.

[8] Vicente (2008) and Nevins et al. (2007) present a number of arguments in favor of their analysis. Let me replicate one of them here: while regular sluicing is compatible with modification by *más* 'else' (cf. (i)), P-stranding sluicing is not, see (ii). This follows nicely from the cleft analysis, as a cleft is also incompatible with such non-exhaustive modification (iii).

(i) *Juan ha hablado con una chica rubia, pero no sé con qué chica más.*
Juan has talked with a girl blonde but not know with what girl else
'Juan talked to a blonde girl, but I don't know with what other girl.'

(ii) **Juan ha hablado con una chica rubia, pero no sé qué chica más.*
Juan has talked with a girl blonde but not know what girl else
INTENDED: 'Juan talked to a blonde girl, but I don't know with what other girl.'

(iii) **Juan ha hablado con una chica rubia, pero no sé qué chica más es* pro.
Juan has talked with a girl blonde but not know what girl else is it
*'Juan talked to a blonde girl, but I don't know what other girl it was.'

Moreover, the case assigned to the complement of the preposition *me* 'with' (i.e. accusative) is morphologically different from that of a cleft pivot (which bears nominative):

(19) *Me pjon milise?*
with who.acc she.spoke
'With whom did she speak?'

(20) *Dhen ksero pjos itan.*
not I.know who.nom it.was
'I don't know who it was.'

In other words, Greek has precisely the right setup for testing the cleft-analysis from the previous section. If this language uses a cleft to circumvent a preposition stranding violation under sluicing, this should be visible in the morphological case marking on the sluiced wh-phrase. Consider in this respect the following two sluicing examples.

(21) **I Anna milise me kapjon, alla dhen ksero pjon.*
the Anna spoke with someone, but not I.know who.acc
INTENDED: 'Anna spoke with someone, but I don't know who.'

(22) **I Anna milise me kapjon, alla dhen ksero pjos.*
the Anna spoke with someone, but not I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

The ungrammaticality of (21) is not surprising: the accusative case on the sluiced wh-phrase indicates that the ellipsis site contains a non-cleft wh-question, so this example is illicit due to the ban on preposition stranding in Greek (i.e. parallel to (18)). The example in (22), however, is more puzzling: if clefts can be used to circumvent P-stranding violations under sluicing, the nominative wh-phrase *pjos* 'who' should be perfectly licit here, all the more so since the non-elliptical counterpart of this example is perfectly well-formed:

(23) *I Anna milise me kapjon, alla dhen ksero pjos itan.*
the Anna spoke with someone, but not I.know who.nom it.was
'Anna spoke with someone, but I don't know who it was.'

Summing up, while section 3.2 revealed a fairly widespread pattern of accommodation in clausal ellipsis, the data discussed here present a systematic exception to this generalization. Moreover, just like the accommodation cases were not limited to Spanish, the non-accommodation cases are not specific to Greek either. Below I present data from Czech, Slovene, Hungarian, and Hindi, all showing the same pattern. For each of these languages I present four examples. The first one shows that the language disallows P-stranding in non-elliptical wh-questions. The second and third parallel the Greek data in (21)–(22): they show that P-stranding under sluicing is disallowed regardless of whether the case borne by the sluiced wh-phrase matches that of a cleft or not.[9] The fourth and final example shows that a non-elliptical cleft is perfectly well-formed (just

[9]The ban on a (non-syncretic, see section 3.4.2 below) nominative case ending on a 'P-stranding' sluiced wh-phrase is very robust. I know of only two exceptions: one of my Russian informants in some examples allowed for a nominative-marked sluiced wh-phrase and **?** presents one such example from German. I have no account for this. See note 12 for some general considerations, though.

like the Greek example in (23)).

Czech

(24) **Kým mluvila Anna s?*
who.instr spoke Anna with
INTENDED: 'Who did Anna speak with?'

(25) **Anna mluvila s někým, ale nevím kým.*
Anna spoke with someone but not.I.know who.instr
INTENDED: 'Anna spoke with someone, but I don't know who.'

(26) **Anna mluvila s někým, ale nevím kdo.*
Anna spoke with someone but not.I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

(27) *Anna mluvila s někým, ale nevím kdo to byl.*
Anna spoke with someone but not.I.know who.nom it was
'Anna spoke with someone, but I don't know who it was.'

Slovene

(28) **Kom je govorila Anna s?*
who.instr AUX spoke Anna with
INTENDED: 'Who did Anna speak with?'

(29) **Anna je govorila z nekom, ampak ne vem kom.*
Anna AUX spoke with someone but not I.know who.instr
INTENDED: 'Anna spoke with someone, but I don't know who.'

(30) **Anna je govorila z nekom, ampak ne vem kdo.*
Anna AUX spoke with someone but not I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

(31) *Anna je govorila z nekom, ampak ne vem kdo je to bil.*
Anna AUX spoke with someone but not I.know who.nom AUX it been
'Anna spoke with someone, but I don't know who it was.'

Hungarian

(32) **János kin kapott kíreket keresztül?*
János who.subl got news across
INTENDED: 'Via who did János get some news?'

(33) **János híreket kapott valakin keresztül, de nem tudom kin.*
János news got someone.subl across but not I.know who.subl
INTENDED: 'János got some news via someone, but I don't know who.'

(34) **János híreket kapott valakin keresztül, de nem tudom ki.*
János news got someone.subl across but not I.know who.nom
INTENDED: 'János got some news via someone, but I don't know who.'

(35) *János híreket kapott valakin keresztül, de nem tudom ki voltaz, akin keresztül híreket kapott.*
János news got someone.subl across but not I.know who.nom was that REL across news got

'János got some news via someone, but I don't know who it was via whom he got some news.'

Hindi

(36) **Kis dukaan John gayaa mein?*
which shop John go to
INTENDED: 'Which shop did John go into?'

(37) **Gautamne kisi se baat kii thii, lekin mujhe pataa nahĩĩ kis.*
Gautam.erg someone with talk do PAST but I.dat knowledge NEG who.obl
INTENDED: 'Gautam spoke with someone, but I don't know who.'

(38) **Gautamne kisi se baat kii thii, lekin mujhe pataa nahĩĩ kaun.*
Gautam.erg someone with talk do PAST but I.dat knowledge NEG who.nom
INTENDED: 'Gautam spoke with someone, but I don't know who.'

(39) *Gautamne kisi se baat kii thii, lekin mujhe nahĩĩ pataa ki vo kaun thaa.*
Gautam.erg someone with talk do PAST but I.dat NEG knowledge that he who.nom was
'Gautam spoke with someone, but I don't know who he was.'

3.4 Accommodation: case identity, case syncretism and case drop

The main difference between the languages that allow for cleft accommodation (section 3.2) and those that don't (section 3.3) is that the latter have morphological case marking, whereas the former do not (with the exception of Polish, which I return to in section 3.4.1). This section shows that it is nonetheless possible to find cleft accommodation under ellipsis in languages with morphological case marking, but only under very specific circumstances. These circumstances include: (a) contexts where the case assigned to a cleft pivot is identical to that of the complement of a preposition, (b) contexts where the case ending of the cleft pivot is syncretic with that of the complement of a preposition, and (c) contexts where the case ending of the cleft pivot is dropped. I discuss all three situations below.

3.4.1 Case identity

Polish is a language with morphological case marking which has no P-stranding under wh-movement (see (40)), but which nonetheless allows for preposition omission under sluicing, as in (41).

(40) **Którym Anna tańcczyła z mężczyzną?*
which Anna danced with man
INTENDED: 'Which man did Anna dance with?'

(41) *Anna tańcczyła z jednum mężczyzną ale nie wiem którym.*
Anna danced with one man but not know which

'Anna danced with a man, but I don't know which.'

Completely parallel to the accounts mentioned in section 3.2, **??** argues that the underlying structure for (41) is not a(n illicit) P-stranding wh-question such as (40), but rather the cleft in (42).

(42) *Anna tańcczyła z jednum mężczyzną ale nie wiem którym* ~~*to z*~~
Anna danced with one man but not know which it with
~~*mężczyzną (ona) tańcczyła.*~~
man she danced
'Anna danced with a man, but I don't know which (man it was with whom she danced).'

At first glance, this shows that Polish is an exception to the generalization that languages with morphological case marking do not allow for cleft accommodation under sluicing. On closer inspection, however, there is a crucial difference between the Polish data discussed here and the Greek, Czech, Slovene, Hungarian and Hindi facts from the previous section. What is special about the Polish cleft in (42) is the fact that the cleft pivot (*którym*) bears the same case (instrumental) as the one assigned by the preposition that appears to have been stranded (i.e. *z* 'with'). It turns out that under these specific circumstances, cleft accommodation is allowed even in a language with morphological case marking. Moreover, Polish is not alone in this regard. As discussed in detail by Gribanova (2012), Uzbek is another language with morphological case marking in which clefts displaying case connectivity can underlie clausal ellipsis.

3.4.2 Case syncretism

A second situation in which cleft accommodation under sluicing is allowed in languages with morphological case marking is when the case ending on the cleft pivot is syncretic with the one found on the complement of a preposition. Consider in this respect the following facts from Zurich German. As the examples in (43)-(45) show, the non-neuter wh-word *wëër* 'who' is syncretic between nominative and accusative, but not dative.

(43) *Wëër hät mit em Hans geredt?*
who.nom has with the Hans spoken
'Who talked to Hans?'

(44) *Für wëër hät de Hans kocht?*
for who.acc has the Hans cooked
'Who did Hans cook for?'

(45) *Mit wem hät de Hans geredt?*
with who.dat has the Hans talked
'Who did Hans talk to?'

Interestingly, this morphological distinction correlates with the possibilty of preposition omission under sluicing. While such omission is allowed with prepositions assigning accusative, it is illicit with those assigning dative:

(46) *De Hans hät für öppert kocht, aber ich wäiss nöd ?(für) wëër.*
the Hans has for someone cooked but I know not for who.nom/acc
'Hans cooked for someone, but I don't know who.'

(47) *De Hans hät mit öppertem gredt, aber ich wäiss nöd *(mit) wem.*
the Hans has with someone talked but I know not with who.dat
'Hans talked to someone, but I don't know who.'

What do these data show? The first thing to keep in mind is that cleft pivots in Zurich German bear nominative case (as they do in many other languages). This means that the only contexts in which preposition omission under sluicing is possible are those where the case assigned by the (seemingly stranded) preposition is syncretic with the case found in a cleft. As such these data represent a second circumstance in which cleft accommodation under sluicing is allowed in a language with morphological case marking. Note also that Zurich German is not the only language for which this holds. Consider for example the following facts from standard German:

(48) *Was ist passiert?*
what.nom is happened
'What happened?'

(49) *An was hat Rudolf dich erinnert?*
to what.acc has Rudolf you reminded
'What has Rudolf reminded you of?'

The neuter wh-word *was* 'what' is syncretic for nominative and accusative (in this case assigned by the preposition *an* 'to'), and while preposition stranding under sluicing is disallowed in German (see Merchant (2001)), it improves when this syncretic form is used:

(50) *Rudolf hat mich an etwas erinnert, aber ich weiß nicht mehr ?(an) was.*
Rudolf has me to something reminded, but I know not anymore to what
'Rudolf has reminded me of something, but I don't recall what.'

Similarly, the wh-determiner *welche* 'which' is syncretic for nominative and accusative (*welche*), but not for genitive (*welcher*), and accordingly, can 'strand' its preposition under sluicing only when governed by a preposition that assigns accusative (cf. (51)), not by one requiring genitive (see (52)).

(51) *Rudolf wartet auf einige Freunde, aber ich weiß nicht ?(auf) welche.*
Rudolf waits on some friends but I know not on which.nom/acc
'Rudolf is waiting for some friends, but I don't know which.'

(52) *Rudolf ist statt einiger Freunde aufgetreten, aber ich weiß nicht *(statt) welcher.*
Rudolf is instead.of some friends performed but I know not instead.of which.gen

'Rudolf has performed instead of some friends, but I don't know which.'

Comparable data can be found in Greek, where preposition omission under sluicing is generally disallowed (see above, section 3.3), except when the sluiced wh-phrase is syncretic between nominative and accusative, such as the feminine wh-pronoun *pja* 'which.nom/acc'.

(53) ?*I Anna milise me kapja kopela, alla dhen ksero pja.*
the Anna spoke with a girl, but not I.know which.nom/acc
'Anna spoke with a girl, but I don't know which.'

Finally, Russian shows a similar pattern in that preposition omission under sluicing is more acceptable with the syncretic neuter form *čto* 'what.nom/acc' than with the non-syncretic non-neuter form *kto/kogo* 'who.nom/who.acc':[10]

(54) *On vystrelil vo čto-to no ja ne znaju ??(vo) čto.*
he shot at something but I not know at what.nom/acc
'He shot at something, but I don't know what.'

(55) *On vystrelil vo kogo-to no ja ne znaju ?*(v) kogo.*
he shot at someone but I not know at who.acc
'He shot at someone, but I don't know who.'

Summing up, a second circumstance under which languages with morphological case marking can partake in cleft accommodation under sluicing is when (the case ending of) the sluiced wh-phrase is syncretic between the complement of the 'stranded' preposition and the pivot of a cleft.[11,12]

3.4.3 Case drop

A third and final context in which languages with morphological case allow for cleft accommodation under sluicing can be illustrated on the basis of Japanese. As shown by Fukaya (2007), this language has two sluicing-like constructions: one in which the sluiced wh-phrase is case-marked (see (56)) and one in which this case ending is dropped (as in (57)).

[10]Note that the judgment is less clear-cut here compared to the previous examples. This might be due to interference of the—for our purposes irrelevant—direct object reading in (54) and (55) (cf. *to shoot at something* vs. *to shoot something*). On the whole, though, the effect of syncretism was less pronounced in Russian than in German and Zurich German (with Greek occupying a position in the middle). I have no account for this variation. See note 12, though, for some more general considerations.

[11]The only exception I know of at this point is Czech, where, as J. Dotlačil (p.c.) has pointed out to me, preposition omission under sluicing is allowed (with complex wh-phrases) also in non-syncretic contexts and in spite of the fact that Czech does not have clefts with case connectivity (cf. section 3.4.1). See Caha (2012) for an analysis of Czech that is compatible with—but orthogonal to—the account presented here.

[12]A general caveat is in order concerning the syncretism facts discussed here. As pointed out by Pullum and Zwicky (1986, 759) and Ingria (1990, 203), judgments about syncretism and morphological case are notoriously subtle and subject to inter-speaker variation. As I have tried to make clear through the use of grammaticality diacritics, this was also the case for my data. That said, however, the general trend is clear: syncretic sluiced wh-phrases can be prepositionless more easily than their non-syncretic counterparts.

(56) *John-wa dareko-a suisensita ga, boku-wa dare-o ka*
John.top someone.acc recommended but I.top who.acc Q
siranai.
know.not
'John recommended someone, but I don't know who.'

(57) *John-wa dareko-a suisensita ga, boku-wa dare ka siranai.*
John.top someone.acc recommended but I.top who Q know.not
'John recommended someone, but I don't know who.'

Interestingly, Fukaya shows at length that the case-less version is derived from a cleft source, i.e. is a case of cleft accommodation, while the case-containing version is not.[13] As such, these data reveal a third context under which cleft accommodation is allowed in a language with morphological case marking, i.e. when that case marker is dropped.

3.4.4 Conclusion

The preceding three subsections have introduced and illustrated three circumstances in which cleft accommodation under sluicing is allowed in languages with morphological case marking: (i) contexts where the cleft and the preposition assign the same case to the wh-phrase (Polish, Uzbek), (ii) contexts where the two cases are different but syncretic (Zurich German, standard German, Greek, Russian), and (iii) contexts where the case ending of the sluiced wh-phrase is dropped (Japanese). What these three contexts seem to have in common is that the morphological make-up of the sluiced wh-phrase cannot signal its cleft origins. As soon as the wh-phrase unambiguously shows that a cleft has been elided (and hence that there is an accommodated antecedent), accommodation is not allowed. In languages without morphological case marking there is never a risk of violating this principle, but in languages with morphological cases, it can only be met in contexts of (a) case identity, (b) case syncretism, or (c) case drop.

With this in mind, it is worth going back to Fox's theory of accommodation as outlined in section 2.2. Recall that for Fox accommodation is only allowed in the presence of accommodation seeking material, i.e. there has to be an overt, non-F-marked trigger which is absent in the antecedent. At first glance, the case ending on *pjos* 'who.nom' in (22) (repeated below) would be perfectly suited as an accommodation trigger.

(58) **I Anna milise me kapjon, alla dhen ksero pjo-s.*
the Anna spoke with someone, but not I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

The facts described in the previous three subsections, however, point in the exact opposite direction: as soon as a case ending unambiguously points towards a(n accommodated) cleft antecedent, accommodation rather than being facilitated, becomes illicit. In other words, the case ending acts not as an accommodation trigger, but as an accommodation blocker.[14]

[13] I refer to the original work for the details of the argumentation.

[14] Note that the reasoning developed here presupposes that the *s*-ending in (58) is non-F-marked (otherwise it could not serve as accommodation trigger). Although this is an issue I return to in detail below, it is worth pointing out here that the opposite assumption, i.e.

In short, the data discussed in the preceding sections cannot be captured by existing accounts of accommodation under ellipsis[15] and hence require a new approach. Before turning to such a new analysis, however, I expand the data set in the next section and show that the type of restrictions on accommodation that we have uncovered here apply not only to (case and) sluicing, but also to verbal and nominal ellipses.

4 Expanding the data set

This section contains three sets of data (Hungarian NP-ellipsis, V-stranding VP-ellipsis and Hungarian subject extraction) that show a clear parallelism with the sluicing/cleft-data discussed above. In all three cases, the use of an accommodated antecedent is disallowed in spite of the fact that there appears to be a clear, overt accommodation trigger. In the first and the third case, the trigger is once again morphological case, while in the second it is a lexical verb. The data in sections 4.1 and 4.3 are new, those in section 4.2 are known from the literature (in particular Goldberg (2005)).

4.1 Hungarian NP-ellipsis

As is well-known (see Szabolcsi (1984) for a classic reference), Hungarian has both nominative and dative possessors. An example of each of them is given in (59).

(59) a. *János-nak a ház*a
Janos-dat the house
'János's house'
b. *János ház*a
János.nom house
'János's house'

While both of these structures independently allow for NP-ellipsis, it turns out that the two are not interchangeable under ellipsis:

(60) *János-nak a ház*a *szebb, mint Mari-nak.*
János.dat the house more.beautiful than Mary.dat
'János's house is more beautiful than Mary's.'

(61) **János ház*a *szebb, mint Mari-nak.*
János.nom house more.beautiful than Mary.dat
INTENDED: 'János's house is more beautiful than Mary's.'

that the *s*-ending is F-marked, would be to no avail either. While it would correctly predict accommodation to be ill-formed in (58), it would incorrectly predict accommodation to be equally ill-formed in the Spanish example in (16).

[15]It is worth pointing out that accounts such as those of Hardt (2004, 2007) and Sauerland (2004) mentioned in footnote 6 fare no better than Fox's proposal when faced with these data. Both papers propose that accommodation takes place as a last resort, i.e. to repair an otherwise illicit derivation or representation. While this seems to mesh well with the fact that we find cleft repair in contexts of preposition stranding in languages that generally disallow this process, it fails to differentiate between the grammatical and the ungrammatical cases. In particular, if cleft accommodation is allowed in Spanish in order to avoid a violation of the ban on preposition stranding, why not in Greek? And within Greek, why is it allowed with a syncretic wh-phrase, but not with a non-syncretic one?

Note that the ill-formedness of (61) is indeed due to the ellipsis process in the complement of the comparative, as the non-elliptical counterpart of this example is perfectly well-formed. This is shown in (62).

(62) *János ház szebb, mint Mari-nak a ház.*
János.nom house more.beautiful than Mary.dat the house
'János's house is more beautiful than Mary's house.'

From the point of view of this paper, these data closely parallel those introduced in the previous section. In particular, while in (60) the ellipsis site is completely parallel to the actual antecedent, in (61) we need to make use of an accommodated antecedent (a dative possessor instead of a nominative one). However, in spite of the fact that Hungarian has this structure generally available (cf. (59-a)), that the non-elliptical counterpart is perfectly well-formed (cf. (62)) and that the dative case ending in (61) would make for a perfect accommodation trigger, the result is ill-formed. This is reminiscent of the lack of cleft accommodation in Greek, where the alternative structure (a cleft) is also readily available (cf. (20)), where the non-elliptical version is also well-formed (cf. (23)) and where the case ending provides a similar accommodation trigger (cf. (22)). The crucial difference between the two data sets is that we are dealing with nominal ellipsis here instead of clausal. This means that whatever mechanism is responsible for these data patterns should not be specific to sluicing, but should apply to ellipsis more generally.

4.2 V-stranding VP-ellipsis

In this section I show how a well-known data set from the ellipsis literature fits straightforwardly into the empirical patterns uncovered in the previous section. It concerns the identity requirement that is imposed on so-called V-stranding VP-ellipsis, whereby the main verb raises out of the verbal ellipsis site. The most detailed and extensive discussion of the relevant facts can be found in Goldberg (2005) (though see also Lipták (2012) for new data, discussion and references). She calls the identity requirement on V-stranding VP-ellipsis the Verbal Identity Requirement, and defines it as in (63) (Goldberg, 2005, 171).

(63) **Verbal Identity Requirement**
The antecedent- and target-clause main Vs of VP Ellipsis must be identical, minimally, in their root and derivational morphology.

A few examples should help clarify how this requirement works. The Hebrew dialogue in (64) represents a case where the requirement is met. In particular, the verb in the antecedent clause and the one in the ellipsis clause have the same root and the same derivational morphology (i.e. they are conjugated in the same binyan).[16] Accordingly, the recoverability condition is met and ellipsis is well-formed.

[16]Note that the inflection on the verb does differ in the a- and the b-example (past vs. future). This is an issue I return to below.

(64) a. *Binyamin hisi'a ha-yom et imo*
Binyamin drive.past.3sg the-day acc mother.gen.3msg
la-xanut?
to.the-store
'Did Binyamin drive his mother to the store today?'

b. *Lo– hu yasi'a maxar.*
no he drive.fut.3msg tomorrow
'No– he will drive tomorrow [~~his mother to the store~~]'

As soon as either root or derivational morphology is altered, however, ellipsis fails. This is illustrated in (65) and (66). In (65) the two verbs have the same root, but different derivational morphology, while in (66) the derivational morphology is the same, but the roots differ.

(65) a. *Li'ora nas'a etmol le-Tel Aviv?*
Liora travel.past.3fsg yesterday to.Tel Aviv
'Did Liora travel yesterday to Tel Aviv?'

b. **Ken hisa'ti.*
yes drove.past.1sg
INTENDED: 'Yes, I drove her.'

(66) a. *Rivka hisi'a otax le-beit ha-sefer?*
Rivka drive.past.3fsg acc.you.fsg to.house the.book
'Did Rivka drive you to school?'

b. **Ken hi hevi'a.*
yes she bring.past.3fsg
INTENDED: 'Yes, she brought me.'

When looked at in terms of accommodation, the description of these facts goes as follows. In (65) the ellipsis site is structurally isomorphic to a (perfectly grammatical) accommodated antecedent (i.e. *Liora drove to Tel Aviv yesterday*) rather than to the actual antecedent (*Liora traveled to Tel Aviv yesterday*). Moreover, the presence of the verb *hisa'ti* 'drove' outside of the ellipsis site seems to be an excellent trigger to signal and license this accommodation. In spite of all this, however, the example is ruled out. In this respect, these data are highly reminiscent of the Greek sluicing/cleft-example in (58).

In addition to this parallelism, however, the Hebrew facts bring us a step closer to providing an analysis for this phenomenon. The contrast between inflection (which can be different in antecedent and ellipsis clause, see (64) and note 16) and root/derivation (which cannot, see (65) and (66)) suggests that the strict identity requirements we have been witnessing throughout this paper only apply to elements that have been extracted out of the ellipsis site, i.e. only material that was inside the ellipsis site at some point in the derivation has to be identical to corresponding material in the antecedent clause (see also Gribanova (to appear) for extensive argumentation in favor of this conclusion). While this clearly cannot be the whole story—there are well-known cases of extraction where such identity is not required (e.g. PISTACHIOS *I like, but* PEANUTS$_i$ *I don't* ~~*like* t_i~~)—the link between extraction and identity will play a central role in the analysis developed in section 5.

4.3 Subject extraction in Hungarian

The third and final additional data set I want to introduce here is thematically most closely related to the facts discussed in section 3 in that it deals with the interaction between sluicing and morphological case. As was pointed out by Kiss (1987), long subject extraction in Hungarian has peculiar case properties. While an *in situ* subject can only surface with nominative case, when extracted (e.g. under wh-movement) all speakers allow, and some strongly prefer the extracted subject to surface in the accusative. This is illustrated in (67).[17]

(67) *{Kit / ??ki} mondott János, hogy korán otthagyta a bulit?*
who.acc / who.nom said János that early left the party.acc
'Who did János say left the party early?'

In sluicing contexts, however, only the nominative is allowed, even for speakers who strongly prefer the accusative in non-elliptical contexts:

(68) *János azt mondta, hogy valaki korán otthagyta a bulit, de nem emlékszem {*kit / ^{ok}ki}*
János that.acc said that someone early left the party.acc but not remember who.acc / who.nom
János said that someone left the party early, but I don't remember who.'

Once again, these data represent a case of accommodation (from the nominative to the accusative structure[18]) being bled in spite of the fact that an accommodation trigger is readily available.

4.4 Conclusion

I have now presented data from a wide range of ellipsis contexts (clausal, verbal and nominal) involving not just morphological case, but also derivational and root morphology of verbs. All of these facts give rise to a uniform pattern: while accommodation under ellipsis is in principle allowed (see the Spanish example in (16)), it is blocked as soon as the trigger for the accommodation has been extracted out of the ellipsis site. In the next section I provide an account for this generalization that incorporates insights from Fox (1999) and Johnson (2012).

5 The analysis

5.1 Central assumptions

The analysis I want to propose is based on two central assumptions. The first one builds on Johnson (2012)'s reinterpretation of Fox (1999)'s theory of accommodation. It can be formulated as in (69).

[17] The judgments in this subsection are from a speaker who strongly prefers the accusative for extracted subjects.

[18] Note that the difference in case might signal a difference in syntactic structure. See Lipták (1998) for discussion.

(69) **Assumption #1:** An accommodated antecedent can only be built up from non-F-marked overt material present in the discourse or from elements that are freely available in any discourse.

The first half of (69) is Johnson (2012)'s, the *or*-clause is something I have added. Let me discuss each part in turn. What Johnson proposes is that accommodated antecedents (or phantom antecedents as he calls them) can only be constructed out of overt, non-F-marked material which is present in the discourse. While this is very reminiscent of Fox's accommodation triggers, there is a crucial difference: in Johnson's view, the ellipsis-containing clause need not contain any overt, non-F-marked material that is absent from the antecedent-containing clause in order for accommodation to be licit. In other words, there does not have to be an overt trigger as such; if an accommodated antecedent can be constructed on the basis of the material that is present in the antecedent-containing clause alone, that is also allowed. Giving up the requirement that there has to be an overt trigger is a desirable result in light of the data discussed in section 3.2. Consider again the Spanish sluicing/cleft accommodation example in (16), repeated below.

(70) *Juan ha hablado con una chica rubia, pero no sé cuál.*
Juan has talked with a girl blonde but not I.know which
'Juan has talked to a blonde girl, but I don't know which.'

Assuming that the sluiced wh-phrase is F-marked (more on this below), the ellipsis-containing clause does not contain any overt, non-F-marked material that is absent from the antecedent-containing clause. According to Fox (1999), then, accommodation should be disallowed (contrary to fact). In Johnson (2012)'s reinterpretation of Fox (1999), however, an overt trigger is not required, as long as the accommodated antecedent can be constructed on the basis of the (non-F-marked) material that is spoken.

This brings me to the second half of the assumption in (69). I propose that there are certain elements that are part of any discourse, regardless of whether they are actually spoken. Put differently, there are elements that can always be accommodated. The ones I want to focus on here are pronouns and copulas, and the supporting evidence in favor of this assumption comes from ellipsis in discourse-initial contexts. If an ellipsis site has to be structurally isomorphic to an antecedent, then the null hypothesis seems to be that there can never be ellipsis in discourse-initial contexts. As discussed in detail by Merchant (2004, 716–732), however, this prediction is incorrect: ellipsis can take place in discourse-initial contexts, but, interestingly, the range of material that can be elided is rather limited. As an illustration, consider the following two discourse-initial fragments (Merchant, 2004, 716).

(71) [Abby and Ben are at a party. Abby sees an unfamiliar man with Beth, a mutual friend of theirs, and turns to Ben with a puzzled look on her face. Ben says:]
Some guy she met at the park.

(72) [Abby and Ben are arguing about the origin of products in a new store on their block, with Ben maintaining that the store carries only German products. To settle their debate they walk into the store together. Ben picks up a lamp at random, upends it, examines the label (which reads *Lampenwelt GmbH, Stuttgart*), holds the lamp out towards Abby, and

proudly proclaims to her:]
From Germany! See, I told you!

Merchant argues (a) that these examples represent a case of (movement and) ellipsis, and (b) that the structure that is elided is rather limited. In particular, what is left unpronounced in each case is a pronoun and a copula. This analysis can be schematically represented as in (73).

(73) a. [Some guy she met at the park]$_i$ [$_{TP}$ ~~he is t$_i$~~]
b. [from Germany]$_i$ [$_{TP}$ ~~this is t$_i$~~]

One of the arguments Merchant presents in favor of this analysis concerns case. In a language with morphological case marking such as Greek, the fragment in (71) comes out with nominative case, not accusative:

(74) a. *Kapjos pu gnorise sto parko.*
someone.nom that she.met in.the park
'Someone she met at the park.'
b. **Kapjon pu gnorise sto parko.*
someone.acc that she.met in.the park
'Someone she met at the park.'

This follows straightforwardly if the underlying structure for the elliptical clause contains the copular structure in (75) rather than the 'fully clausal' (and in principle equally plausible) structure in (76).

(75) *Aftos ine {kapjos / *kapjon} pu gnorise sto parko.*
he is someone.nom / someone.acc that she.met in.the park
'He is someone she met at the park.'

(76) *Efere {*kapjos / kapjon} pu gnorise sto parko.*
she.brought someone.nom / someone.acc that she.met in.the park
'She brought someone she met at the park.'

Another argument—not presented by Merchant—can be found in discourse-initial fragments with tag questions. Consider the data in (77) and (78).

(77) [Upon meeting someone in the park:]
Nice weather, isn't it?

(78) [While shaking the hand of a business associate one is meeting in person for the first time:]
How do you do? John Smith, is it?

As is well-known, tag questions are formed based on (as in: copy the features of) the subject and the T^{o}-head of the clause they attach to. The fact that they can attach to the discourse-initial fragments in (77) and (78) shows (a) that these examples are underlyingly clausal in nature (and hence have a subject and a T^{o}-node), and (b) that this underlying structure is copular in nature, i.e. it only contains a pronoun and a copula. This analysis can be represented as follows:

(79) a. ~~It is~~ nice weather, isn't it?
b. ~~It is~~ John Smith, isn't it?

Summing up, there is clear evidence that the elided structure in discourse-initial fragments can contain pronouns and copulas, or more generally, that these elements are always available as (parts of) possible ellipsis antecedents, even when they are not literally spoken. This is also the conclusion Merchant (2004, 724-725) reaches when discussing the fragments in (71) and (72): "The contexts are rich enough to make a certain entity salient (a guy and a lamp, respectively), and to make a certain question manifest, namely the question as to the identity or the country of origin of the entity. (..) this is enough to license anaphoric devices like *he* and *this*. Further we can be sure that these contexts also make the existence predicate be manifest (..) In short, I'm proposing a kind of 'limited ellipsis' analysis, one in which a demonstrative (such as *this/that* or a pronoun in a demonstrative use) or expletive subject and the copula are elided—given the appropriate discourse context, which will be almost any context where the speaker can make a deictic gesture, and where the existence predicate can be taken for granted (and it's hard to imagine a context where this wouldn't be the case)".

We now have all the ingredients we need to account for the accommodation in the Spanish sluicing example in (16), the analysis of which is repeated below:

(80) *Juan ha hablado con una chica, pero no sé cuál* ~~*es*~~ ~~pro~~
Juan has talked with a girl but not I.know which is it
'Juan talked to a girl, but I don't know which girl it was.'

In this example the accommodated antecedent contains two elements that are absent in the actual antecedent: the copula *es* and the (silent) pronoun *pro*. In light of the reasoning developed above, it should be clear that these are elements that can be freely accommodated. As a result, the accommodation indicated in (80) is well-formed, and the example constitutes only an apparent exception to the PSG.

What the analysis thus far does not explain, however, is the behavior of languages with morphological case marking such as Greek, i.e. we have yet to account for why nominative case marking on the sluiced wh-phrase is ill-formed (and does not lead to accommodation) in (58), repeated below.

(81) **I Anna milise me kapjon, alla dhen ksero pjo-s.*
the Anna spoke with someone, but not I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

This is where the second central assumption of my analysis comes in. It can be formulated as in (82).

(82) **Assumption #2:** Material that is extracted from an ellipsis site cannot be part of an accommodated antecedent.

Before we look into the rationale behind this assumption, note that the ill-formedness of (81) follows straightforwardly from it. In this example the wh-phrase *pjos* has been extracted from the ellipsis site. As a result, its nominative case ending cannot be part of an accommodated antecedent, which in turn means that the cleft option (which requires nominative case on the wh-phrase) is ruled out.[19]

[19]Note that the nominative case on *I Anna*, the subject of the antecedent-containing clause does not suffice to license the accommodation, i.e. material in the accommodated antecedent

Successful though it may be in accounting for our central data contrast, however, the generalization in (82) as it stands is a stipulation. In order to see if and how it follows from more general conditions on ellipsis and accommodation, we first need to distinguish between the various types of material that can be extracted from an ellipsis site. Taking into account notions such as F-marking and the relation between the ellipsis-containing clause and the antecedent, we arrive at the following three categories:[20]

(83) a. non-F-marked and present in the antecedent
b. F-marked (and hence by definition absent from the antecedent)
c. non-F-marked and absent from the antecedent

An example of the first category is given in (84), where the subject *I* has been extracted from the ellipsis site. Given that it is completely identical to a parallel element in the antecedent-containing clause (the subject *I* in the first conjunct), it is clear that this material makes no contribution towards accommodation, or rather, no contribution that could not be made without it, by only looking at the antecedent-containing clause. As a result, the material in (83-a) straightforwardly meets the criterion in (82).

(84) I thought I'd be arrested, but I_k wasn't ~~arrested t_k~~

Material beloning to the second group is explicitly marked as being contrastive (and hence new) with respect to the antecedent. As a result, it cannot be part of an accommodated antecedent either. Rather, this is the type of material that gets taken out of the equation by an operation such as F-closure (Merchant, 2001) when the identity between an ellipsis site and its antecedent is evaluated. Examples that fall into this category include so-called contrast sluices and cases of contrastive topicalization out of ellipsis sites:

(85) a. I know which ARTICLE he read, but not which BOOK.
b. CHOCOLATE I like, but PEANUTS I don't.

This leaves only the category in (83-c). It is the most promising one when it comes to accommodation as this is precisely what Fox (1999) definsd as accommodation-seeking material. Before examining the question of whether this also holds for material that has been extracted from an ellipsis site, let us first try to construct an example of this category. What I am particularly interested in—in light of the data discussed in section 3—is whether the wh-phrase in sluicing counts as F-marked or not. While many people have pointed out that sluiced wh-phrases are focused and hence F-marked (see e.g. Hartman (2007) and references mentioned there), the question we need to raise in the context of this paper is which *portion* of the wh-phrase is F-marked. Recall that we are trying to determine whether the case ending on a sluiced wh-phrase can be part of an accommodated antecedent. In this paper, I follow Romero (1998) and Johnson (2012), who argue that it is only the wh-determiner that

has to sit in a parallel syntactic position to comparable material in the actual antecedent. See Fox (1999, 89n14) for discussion.

[20] In a system such as that of Selkirk (2008), which distinguishes between F-marking, G-marking and being unmarked, there would arguably be more categories. Although I believe the overall conclusions will remain unaltered, I leave a full exploration of this alternative for future research.

is F-marked, not the NP-portion (which includes the case ending in languages with morphological case marking). This is also suggested by the stress pattern of sluiced complex wh-phrases as in (86) (adapted from Romero (1998, 31)).

(86) They usually ask how many papers the candidate reviewed for the journal, but they never ask {WHICH ones/*which ONES}.

If the entire wh-phrase was focused, the stress would have to fall on *ones*. The fact that it doesn't, suggests that only a portion of the wh-phrase—in particular, the wh-determiner—is F-marked. This in turn means that in an example like (81) (repeated below) the case ending on the sluiced wh-phrase falls into category (83-c) and we have to explain why it cannot be part of an accommodated antecedent (cf. (82)).

(87) **I* *Anna milise me kapjon, alla dhen ksero pjo-s.*
the Anna spoke with someone, but not I.know who.nom
INTENDED: 'Anna spoke with someone, but I don't know who.'

I propose that material that has been extracted from an ellipsis site and that belongs to category (83-c) obligatorily undergoes reconstruction into that ellipsis site. This means that as far as the recoverability condition on ellipsis is concerned, this material is treated as if it were unpronounced, and as a result, it cannot be used in the construction of an accommodated antecedent, in accordance with (82). Support for such obligatory reconstruction comes from so-called double-headed ACD as discussed by Sauerland (2004). Consider the data in (88).

(88) a. *Polly visited every town that is near the lake that Erik did.
b. Polly visited every town that is near the town that Erik did.

Sauerland argues at length that the contrast between (88-a) and (88-b) is due to the fact that (the NP-portion of) the head noun of the relative undergoes reconstruction into the ellipsis site, thus rendering it non-identical to its antecedent. More specifically, the NP *lake* in (88-a) is obligatorily reconstructed into the ellipsis site and as a result the elided VP is not identical to the antecedent VP, which contains (the reconstructed NP-portion of the QRed) DP *every town*. From the point of view of the present paper, what this example shows is that the noun *lake* cannot be part of an accommodated antecedent (in spite of it not being F-marked), in accordance with (82).

Summing up, in this section I have outlined my analysis of the core data presented in section 3. Key ingredients of this analysis are the two assumptions in (89).

(89) a. **Assumption #1:** An accommodated antecedent can only be built up from non-F-marked overt material present in the discourse or from elements that are freely available in any discourse.
b. **Assumption #2:** Material that is extracted from an ellipsis site cannot be part of an accommodated antecedent.

I have shown that both of these assumptions receive independent support and that the basic data contrast between the presence of cleft accommodation under sluicing in Spanish (cf. (16)) and its absence in Greek (cf. (22)) follows

straightforwardly from the interaction between (89-a) and (89-b). In Spanish, all the elements necessary for constructing an accommodated antecedent are either part of the discourse or freely available, while in Greek a key ingredient of the accommodated antecedent (the case ending on the pivot of the cleft) has been extracted out of the ellipsis site and as a result cannot be part of an accommodated antecedent. In the next section I show how my account derives the rest of the data presented above.

5.2 Deriving the rest of the data

Recall from section 3.4 that there are three circumstances under which languages with morphological case marking nonetheless allow for cleft accommodation under sluicing: case identity, case syncretism and case drop. The case identity scenario was illustrated on the basis of the Polish example in (90).

(90) *Anna tańcczyła z jednum mężczyzną ale nie wiem którym ~~to z~~*
Anna danced with one man but not know which it with
~~mężczyzną (ona) tańcczyła~~.
man she danced
'Anna danced with a man, but I don't know which (man it was with whom she danced).'

The well-formedness of cleft accommodation in this example follows directly from the two assumptions in (89). On the one hand, the instrumental case ending on the sluiced wh-phrase *którym* 'which' cannot be part of the accommodated (cleft) antecedent, but on the other hand, the actual antecedent contains that very same case ending on *jednum mężczyzną* 'one man'. Moreover, the pronoun *to* 'it' can be freely accommodated and as a result, cleft accommodation (and hence apparent preposition stranding) is well-formed here.

A comparable line of reasoning applies to the case syncretism data from section 3.4.2. Consider again a relevant example from German in (91).

(91) ?*Rudolf hat mich an etwas erinnert, aber ich weiβ nicht*
Rudolf has me to something reminded, but I know not
mehr was.
anymore what
'Rudolf has reminded me of something, but I don't recall what.'

If the wh-phrase was unambiguously marked as accusative, it would be incompatible with an ellipsis site that contains a cleft. If it was unambiguously marked as nominative (with an accusative antecedent), however, that nominative could not be part of an accommodated antecedent. The only way out is to use ambiguous/syncretic case endings, so that a nominative-containing (cleft-)ellipsis site can be built up out of an accusative-containing antecedent.[21]

The third and final context under which cleft accommodation under sluicing was allowed in languages with morphological case marking is case drop. Consider again the relevant Japanese example in (92).

[21]Note that this implies that it isn't just the wh-phrase that has to be syncretic, but also its pronominal antecedent. In all the cases I have looked at, this was indeed the case.

(92) *John-wa dareko-a suisensita ga, boku-wa dare ka siranai.*
John.top someone.acc recommended but I.top who Q know.not
'John recommended someone, but I don't know who (it was).'

The explanation for this data pattern is fairly straightforward: if there were an accusative ending on the wh-phrase *dare* 'who' in this example, it would necessarily reconstruct into the ellipsis site and as such be incompatible with an underlying cleft. The fact that Japanese (independently) allows for case drop means that the sluiced wh-phrase can surface in a form that is perfectly compatible with an underlying cleft.

Summing up, the data in section 3 follow fairly directly from the account outlined in the previous section. Now let's see how the facts from section 4 fare. Recall first that a nominative possessor cannot antecede NP-ellipsis in the complement of a dative possessor:

(93) **János ház szebb, mint Mari-nak.*
János.nom house more.beautiful than Mary.dat
INTENDED: 'János's house is more beautiful than Mary's.'

Given that the dative possessor *Marinak* 'Mary.dat' has moved from a lower (ellipsis site-internal) position to its current position (see Szabolcsi (1984)), it falls in the category of elements described by (89-b). As a result, the dative ending on the possessor cannot be part of an accommodated antecedent and the switch from nominative possession to dative possession is disallowed.

The second set of data from section 4 involved the Verbal Identity Requirement. Consider again a relevant Hebrew example in (94).

(94) a. *Rivka hisi'a otax le-beit ha-sefer?*
Rivka drive.past.3fsg acc.you.fsg to.house the.book
'Did Rivka drive you to school?'
b. **Ken hi hevi'a.*
yes she bring.past.3fsg
INTENDED: 'Yes, she brought me.'

Given that the verbal root and its derivational morphology move out of the ellipsis site (see Gribanova (to appear) for detailed discussion), they fall under the generalization in (89-b) and as a result they cannot trigger accommodation. Interestingly, for some speakers it becomes possible to switch to a different verbal root in the second clause in cases of contrast, i.e. when the verbs are F-marked and thus explicitly signal that they are new information. An example from Russian is given in (95) (Gribanova, to appear, 28).

(95) *Kto-to ètu vazu* URONIL, *i tot fakt, čto nikto ne*
someone this.acc vase.acc dropped.sg.m and the fact that noone NEG
PODNJAL *menja ogorcaet.*
under.hold.sg.m me.acc upsets.3sg
'Someone DROPPED this vase, and the fact that no one PICKED (it) UP upsets me.'

Finally, the lack of accusative case in long subject extraction in Hungarian (cf. (96)) also follows straightforwardly from the assumptions in (89): the accusative case ending belongs to material that has been extracted from the ellipsis site

and as a result is unavailable to serve as part of an accommodated antecedent. The only material that is available is the actual antecedent, which contains a nominative in subject position.

(96) *János azt mondta, hogy valaki korán otthagyta a bulit,*
János that.acc said that someone early left the party.acc
*de nem emlékszem *kit/^{ok}ki*
but not remember who.acc/who.nom
János said that someone left the party early, but I don't remember who.'

All in all, then, it seems fair to say that the analysis outlined in section 5.1 can provide a straightforward account for the data presented in sections 3 and 4. By assuming (a) that accommodated antecedents can only contain material that was spoken in the discourse or that is freely available in any discourse, and (b) that material that has been extracted out of an ellipsis site cannot partake in accommodation, the accommodation patterns discussed so far can be accounted for. In the next section I show that my analysis also provides a handle on some other well-known case of (lack of) accommodation.

6 Extending the analysis

In this section I discuss two other cases of (lack of) accommodation, viz. voice mismatches and preposition stranding under sprouting. As was pointed out by Merchant (2012), it is not the case that active/passive-mismatches between an ellipsis site and its antecedent are monolithically allowed or disallowed. Rather, such mismatches can be found in verbal, but not in clausal ellipsis. Consider in this respect the data in (97) and (98).

(97) a. *Someone murdered Joe, but I don't know who by.
b. *Joe was murdered, but I don't know who [~~murdered Joe~~]

(98) a. The janitor must remove the trash whenever it is apparent that it should be.
b. The system can be used by anyone who wants to.

The examples in (97) are cases of sluicing, those in (98) of VP-ellipsis. As shown by the grammaticality judgments, voice mismatches are allowed in the case of VP-ellipsis (from active to passive in (98-a) and from passive to active in (98-b)), but not in sluicing (regardless of whether we switch from active to passive as in (97-a) or vice versa as in (97-b)). Merchant takes this split in the data between 'big' and 'small' ellipses to be strong evidence in favor of a theory that takes the antecedent condition on ellipsis to be one of syntactic isomorphism, not of semantic parallelism. His reasoning goes as follows: in (97) the Voice-head sits inside the ellipsis site and as a result there has to be an identical Voice-head in the antecedent clause. Given that their isn't (one of the two is active and the other passive), ellipsis fails to meet the antecedent condition and the sentence is out. In (98) on the other hand, the Voice-head is outside of the ellipsis site and so is not subject to the antecedent condition, which in turn means that voice mismatches are allowed. Interestingly for our purposes, Merchant also argues specifically against an accommodation account à la Fox (1999) for these data. Focusing on the example in (97-a), he notes that "the preposition

by in the sluiced clause could function as 'accommodation-seeking material', triggering the creation via accommodation of a passive antecedent LF to license the ellipsis of *Joe was murdered*" (Merchant, 2012, 14). He concludes that "the notion of accommodation or inferential triggering as typically conceived of in the literature cannot account for the facts with voice mismatches" (Merchant, 2012, 14). Note that the objection Merchant raises doesn't apply to the proposal developed in this paper: the preposition *by* (is part of a constituent that) has been extracted out of the ellipsis site and as a consequence cannot be used in the creation of an accommodated antecedent. Better still, the account developed here also provides a handle on the contrast between (97) and (98). Given that in clausal ellipsis the only surviving material has typically been extracted out of the ellipsis site, it cannot serve as part of an accommodated antecedent, and accommodation options become fairly limited. In verbal ellipsis on the other hand, some of the material surviving the ellipsis does not originate inside the ellipsis site and as a result these types of constructions allow for a wider range of accommodation. Our account, then, not only captures cleft accommodation under sluicing—for which a purely syntactic isomorphism account à la Merchant is difficult, as clefts are not structurally isomorphic to non-cleft wh-questions—but also the difference between big and small ellipses when it comes to voice mismatches.

Another well-known ellipsis puzzle which follows straightforwardly from the accommodation analysis developed here is the ban on preposition stranding under sprouting, first discussed by **?**. Consider the example in (99).

(99) *John was flirting, but I don't know who [~~John was flirting with~~ t_{who}]

When John is flirting, it is implied that he is flirting *with someone*. In other words, the antecedent clause *John was flirting* should allow for the construction of an accommodated antecedent *John was flirting with someone*. The fact that it doesn't leads Chung to postulate an additional restriction on the antecedent condition for ellipsis:

(100) Every lexical item in the numeration of the sluice that ends up (only) in the elided IP must be identical to an item in the numeration of the antecedent CP.

This accounts for the example in (99) in that the preposition *with*, which ends up only in the elided IP, is not identical to an item in the numeration of the antecedent CP. Just as was the case with voice mismatches, however, these data also follow straightforwardly from the present account: given that accommodated antecedents can only be built up from (overt, non-F-marked) elements that are present in the discourse, *with* cannot be part of such an antecedent and ellipsis fails. One could even say that the two assumptions outlined in (89) are an extended version of Chung's principle in (100) in that they add two amendments: (i) some lexical items come for free, and (ii) lexical items extracted from the ellipsis site don't count for accommodation.

Summing up, the accommodation analysis presented in this paper not only accounts for the new data discussed in sections 3 and 4, it also straightforwardly captures existing cases of ellipsis-antecedent mismatches.[22]

[22]It should be pointed out that there is one subtype of sluicing that is not yet straightforwardly captured by my account, i.e. sprouting with a wh-PP (many thanks to K. Johnson

7 Conclusion and prospects

The theory advocated in this paper is one where you can have your cake and eat it too. On the one hand, it imposes a very stringent structural isomorphism requirement on an ellipsis site, while on the other, it allows—via the intermediation of an accommodated antecedent—for discrepancies between an ellipsis site and its 'actual' antecedent. This type of approach (which has predecessors in Merchant (2012, to appear); Johnson (2012); Elbourne (2001, 2008)) seems forced upon us by the data. On the one hand, the antecedent condition is sensitive to factors that cannot plausibly be attributed to semantics or pragmatics such as the case morphology discussed in sections 3.3 and 3.4 or **?**'s stranded prepositions. On the other hand, the cleft accommodation cases discussed in section 3 clearly show that a purely syntactic requirement that demands full identity between the antecedent and the ellipsis site is too rigid (clefts are simply not structurally isomorphic to non-cleft wh-questions). By adding accommodated antecedents into the mix, we strike the right balance between strict identity on the one hand and room for discrepancies on the other.

More generally, this line of thinking is congruent with the growing body of work (see e.g. Merchant (2001); **?**); **?**); Fukaya (2007); Barros (2012)) arguing that ellipsis cannot repair island violations (*pace* for example Merchant (2008)). Consider the example in (101).

(101) They hired someone who speaks a Balkan language, but I don't know which one$_i$ [~~they hired someone who speaks t$_i$~~]

At first glance, a syntactic isomorphism approach to the antecedent condition would have to say that the ellipsis site contains a complex NP-island and—given that the example is grammatical—that ellipsis can repair or undo such island violations. When we consider the possibility of accommodated antecedents, however, this conclusion no longer follows, as (101) allows for an alternative analysis, whereby the accommodated antecedent (and hence the ellipsis site) does not violate the island:

(102) They hired someone who speaks a Balkan language, but I don't know which one$_i$ [~~they speak t$_i$~~]

p.c. for pointing this out to me). Consider the example in (i).

(i) John was flirting, but I don't know [with who]$_i$ [~~John was flirting t$_i$~~]

Given that the PP *with who* is extracted from the ellipsis site, the preposition *with* cannot be part of an accommodated antecedent. As a result, only the actual antecedent *John was flirting* is available, and ellipsis should fail, contrary to fact. A way of making this example compatible with the theory developed here is to assume that sprouting always involves base-generation of the wh-phrase outside of the ellipsis site. To a certain extent, this conclusion is even forced by the approach adopted here. Consider the non-PP sprouting example in (ii).

(ii) John was eating but I don't know what [~~John was eating~~].

In order for this ellipsis to be recoverable, we need to construct an accommodated antecedent with a (freely available) pronoun in the object position of *eating*. This implies, however, that the only way for the ellipsis site to be structurally isomorphic to its antecedent is by making use of a resumptive pronoun in combination with a wh-phrase that is base-generated in specCP. I leave a full exploration of this alternative analysis of sprouting as a topic for further research.

As argued by Barros (2012) and Fukaya (2007), this type of approach is independently supported by the lack of island repair in contrast sluices (where a similar accommodated antecedent is unavailable). A theory of the antecedent condition that embraces accommodation can thus do away with an otherwise mysterious property of ellipsis (island repair), while retaining—and in some cases improving upon—the empirical results of previous theories.

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