Ellipsis, identity, and accommodation:
The case of case

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Highlights

- **main topic:** constraints on identity in ellipsis

- **central data:** the complex interaction between morphological case marking on a sluiced wh-phrase and the degree of isomorphism between ellipsis site and antecedent

- **main conclusions:**

  - ellipsis identity has to allow for accommodation
  - ellipsis licensing in sluicing requires that the sluiced wh-phrase be morphologically anchored to the antecedent clause

Contents

1 Introduction: ellipsis identity

(1)   Billy-Bob ate something, but I don't know what _.

ellipsis identity: it is clear that the sluicing site in (1) gets its meaning by virtue of being isomorphic/identical to the antecedent clause at some level and to some extent, but at what level and to what extent?

some history:

1. ellipsis identity is structural/syntactic: Ross (1969); Rooth (1992); Fiengo and May (1994); Chung et al. (1995)

2. ellipsis identity is semantic: Dalrymple et al. (1991); Hardt (1993); Merchant (2001)

3. mixed accounts: Chung (2006, 2013); Merchant (2013); AnderBois (2010)

in this talk I argue:

- that none of the existing accounts adequately accounts for the interaction between sluicing and morphological case

- that the case facts necessitate the introduction of a new licensing condition on sluicing

2 The basic data: non-isomorphic ellipsis sites

2.1 Introduction: antecedent–ellipsis isomorphism

(2)   Billy-Bob ate something, but I don't know what __.

→ in order to determine the nature of the antecedent–ellipsis identity relation, we first need to know what exactly the ellipsis site looks like:

(3)   Billy-Bob ate something, but I don't know what ~~Billy-Bob ate~~.

(4)   Billy-Bob ate something, but I don't know what ~~it was~~.

→ the ellipsis site in (3) is syntactically and semantically isomorphic to the antecedent clause, while the ellipsis site in (4) is (arguably) semantically isomorphic, but not syntactically ⇒ if structures like (4) can be argued to exist, they constitute a problem for syntactic identity approaches

next sections: they do indeed exist!

2.2 Optionally non-isomorphic ellipsis sites

observation: sluicing is often ambiguous depending on the size of the antecedent that is elided

(5)   John said that Mary left, but I don't know why.
   a.   but I don't know why ~~John said that Mary left~~.
   b.   but I don't know why ~~Mary left~~.

note: in some cases differences in size of the antecedent correlate with the difference between having the ellipsis site be isomorphic to the antecedent vs. using a non-isomorphic copular structure (typically, depending on whether ellipsis takes a clausal or a nominal antecedent)

(6)   John was given a book, but I don't know who by.
   a.   but I don't know who ~~John was given a book~~ by.
   b.   but I don't know who ~~the book was~~ by.

(7)   John received a book, but I don't know from which author.
   a.   but I don't know from which author ~~John received a book~~.
   b.   but I don't know from which author ~~the book was~~.

(8)   They were arguing over a collaboration, but I don't know with who.
   a.   but I don't know with who ~~they were arguing over a collaboration~~.
   b.   but I don't know with who ~~the collaboration was~~.

2.3 Necessarily non-isomorphic ellipsis sites

2.3.1 Exclusively nominal antecedents

Beecher (2006): in some contexts the only available antecedent for sluicing is a nominal and as a result the only possible underlying structure is a non-isomorphic copular clause

(9)   I remember the presentation at the Climatic Committee meeting, but do not remember who by.
   a.   #who ~~I remember the presentation~~ by.
   b.   who ~~the presentation was~~ by.

(10)   The only thing I can come up with is contamination but I do not know what from.
   a.   *what ~~the only thing I can come up with is contamination~~ from.
   b.   what ~~the contamination is~~ from.

(11)   It strongly reminds me of some European comic I read once, but I can't remember who by.
   a.   *who ~~it strongly reminds me of some European comic~~ by.
   b.   who ~~it was~~ by.

(12)   My parents have some gifts from Santa waiting at their house and I'll put one out for Christmas morning that has their name on it but doesn't say who from.
   a.   *who ~~I'll put one out~~ from.
   b.   who ~~it is~~ from.

2.3.2 Fragments with dependent tag questions

Dependent tag questions (DTQs) are yes/no questions following assertions (= the host clause), which question the content of that assertion:[1]

(13)   Jack left, <u>didn't he</u>?

Sailor (2011): the elided DTQ-clause and its host are subject to stringent identity requirements:

(14)   a.   Jack is sleeping, isn't he?
        b.   *Jack is sleeping, isn't it?

(15)   a.   *It is Jack, isn't he?
        b.   It is Jack, isn't it?

→ we can use this property of DTQs as a window into the internal syntactic structure of clausal ellipsis sites, in particular **fragment answers** (Merchant (2004))

(16)   A: Someone left.
        B: Yes, Jack.

note: since fragment answers are themselves assertions, we should be able to tag them with DTQs:

(17)   A: Someone left.
        B: Yes, Jack, DTQ?

moreover: given the identity requirements in (14)-(15), the choice of DTQ (cleft or non-cleft) should provide direct insight into the structure of the ellipsis site:

(18)   A: Bill met a member of the Linguistics Department.
        B: Yes, Ken Safir, {wasn't it/??didn't he}?

(19)   A: Who can Bill talk to?
        B: Ken Safir, {isn't it/??can't he}?

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[1]This section is based on joint work with Matt Barros.

note: informal acceptability judgements from linguists surprisingly show that the DTQ consistent with an isomorphic ellipsis site is degraded, and that the cleft DTQ is preferred → this is unexpected from the point of view of Last Resort, because the non-elliptical isomorphic structures are perfectly well-formed:

(20)   A: Bill met a member of the Linguistics Department.
        B: Yes, he met Ken Safir, {*wasn't it/didn't he}?

(21)   A: Who can Bill talk to?
        B: He can talk to Ken Safir, {*isn't it/can't he}?

experimental support: in an attempt to confirm or disconfirm these initial findings, we ran an online acceptability judgement task:

- one independent variable ('tag type') - two levels (cleft and non-cleft tags)

- 6 items per condition split into two questionnaires

- each subject was asked to judge three experimental items per condition on a five point Likert scale (1 = very unnatural, 5 = very natural)

- filler to test item ration 2:1 (fillers from two other experiments), pseudorandomized

- administered online through the Sakai software platform

- advertized on Facebook and psychological research on the net (`http://psych.hanover.edu/research/exponnet.html`)

- judgements were collected from 46 native Standard American English speakers

results:

- a two tailed t-test for dependent samples revealed a statistically significant difference between acceptability ratings for cleft tags (Mean = 3.75) and non-cleft tags (Mean = 2.92), $t(137) = -6.883$, $p < 0.01$ in favor of cleft tags

2.3.3 Preposition stranding

(22) **P-stranding generalization (PSG)** (Merchant, 2001, 92)
A language *L* will allow preposition stranding under sluicing iff *L* allows preposition stranding under regular wh-movement.

English: P-stranding

(23) Peter was talking with someone, but I don't know (with) who.

(24) Who was Peter talking with?

Greek: no P-stranding (Merchant, 2001, 94)

(25) *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.'

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

→ at first sight, **Spanish** appears to be an exception for the PSG (Nevins et al. (2007); Vicente (2008)):

no P-stranding in regular wh-questions:

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

P-stranding under sluicing:

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

Vicente (2008): P-stranding violations under sluicing in Spanish do not derive from a regular wh-question, but from an underlying cleft:

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

supporting evidence: sluicing and *else*-modification:

short clefts are incompatible with *else*-modification

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

no P-stranding under sluicing with *else*-modification

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

control: *else*-modification is allowed in regular (= non-P-stranding) sluicing

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

2.4   Conclusion

in general, non-isomorphic (in this case: cleft and copular) ellipsis sites in sluicing/fragments are difficult to detect, but when they differ sufficiently in meaning from the isomorphic one, when in the presence of tags, or when the isomorphic ellipsis site is illicit, they can be shown to exist

3 Morphological case vs. (lack of) isomorphism

3.1 Introduction: case matching

note: one way of getting a fairly direct window into an ellipsis site is by looking at the morphology of elements that have been extracted out of it → e.g. sluicing remnants are known to display case matching (Ross (1969), Merchant (2001)):

(33) *Has hat jemandem gedroht, aber ich weiß nicht {*wer /*
Hans has someone.DAT threatened but I know not who.NOM
*wen / wem}
who.ACC who.DAT
'Hans threatened someone, but I don't know who.'

(34) *Has hat jemanden gesehen, aber ich weiß nicht {*wer /*
Hans has someone.ACC seen but I know not who.NOM
*wen / *wem}*
who.ACC who.DAT
'Hans threatened someone, but I don't know who.'

→ given that cleft pivots and DPs in copular clauses are often assigned a specific (typically: default) case, the morphological shape of sluicing remnants should reveal its cleft/copular-based underpinnings

3.2 The general pattern: morphological case blocks non-isomorphism

3.2.1 Greek P-stranding under sluicing

setting the scene: case, copular clauses and P-stranding in Greek

accusative case for the object of a preposition:

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

nominative case for the pivot of a copular clause:

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

no P-stranding in a regular wh-question:

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

the test: P-stranding under sluicing in Greek

(38) **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.'

(39) **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.'

note: the ill-formedness of (39) is hardly surprising in light of (37) (combined with Merchant's PSG), but the ill-formedness of (38) is puzzling, esp. given (40)

(40) *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.'

conclusion: in precisely the context where we would be able to probe non-isomorphic ellipsis sites fairly directly (i.e. based on the morphological case of the sluiced wh-phrase), this option appears to be ruled out[2]

3.2.2 Code-switching under sluicing (González-Vilbazo and Ramos (2013))

→ code-switching is the use of two or more languages by highly competent bilinguals within a discourse. These speakers have intuitions about code-switching constructions, similar to monolingual speakers' grammatical intuitions.

(41) *Juan amenazó   a alguien   aber ich weiß nicht wem   er*
      Juan threatened someone.ACC but I   know not   who.DAT he
      gedroht   hat.
      threatened has
      'Juan threatened someone, but I don't know who he threatened.'

note: this example shows that we can code-switch in between a possible sluicing site (the embedded question in (41)) and its antecedent. What's more, the Spanish and German verb differ in the case they assign to their complement (ACC in Spanish vs. DAT in German) → so what happens under sluicing?

(42) *Juan amenazó   a alguien   aber ich weiß nicht {*wer   /*
      Juan threatened someone.ACC but I   know not   who.NOM
      *wem   / wen}.
      who.DAT   who.ACC
      'Juan threatened someone, but I don't know who.'

once again: in spite of the fact that (41) is perfectly well-formed, it cannot serve as a source for sluicing. Instead, the (equally grammatical) version in (43) is the only one that can serve as (basis for the) ellipsis site:

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[2]The Greek pattern can be replicated in German, Hungarian, Hindi, Czech, and Slovene.

(43) *Juan amenazó   a alguien   aber ich weiß nicht wen   Juan*
      Juan threatened someone.ACC but I   know not   who.ACC Juan
      amenazó.
      threatened
      'Juan threatened someone, but I don't know who he threatened.'

3.3 The exceptional pattern: ambiguous case allows for non-isomorphism

3.3.1 P-stranding in (Zurich) German

observation: when the case assigned to the sluicing remnant in an isomorphic ellipsis site is underlyingly different but superficially identical to (i.e. syncretic with) the case assigned to the sluicing remnant in a non-isomorphic ellipsis site, lack of antecedent–ellipsis isomorphism is once again an option

recall: absence of P under sluicing in non-P-stranding languages can be argued to be due to a non-isomorphic (cleft or copular) ellipsis site → in (Zurich) German (and to a lesser extent Greek and Russian) this pattern only occurs when the case assigned by the 'stranded' preposition is syncretic with the case assigned in a cleft/copular clause

nominative and accusative are syncretic for the neuter wh-phrase was *'what' in German:*

(44) *Was   ist passiert?*
      what.NOM is happened
      'What happened?'

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

and sluicing with was *allows for P-stranding:*

(46)   *Rudolf hat mich an etwas   erinnert, aber ich weiß nicht*
Rudolf has me   to something reminded, but I   know not
mehr   ?(an) was.
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 P-absence under sluicing follows suit:*

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

(48)   *Rudolf ist statt   einiger Freunde aufgetreten, aber ich weiß*
Rudolf is instead.of some   friends performed but I   know
*nicht *(statt)   welcher.*
not   instead.of which.GEN
'Rudolf has performed instead of some friends, but I don't know which.'

in Zurich German, wëër *'who' is syncretic for* NOM/ACC*, but not* DAT*:*

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

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

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

and again, P-absence under sluicing follows the same pattern:

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

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

conclusion: in contexts where the morphology is inconclusive (because of case syncretism), independent evidence (apparent violations of the PSG) suggest that the ellipsis site is indeed non-isomorphic

3.3.2   Spading in Waubach Dutch

spading: Sluicing **P**lus **A D**emonstrative **I**n **N**on-insular **G**ermanic (Craenenbroeck (2010))

(54)   *A: Ik em   iemand gezien. B: Wou da?*
     I   have someone seen   who that
'A: I saw someone. B: Who?' (Wambeek Dutch)

Craenenbroeck (2010):

- spading derives from an underlying cleft

- spading involves clausal ellipsis (sluicing) and so is not a case of pseudosluicing

(a) spading derives from an underlying cleft

in other words the elliptical embedded question in (54) derives not from the 'regular' wh-question in (55) but from the cleft in (56)

(55)   *Wou ejje   gezien?*
         who have.you seen
         'Who did you see?'

(56)   *Wou is da   da   ge   gezien etj?*
         who is that that you seen   have
         'Who is it that you saw?'

arguments: parallelisms between spading and clefts that set them apart
from 'regular' sluicing, e.g. *else*-modification:

else-*modification is allowed in sluicing*

(57)   *A: Jef ei   nie alliejn Lewie gezien. B: Nieje? Wou nog?*
         Jef has not just   Louis seen   no   who else
         'A: Jef hasn't just seen Louis. B: No? Who else?'

else-*modification is not allowed in clefts*

(58)   **Wou <nog> was da   <nog> da   Jef gezien eit*
         who else   was that else   that Jef seen   has

else-*modification is not allowed in spading*

(59)   *A: Jef ei   nie alliejn Lewie gezien. B: Nieje? Wou <da> nog*
         Jef has not just   Louis seen. B: No? who that else
         <da>?
         that

	SLUICING	SPADING	CLEFTS
else-modification	ok	*	*
modification by NEG and AFF	ok	*	*
non-overt antecedent	ok	#	#
exhaustivity requirement	no	yes	yes
multiple wh	ok	*	*

(b) spading does not involve pseudosluicing

definitions:

- pseudosluicing $=_{def}$ an elliptical construction that resembles a sluice in having only a wh-XP as remnant, but has the structure of a cleft, not of a regular embedded question (Merchant (1998, 91)). The fact that the cleft is unpronounced is due to the combined effect of pro-drop and copula drop.

    (60)   *Darekaga   sono hono   yonda ga, watashiwa dare ka*
             someone.NOM that book.ACC read   but I.TOP   who Q
             wakaranai.
             know.not
             'Someone read that book, but I don't know who.'

    (61)   [$_{CP}$ [$_{IP}$ *pro dare ~~da~~*   ] *ka*]
                      it   who be.PRESS   Q
             'who it is.'

- sluicing a cleft $=_{def}$ an instance of sluicing (= clausal ellipsis) applied to an IP that contains a cleft

back to spading: dialect Dutch is neither pro-drop nor copula drop → the non-pronunciation of the verb in spading cannot be due to copula drop → instead, spading involves TP-ellipsis, just like regular sluicing → spading involves sluicing of a cleft

note: the presence of the demonstrative in spading provides direct evidence in favor of a non-isomorphic ellipsis site ⇒ we can use this construction to further probe the issue of antecedent–ellipsis isomorphism. What's more, some Dutch dialects have retained a system of morphological case in their wh-paradigm, e.g. Waubach Dutch:

subject wh-questions: only nominative

(62) {*Wea* / **Wem*} *kemp* *noa* '*t* *fees?*
      who.NOM who.ACC comes to   the party
      'Who is coming to the party?'

object wh-questions: accusative and—more markedly—nominative

(63) {*??Wea* / *Wem*} *has-te* *gezieë?*
      who.NOM   who.ACC have.you seen
      'Who did you see?'

subject clefts: only nominative

(64) {*Wea* / **Wem*} *is dat dea noa* '*t* *fees* *kemp?*
      who.NOM   who.ACC is that REL to   the party comes
      'Who is it that is coming to the party?'

object clefts: only nominative

(65) {*Wea* / **Wem*} *is dat deaste* *gezieë has?*
      who.NOM   who.ACC is that that.you seen   have
      'Who is it that you saw?'

the test: spading vs. morphological case

subject spading: only nominative

(66) *A:* '*t Kumt inne*   *noa* '*t* *fees. B:* {*Wea* / **Wem*} *dat?*
      it comes someone to   the party   who.NOM   who.ACC that
      'A: Someone is coming to the party. B: Who?'

object spading: only—and markedly—nominative

(67) *A: Ik han inne*   *gezieë. B:* {*??Wea* / **Wem*} *dat?*
      I   have someone seen   who.NOM   who.ACC that
      'A: I saw someone. B: Who?'

control: 'regular' sluicing vs. morphological case

subject sluicing: only nominative

(68) *A:* '*t Kumt inne*   *noa* '*t* *fees. B:* {*Wea* / **Wem*}?
      it comes someone to   the party   who.NOM   who.ACC
      'A: Someone is coming to the party. B: Who?'

object spading: accusative and—more markedly—nominative

(69) *A: Ik han inne*   *gezieë. B:* {*??Wea* / *Wem*}?
      I   have someone seen   who.NOM   who.ACC
      'A: I saw someone. B: Who?'

once again: a non-isomorphic ellipsis site (here: spading) is allowed only when the morphology of the wh-phrase is ambiguous between an isomorphic and a non-isomorphic source

3.4   Downright quirky patterns: Hungarian, Malagasy and Dutch

3.4.1   Hungarian

Lipták (2013) (following Barros (2012)): certain contexts disallow isomorphic ellipsis sites by virtue of their semantics:

(70) Jack likes Sally, and he likes someone else too, but I don't know
      a. who.
      b. #who he likes.
      c. who it is.

→ in a language with morphological case marking like Hungarian, this means we would expect the sluiced wh-phrase in (70) not to show up in the case assigned by the verb *like* → false prediction:

(71) *Mari meg hívta   Jánost,   és   meg hívott   még valakit,*
Mari PV invited János.ACC and PV invited also someone.ACC
de nem tudom {*ki   / kit}.
but not know who.NOM   who.ACC
'Mari invited János, and she invited someone else, too, but I don't
know who.'

note: the case found on the sluiced wh-phrase in (71) is the one that
corresponds to the ill-formed meaning in (70-b), and yet this example
doesn't have that interpretation → Lipták (2013, 2) concludes that this
fact "points towards a conclusion that overt case on the remnant cannot
be used as conclusive evidence *against* a pseudo-sluicing analysis".

3.4.2 Malagasy

Potsdam (2007): two properties of Malagasy syntax conspire to ensure
that this language *only* has non-isomorphic ellipsis sites in sluicing:

1. subjects must be specific

   (72) **mamaky boky olona*
   read.ACT book person
   INTENDED: 'Someone is reading a book.'

2. only subjects can be extracted

   (73) **inona no mividy i Soa?*
   what PRT buy.ACT Soa
   INTENDED: 'What is Soa buying?'

this means we cannot create a sluice of the type in (74) (indefinite subject
in the antecedent clause), nor of the type in (75) (extraction of a non-
subject in the ellipsis clause):

(74) Someone left, but we don't know who <left>.

(75) John saw someone, but we don't know who <John saw>.

nevertheless Malagasy does have sluicing:

(76) *nandoko zavatra i Bao fa adnoko   hoe   inona*
paint.ACT think Bao but forget.PASS.1SG COMP what
'Bao painted something, but I forget what.'

Potsdam (2007): the structure underlying the ellipsis site in (76) is the
pseudocleft in (77), not the (ill-formed) wh-question in (78)

(77) *nandoko zavatra i Bao fa adnoko   hoe   inona no*
paint.ACT think Bao but forget.PASS.1SG COMP what PRT
nolokoin' i Bao
paint.PASS Bao
'Bao painted something, but I forget what (it was that) was painted
by Bao.'

(78) **nandoko   zavatra i Bao fa adnoko   hoe   inona no*
paint.ACT think Bao but forget.PASS.1SG COMP what PRT
nandoko   i Bao
paint.ACT Bao
INTENDED: 'Bao painted something, but I forget what Bao painted.'

in other words a sluicing site in Malagasy is always non-isomorphic to its
antecedent. What's more, Malagasy has a limited amount of morpholog-
ical case marking in its wh-paradigm:

(79) *mijery {*iza   / an'iza} ianao?*
see.ACT who.NOM   who.ACC you
'Who are you looking at?'

(80) *{iza   / *an'iza} no mijery anao*
who.NOM   who.ACC PRT see.ACT you?
'Who is looking at you?'

and unlike in Greek, Malagasy sluicing always and only uses the form cor-
responding to the non-isomorphic ellipsis site (i.e. the nominative)

(81)   *mijery   olona   i Bao fa   tsy fantatro hoe   {iza   /*
look.ACT person Bao   but not know.I   COMP who.NOM
*an'iza}
who.ACC
'Bao is looking at someone, but I don't know who.'

conclusion: Malagasy is a language that goes against the general pattern by using in sluicing a morphologically case-marked wh-phrase that is only compatible with a non-isomorphic ellipsis site

3.4.3   Dutch

Riemsdijk (1982): while Dutch in general doesn't allow for preposition stranding, so-called R-pronouns (= pronouns taken from the locative paradigm) do allow for P-stranding:

(82)   *Waar spreek je   over?*
where speak you over
'What are you speaking about?'

however, under sluicing R-pronouns cannot strand their preposition (Merchant (2001)), cf. (83), in spite of the fact that the non-elliptical counterpart is perfectly well-formed (cf. (84))

(83)   **Dany spreekt morgen   ergens   over, maar ik weet niet*
Dany speaks tomorrow somewhere about but   I know not
waar.
where
INTENDED: 'Dany is speaking about something tomorrow, but I don't know what.'

(84)   *Dany spreekt morgen   ergens   over, maar ik weet niet*
Dany speaks tomorrow somewhere about but   I know not
waar hij morgen   over spreekt.
where he tomorrow over speaks
'Dany is speaking about something tomorrow, but I don't know what he's speaking about tomorrow.'

instead, a non-R-pronoun can be used in the sluicing context in (83):

(85)   *Dany spreekt morgen   ergens   over, maar ik weet niet wat.*
Dany speaks tomorrow somewhere about but   I know not what
'Dany is speaking about something tomorrow, but I don't know what.'

this non-R-pronoun is incompatible with an isomorphic (regularly P-stranding) ellipsis site as in (86) and instead seems to derive from the copular clause in (87)

(86)   **Dany spreekt ergens   over, maar ik weet niet wat Dany*
Dany speaks somewhere about but   I know not what Dany
over spreekt.
over speaks
INTENDED: 'Dany is speaking about something, but I don't know what he's speaking about.'

(87)   *Dany spreekt ergens   over, maar ik weet niet wat het is.*
Dany speaks somewhere about but   I know not what it   is
'Dany is speaking about something, but I don't know what it is.'

conclusion: the Dutch facts turn the data patterns from the preceding sections completely on their head: on the one hand there is no reason why the isomorphic pattern with *waar* should be disallowed, while on the other it goes against the general pattern that a morphologically marked non-isomorphic form (*wat* 'what') does yield a grammatical result

3.5 Data summary

sluiced wh	compatible with isomorphic source	compatible with non-isomorphic source	judgment
Sp/Germ *wen*	y	n	ok
Greek *pjon*	y	n	*
Malagasy *an'iza*	y	n	*
Waubach *wem*	y	n	*
Greek *pjos*	n	y	*
Hungarian *ki*	n	y	*
Sp/Germ *wem*	n	y	*
Spanish *cual*	y	y	ok
German *was*	y	y	ok
Z. German *wëër*	y	y	ok
Waubach *wea*	y/n	y	??
Hungarian *kit*	y	n	ok
Malagasy *iza*	n	y	ok
Dutch *waar*	y	n	*
Dutch *wat*	n	y	ok

4 Previous accounts

in a nutshell: none of the existing proposals of ellipsis identity can account for the full range of case facts unearthed in the previous sections (even disregarding the quirky cases)

4.1 Syntactic identity

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

(89)   *A: Ik em   iemand gezien. B: Wou ~~is da~~   ~~da~~   ~~ge~~   ~~gezien etj~~?*
       I   have someone seen   who is that that you seen   have
       'A: I saw someone. B: Who?'

→ given that a cleft or copular clause is in no obvious sense syntactically or structurally identical to the non-cleft antecedent in (88)/(89), a recoverability condition based solely on syntactic identity would incorrectly predict these examples to be ill-formed

4.2 Semantic identity

(90)   **Juan amenazó   a alguien   aber ich weiß nicht wem   ~~er~~*
       Juan threatened someone.ACC but I   know not   who.DAT he
       ~~gedroht~~   ~~hat~~.
       threatened has
       'Juan threatened someone, but I don't know who he threatened.'

→ it is hard to see a semantic theory in which the Spanish and German version of the same sentence would not have the same semantics → a recoverability condition based solely on semantic identity would incorrectly predict this example to be well-formed

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

(92)   **I   astinomia anekrine   enan   apo tous Kiprious prota,*
       the police   interrogated one.ACC from the Cypriots first
       ala dhen ksero pjos   ~~itan~~.
       but not I.know who.NOM it.was
       'The police interrogated one of the Cypriots first, but I don't know who.'

→ either the elided cleft/copular clause has the same semantics as the antecedent clause or it doesn't → either way, a recoverability condition based solely on semantic identity would incorrectly predict these examples to pattern alike in terms of their acceptability

4.3 Chung (2006)'s No New Words

(93) **No New Words**
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.

(94) a. John is jealous of someone, but I don't know who ~~John is jealous of~~.
  b. *John is jealous, but I don't know who ~~John is jealous of~~.

→ the b-example is out because the ellipsis site contains a lexical item (*of*) that the antecedent does not

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

(96) *A: Ik em   iemand gezien. B: Wou ~~is da   da   ge   gezien etj~~?*
   I   have someone seen   who is that that you seen   have
  'A: I saw someone. B: Who?'

→ in both (95) and (96) the ellipsis site contains lexical items that are absent from the antecedent (*es*, *is*, *da*, possibly *pro*) → NNW incorrectly predicts these examples to be ill-formed

4.4 Chung (2013)'s Case condition

(97) **Case Condition** (Chung (2013, 30))
If the interrogative [i.e. sluiced, jvc] phrase is a DP, it must be Case-licensed in the ellipsis site by a head identical to the corresponding head in the antecedent clause.

→ this condition has potential, in that it correctly distinguishes the grammatical code-switching examples from the ungrammatical ones:

(98) **Juan amenazó   a alguien   aber ich weiß nicht wem   ~~er~~*
  Juan threatened someone.ACC but I   know not   who.DAT he
  ~~gedroht   hat~~.
  threatened has
  'Juan threatened someone, but I don't know who he threatened.'

→ *wem* is not case-licensed by a head identical to the corresponding head in the antecedent clause (the Spanish and German verb crucially assign different cases). Where (97) fails is in cases of copular or cleft repair of P-stranding:

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

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

→ here, the case licenser in the antecedent clause is a preposition, while the case of the sluiced wh-phrase is assigned by whatever head assigns nominative to a cleft or copula pivot → the Case Condition incorrectly predicts these examples to be ruled out

5 The analysis: accommodation and anchoring

5.1 Introduction: two central questions

The data presented thus far raise two central questions:

1. what is the theory of ellipsis identity such that an elided cleft or copular clause counts as identical to a non-cleft or non-copular antecedent?
   → section 5.2

2. what accounts for the role morphological case plays in further restricting this identity relation?
   → section 5.3

5.2 Accommodating the cleft

central idea: ellipsis identity is syntactic/structural, but possible ellipsis antecedents are not only sentences that are actually part of the linguistic context, but also sentences that can be *accommodated* based on that linguistic context (cf. Rooth (1992))

Johnson (2012) (adopting and adapting Fox (1999)): An accommodated antecedent can only be built up from non-F-marked overt material present in the discourse.

my modification: 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.*

question: how do we know/determine which elements are "freely available in any discourse"?

→ by looking at (ellipsis in) discourse-initial contexts: in these situations, the linguistic context provides us with no material to construct an ellipsis antecedent, so all elements making up the ellipsis site must come from elsewhere

Merchant (2004): when used without an explicit linguistic antecedent (i.e. in DI$_{lang}$-contexts = Hankamer and Sag (1976)'s pragmatic control), fragments are derived from short clefts/copular clauses

(101)　[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.

(102)　[some guy she met at the park]$_i$ [$_{TP}$ ~~he is t$_i$~~]

(103)　[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!

(104)　[from Germany]$_i$ [$_{TP}$ ~~this is t$_i$~~]

(105)　"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)" (Merchant, 2004, 724–725)

rephrasing: pronouns and copulas (and by extension short clefts) come for free and hence can serve as internal structure for an ellipsis site in any context

supporting evidence for the cleft analysis comes from morphological case and from DTQs

case: in discourse-initial contexts, the case marking on the fragment is the same as that which we find in clefts:

(106)   *{Kapjos   / *Kapjon}   pu   gnorisi   sto   parko.*
someone.NOM / someone.ACC that she.met in.the park
'Someone she met in the park.'

(107)   *Aftos ine {kapjos   / *kapjon}   pu   gnorisi   sto*
he   is   someone.NOM / someone.ACC that she.met in.the
parko.
park
'He is someone she met in the park.'

DTQs: DI$_{lang}$-fragments can be combined with cleft-based DTQs:

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

(109)   [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?

(110)   ~~It is~~ nice weather, isn't it?

(111)   ~~It is~~ John Smith, is it?

conclusion: given that short clefts/copular clauses are available even in the absence of any linguistic antecedent, they can be accommodated for free and are always available when an ellipsis antecedent needs to be constructed

more generally the occurrence of clefts or copular clauses in ellipsis sites anteceded by non-clefts or non-copular clauses can be made to follow from a syntactic/structural theory of ellipsis identity provided it is augmented by the notion of accommodation: an ellipsis site needs to be structurally identical to either the actual or the accommodated antecedent

5.3   Anchoring the wh-phrase

note: even when augmented by accommodation, the theory of ellipsis identity cannot account for the interaction between sluicing and morphological case laid out above → additional machinery is needed

intuition behind the proposal: regardless of what the ellipsis site looks like, a sluiced wh-phrase always has to be formally compatible with the antecedent clause

(112)   **Anchor Condition**
A sluiced wh-phrase has to be a member of the Licensing Potential of the antecedent clause.

(113)   **Licensing Potential** (Barros (2009, 13))
For a syntactic object A, its Licensing Potential is the set of categories B such that if A and [a member of, jvc] B merge, the resulting structure will meet the legibility conditions at the interfaces (the resulting structure is convergent).[3]

note the subtle difference between the Anchor Condition in (112) and Chung (2013)'s Case Condition in (97): the latter is about ***identity*** (the case licensers in ellipsis site and antecedent clause have to be identical), whereas the former is about ***compatibility*** (a sluiced wh-phrase has to be compatible with the antecedent clause) → this raises the question of whether the Anchor Condition is about recoverability or about licensing

→ data from Icelandic subject deletion (Rögnvaldsson (1982), Bresnan and Thraínsson (1990)) suggest that ellipsis identity doesn't care about morphological case and hence that the Anchor Condition is more about licensing than it is about recoverability

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[3]The inspiration for this notion comes from Chung et al. (1995, 249–250): "sprouting is not an unconstrained operation. Rather, it is limited by the requirement that the new material added to the copy of the antecedent IP respect the *licensing potential* of that IP, as regards both arguments and adjuncts, and in all its fine detail" (emphasis added, jvc).

Icelandic has nominative subjects that display regular subject-verb agreement

(114)   *Við {hlökkum / *hlakkar} til jólanna.*
        we.NOM look.forward.1PL   look.forward.3SG to Christmas
        'We look forward to Christmas.'

and it has quirky subjects that display default 3SG agreement

(115)   *Mér {*finn / finnur} til.*
        I.DAT feel.1SG   feel.3SG PRT
        'I feel pain.'

a quirky subject can antecede the ellipsis of a nominative one and vice versa

(116)   *þeir sjá stúlkuna og þeim finnst hún álitleg.*
        they.NOM see.3PL the.girl and they.DAT find.3SG her attractive
        'they see the girl and find her attractive.'

(117)   *þeim líkar maturinn og þeir borða mikið.*
        they.DAT like.3SG the.food   and they.NOM eat.3PL much
        'They like the food and eat much.'

→ this suggests that a difference in morphological case marking does not
   lead to a recoverability problem, i.e. that the case effects in sluicing
   (captured by the Anchor Condition) are due to licensing

5.4   Revisiting the case data

sluiced wh	compatible with isomorphic source	compatible with non-isomorphic source	judgment
Sp/Germ *wen*	y	n	ok
Greek *pjon*	y	n	*
Malagasy *an'iza*	y	n	*
Waubach *wem*	y	n	*

(118)   *Juan amenazó a alguien aber ich weiß nicht wen.*
        Juan threatened someone.ACC but I know not who.ACC

'Juan threatened someone, but I don't know who.'

(119)   **I astinomia anekrine enan apo tous Kiprious prota,*
        the police   interrogated one.ACC from the Cypriots first
        ala dhen ksero pjon.
        but not I.know who.ACC
        'The police interrogated one of the Cypriots first, but I don't know
        who.'

→ these data are not surprising or unexpected: the elliptical version gets
   exactly the same grammaticality judgment as would the non-elliptical
   isomorphic one → any of the current theories of ellipsis identity would
   correctly predict these facts

sluiced wh	compatible with isomorphic source	compatible with non-isomorphic source	judgment
Greek *pjos*	n	y	*
Hungarian *ki*	n	y	*
Sp/Germ *wem*	n	y	*

(120)   **I astinomia anekrine enan apo tous Kiprious prota,*
        the police   interrogated one.ACC from the Cypriots first
        ala dhen ksero pjos.
        but not I.know who.NOM
        'The police interrogated one of the Cypriots first, but I don't know
        who.'

(121)   **Juan amenazó a alguien aber ich weiß nicht wem.*
        Juan threatened someone.ACC but I know not who.DAT
        'Juan threatened someone, but I don't know who.'

→ here we see the Anchor Condition at work: the sluiced wh-phrase is not in
   the licensing potential of the antecedent clause and sluicing is disallowed

sluiced wh	compatible with isomorphic source	compatible with non-isomorphic source	judgment
Spanish *cual*	y	y	ok
German *was*	y	y	ok
Z. German *wëër*	y	y	ok
Waubach *wea*	y/n	y	??

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

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

→ both the Anchor Condition and accommodation are at work here: the
   AC is met because the sluiced wh-phrase is in the Licensing Potential
   of the antecedent clause,[4] and the fact that pronouns and copulas can
   be freely accommodated ensures that the ellipsis site is identical to an
   accommodated antecedent, thus satisfying recoverability

sluiced wh	compatible with isomorphic source	compatible with non-isomorphic source	judgment
Hungarian *kit*	y	n	ok
Malagasy *iza*	n	y	ok
Dutch *waar*	y	n	*
Dutch *wat*	n	y	ok

[4]A quick note on the role of syncretism in this story: either we assume that the notion
of Licensing Potential is sensitive to surface forms and so the surface identity of *was*$_{NOM}$
and *was*$_{ACC}$ is enough to satisfy the AC. Alternatively, we take syncretism to be a sign of
pre-Spell Out application of Impoverishment (Bobaljik (2002), Müller (2004)) such that
the two forms of *was* are underlyingly (i.e. morphosyntactically) non-distinct.

(124) *Mari meg hívta   Jánost,   és meg hívott még valakit,*
Mari PV   invited János.ACC and PV invited also someone.ACC
de nem tudom {*ki   / kit}.
but not know who.NOM   who.ACC
'Mari invited János, and she invited someone else, too, but I don't
know who.'

→ maybe the ellipsis site is not *who Mary invited*, but rather *who Mary
   invited besides János* → that would make this another case of accommo-
   dation

(125) *mijery   olona i Bao fa tsy fantatro hoe {iza   /*
look.ACT person Bao   but not know.I COMP who.NOM
*an'iza}
who.ACC
'Bao is looking at someone, but I don't know who.'

→ this example seems to go directly against AC → perhaps this is a case
   of pseudosluicing (Potsdam (2007, 605n16))? or nominative case is really
   the absence of case in Malagasy (Pearson (2001, 43))?

(126) *Dany spreekt morgen   ergens   over, maar ik weet niet*
Dany speaks tomorrow somewhere about but   I know not
{*waar / wat}.
where   what
'Dany is speaking about something tomorrow, but I don't know
what.'

→ it looks like the non-isomorphic ellipsis site takes precedence here →
   could be an indication that P-stranding off R-pronouns in Dutch is of
   a fundamentally different nature that P-stranding in English (cf. Abels
   (2003)), which could make this a case of repair/Last Resort

6 Conclusions

- sluicing sites can contain structures (mostly of a cleft or copular nature) that are not structurally isomorphic to their antecedents

- to account for such mismatches within a structural theory of ellipsis identity, one has to allow for accommodation, whereby the ellipsis site is isomorphic not to the actual antecedent, but to an accommodated one

- morphological case marking can be used to detect this non-isomorphic structure only to a very limited extent

- this is because the morphosyntactic shape of a sluiced wh-phrase is subject to a stringent condition: it needs to be compatible with/anchored to the antecedent clause

- this requirement might be one of ellipsis licensing rather than ellipsis recoverability/identity

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