On the limits of elliptical repair
Sluicing, clefts and LF-copy

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MAIN TOPIC
The precise form of unpronounced syntactic structures in sluicing

MAIN OBSERVATIONS
- The unpronounced syntactic structure in sluicing is sometimes a cleft with a wh-phrase as pivot, rather than a regular wh-question.
- An underlying cleft is only used as Last Resort, i.e. when the corresponding wh-question is ill-formed.
- This rescue strategy is not available when the wh-phrase is morphologically case-marked.

MAIN GIST OF THE ANALYSIS
A revised and extended version of the LF-copy analysis of sluicing (Chung, Ladusaw & McCloskey 1995, 2006; Fortin 2007).
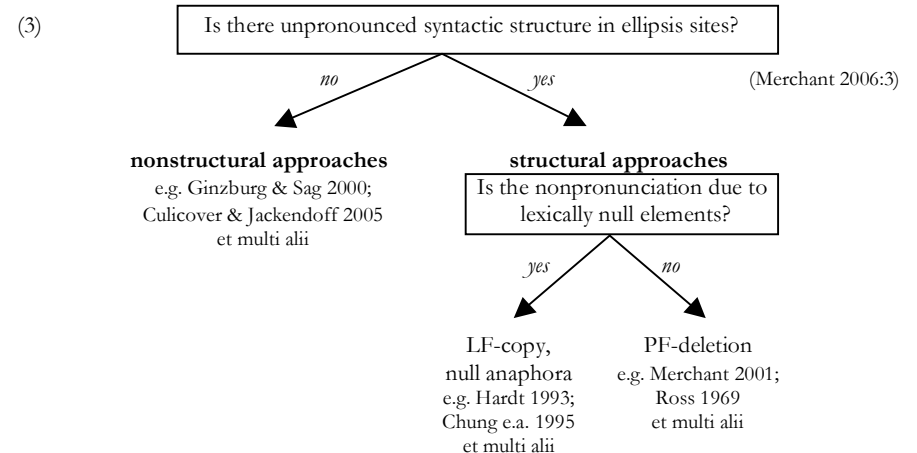
1.   Introduction: unpronounced syntactic structure?

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

(2)   **form:**   John saw someone, but I don't know who.
        meaning: John saw someone, but I don't know who John saw.

Question: How are form and meaning linked in ellipsis? What role – if any – does syntax play, i.e. is there unpronounced syntactic structure in ellipsis sites?

(3)

→ this talk assumes the general correctness of the structural approach to ellipsis, and explores some of its consequences

2.   The hidden syntax of sluicing: Merchant (2001)

Question: Assuming there is unpronounced syntactic structure in sluicing, how can we determine what exactly it looks like?

(4)   John saw someone, but I don't know who.

(5)   a. **option (i):**   John saw someone, but I don't know who ~~John saw~~.
        b. **option (ii):**   John saw someone, but I don't know who ~~it was (that John saw)~~
                               (Erteschik-Shir 1977; Pollman 1975)

Merchant (2001:115-127): 10 arguments against option (ii)

1. adjuncts and implicit arguments

(6) a. **sluicing:** He fixed the car, but I don't know how.
      b. **cleft:** * He fixed the car, but I don't know how it was.

(7) a. **sluicing:** They served the guests, but I don't know what.
      b. **cleft:** * They served the guests, but I don't know what it was.

2. prosody

(8) Someone gave me a valentine, but
      a. **sluicing:** I don't know WHO.
      b. **cleft:** * I don't know WHO it was.
      c. **cleft:** I don't know who it WAS.

3. aggressively non-D-linked wh-phrases

(9) Someone dented my car last night–
      a. **sluicing:** * I wish I knew who the hell!
      b. **cleft:** I wish I knew who the hell it was!

4. 'mention some'-modification

(10) A: You should talk to somebody in the legal department for help with that.
       B: a. **sluicing:** Who, for example?
           b. **cleft:** * Who is it, for example?

5. 'mention all'-modification

(11) A bunch of students were protesting,
       a. **sluicing:** * and the FBI is trying to find out who all.
       b. **cleft:** and the FBI is trying to find out who all it was.

6. else-modification

(12) Harry was there, but
       a. **sluicing:** I don't know who else.
       b. **cleft:** * I don't know who else it was.

7. swiping (sluiced wh-word inversion with prepositions in northern Germanic)

(13) She bought a robe, but
       a. **sluicing:** God knows who for.
       b. **cleft:** * God knows who for it was.

8. languages with limited or no cleft strategy

sluicing
(14) Er hat mit jemandem gesprochen – rate mal mit wem!
      he has with someone spoken guess PRT with who
      'He spoke with someone – guess with whom!' (German)

cleft
(15) * Mit wem war es, daβ er gesprochen hat?
         with who was it that he spoken has
         INTENDED: 'With whom was it that he spoke?' (German)

9. case matching

(16) I astinomia anekrine enan apo tous Kiprious prota,
      the police interrogated one.ACC from the Cypriots first
      ala dhen ksero
      but not I.know
       a. **sluicing:** { *pjos / pjon}
                           which.NOM which.ACC
       b. **cleft:** { pjos / *pjon} itan.
                        which.NOM which.ACC it.was (Greek)
      'The police interrogated on of the Cypriots first, but I don't know which (it was)'

10. left-branch sluices

(17) He married a rich woman –
       a. **sluicing:** wait till you hear how rich!
       b. **cleft:** * wait till you hear how rich it is!

3.   **Merchant's arguments revisited: the Last Resort scenario**

3.1   *Four possible scenarios*

Note: Merchant's arguments are explicitly presented as problems for the scenario in (18)a, implicitly as support for the scenario in (18)b, and they remain agnostic about the scenarios in (18)cd.

(18)   a.   **ALWAYSCLEFT:**   The structure underlying sluicing is always a cleft.
      b.   **ALWAYSWH:**   The structure underlying sluicing is always a wh-question.
      c.   **OPTIONALITY:**   The structure underlying sluicing can be either a cleft or a wh-question (and the choice between them is free).
      d.   **LASTRESORT:**   An underlying cleft is only used when the wh-question is independently unavailable.

3.2   *Revisiting Merchant's arguments from a multi-scenario perspective*

1.   *adjuncts and implicit arguments*

(19)   a.   **sluicing:**   He fixed the car, but I don't know how.
      b.   **cleft:**   *   He fixed the car, but I don't know how it was.
      c.   **wh:**   He fixed the car, but I don't know how he fixed the car.

(20)   a.   **sluicing:**   They served the guests, but I don't know what.
      b.   **cleft:**   *   They served the guests, but I don't know what it was.
      c.   **wh:**   They served the guests, but I don't know what they served the guests.

	ALWAYSCLEFT	ALWAYSWH	OPTIONALITY	LASTRESORT
adjuncts & implicit arguments	*	ok	ok	ok

2.   *prosody*

(21)   Someone gave me a valentine, but
      a.   **sluicing:**   I don't know WHO.
      b.   **cleft:**   *   I don't know WHO it was.
      c.   **wh:**   I don't know WHO gave me a valentine.

	ALWAYSCLEFT	ALWAYSWH	OPTIONALITY	LASTRESORT
prosody	*	ok	ok	ok

3.   *aggressively non-D-linked wh-phrases*

(22)   Someone dented my car last night–
      a.   **sluicing:**   *   I wish I knew who the hell!
      b.   **cleft:**   I wish I knew who the hell it was!
      c.   **wh:**   I wish I knew who the hell dented my car!

	ALWAYSCLEFT	ALWAYSWH	OPTIONALITY	LASTRESORT
aggressively non-D-linked wh	*	*	*	*

4.   *'mention some'-modification*

(23)   A: You should talk to somebody in the legal department for help with that.
      B: a.   **sluicing:**   Who, for example?
            b.   **cleft:**   *   Who is it, for example?
            c.   **wh:**   Who should I talk to, for example?

	ALWAYSCLEFT	ALWAYSWH	OPTIONALITY	LASTRESORT
'mention some'-modification	*	ok	ok	ok

5.   *'mention all'-modification*

(24)   A bunch of students were protesting,
      a.   **sluicing:**   *   and the FBI is trying to find out who all.
      b.   **cleft:**   and the FBI is trying to find out who all it was.
      c.   **wh:**   and the FBI is trying to find out who all was protesting.

	ALWAYSCLEFT	ALWAYSWH	OPTIONALITY	LASTRESORT
'mention all'-modification	*	*	*	*

6. else-*modification*

(25) Harry was there, but
     a. **sluicing:**   I don't know who else.
     b. **cleft:**   *   I don't know who else it was.
     c. **wh:**   I don't know who else was there.

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
else-*modification*	*	ok	ok	ok

7. *swiping* (<u>s</u>luiced <u>w</u>h-word <u>i</u>nversion with <u>p</u>repositions <u>i</u>n <u>n</u>orthern <u>G</u>ermanic)

(26) She bought a robe, but
     a. **sluicing:**   God knows who for.
     b. **cleft:**   *   God knows who for it was.
     c. **wh:**   *   God knows who for she bought a robe.

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
swiping	*	*	*	*

8. *languages with limited or no cleft strategy*

sluicing

(27) Er hat mit jemandem gesprochen – rate mal mit wem!
     he has with someone spoken guess PRT with who
     'He spoke with someone – guess with whom!'   (German)

cleft

(28) * Mit wem war es, daβ er gesprochen hat?
     with who was it that he spoken has
     INTENDED: 'With whom was it that he spoke?'   (German)

wh

(29) Mit wem hat er gesprochen?
     with who has he spoken
     'With whom did he speak?'   (German)

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
languages with limited or no clefts	*	ok	ok	ok

9. *case matching*

(30)   I astinomia anekrine enan apo tous Kiprious prota,
     the police interrogated one.ACC from the Cypriots first
     ala dhen ksero
     but not I.know
     a. **sluicing:**   { * pjos   /   pjon}
                    who.NOM   who.ACC
     b. **cleft:**   { pjos   / * pjon}   itan.
                    who.NOM   who.ACC   it.was
     c. **wh:**   { * pjos   /   pjon}   anekrine i astinomia.
                    who.NOM   who.ACC   interrogated the police

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
case matching	*	ok	*	ok

10. *left-branch sluices*

(31) He married a rich woman –
     a. **sluicing:**   wait till you hear how rich!
     b. **cleft:**   *   wait till you hear how rich it is!
     b. **wh:**   *   wait till you hear how rich he married a woman!

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
left-branch sluicing	*	*	*	*

3.3   Summary and conclusions

	ALWAYSCLEFT	**ALWAYSWH**	**OPTIONALITY**	**LASTRESORT**
adjuncts & implicit arguments	*	ok	ok	ok
prosody	*	ok	ok	ok
aggressively non-D-linked wh-phrases	*	*	*	*
'mention some'-modification	*	ok	ok	ok
'mention all'-modification	*	*	*	*
else-*modification*	*	ok	ok	ok
swiping	*	*	*	*
languages with limited or no clefts	*	ok	ok	ok
case matching	*	ok	*	ok
left-branch sluices	*	*	*	*

Conclusions:

(i) When taken at face value, **four of Merchant's arguments are incompatible with all scenarios ⇒** in those cases the discrepancy between ellipsis (sluicing) and non-ellipsis (wh-question and cleft) must be due to independent factors

e.g.   the lack of aggressively non-D-linked wh-phrases in sluicing follows from the prosodic properties of *the hell* (Sprouse 2005, cf. also Den Dikken & Giannakidou 2002:42-43 for discussion)

e.g.   the lack of non-elliptical swiping is due to a repair effect induced by ellipsis (Van Craenenbroeck 2004:73-75), or to the e-GIVENness of ellipsis forcing overt focus movement (Hartman & Ai 2007) (cf. also Merchant 2002 for discussion)

e.g.   the possibility of left-branch extraction under sluicing is a repair effect induced by ellipsis (Kennedy & Merchant 2000; Merchant 2001:163-183)

(ii) The **Last Resort scenario** fares just as well as the scenario in which all sluicing is derived from an underlying wh-question ⇒ **we might expect to find cases in which sluicing derives from a cleft when there is no wh-question antecedent available**

4.   Part one of the puzzle: clefts as Last Resort

4.1   Introduction: Merchant's (2001) P-stranding generalization

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

English: P-stranding
(33)   Peter was talking with someone, but I don't know (with) who.
(34)   Who was Peter talking with?

Greek: no P-stranding
(35)   I   Anna   milise   me   kapjon,   alla dhe 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.'
(36) *   Pjon   milise   me?
who   she.spoke   with
INTENDED: 'Who did she speak with?'   (Greek, Merchant 2001:94)

4.2   Exceptions to the PSG: clefts to the rescue

4.2.1   Spanish (Nevins, Rodriguez & Vicente 2007)

no P-stranding in regular wh-questions
(37) *   ¿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
(38)   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.'

Nevins e.a.: P-stranding violations under sluicing in Spanish do not derive from a regular wh-question, but from an underlying cleft:

(39) Juan ha hablado com una chica
Juan has talked with a girl
pero no sé cuál ~~es la chica con la que ha hablado Juan~~.
but not know which is the girl with the that has spoken Juan
'Juan talked to a girl, but I don't know which (girl it was with which he spoke).'

supporting evidence: else-modification & P-stranding

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

no clefts with else-*modification*
(41) No sé qué chica (*más) es la chica con la que ha
not know what girl else is the girl with the that has
hablado Juan
talked Juan
'I don't know which girl it was with whom Juan spoke.'

else-*modification in regular wh-questions*
(42) ¿Con qué chica más ha hablado Juan?
with what girl else has talked Juan
'With which other girl did Juan speak?'

important note: the grammaticality of (43) (= (40) partially repeated) shows that it is not the case that *all* sluicing in Spanish derives from an underlying cleft (cf. the ALWAYSCLEFT-scenario)

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

4.2.2 Brazilian Portuguese (Nevins, Rodriguez & Vicente 2007, *pace* Almeida & Yoshida 2007)

no P-stranding in regular wh-questions
(44) * Quem que a Maria dançou com?
who that the Maria danced with
INTENDED: 'Who did Maria dance with?'

P-stranding under sluicing
(45) A Maria dançou com alguém, mas eu não sei quem
the Maria danced with someone but I not know who
'Mary danced with someone, but I don't know who.'

Nevins e.a.: P-stranding violations under sluicing in BP do not derive from regular wh-questions, but from an underlying cleft. The relative clause in such a cleft independently allows P-drop in BP (cf. (47)).

(46) A Maria dançou com alguém, mas eu não sei
the Mary danced with someone but I not know
a. * quem ~~que a Maria dançou com~~.
who that the Mary danced with
b. quem ~~é (com) que a Maria dançou~~.
who was with that the Maria danced
'Mary danced with someone, but I don't know who.'

(47) A menina (com) que o João dançou na festa estava bêbada
the girl with that the João danced in.the party was drunk
'The girl Juan danced with at the party was drunk.'

supporting evidence: no P-stranding in multiple sluicing

multiple sluicing in BP
(48) O João deu algo para alguém, mas eu não sei o que
the João gave something to somebody but I not know the what
para quem
to whom
'João gave something to somebody, but I don't know what to whom.'

no P-stranding in multiple sluicing

(49) Ela   falou   sobre alguma   coisa   para   alguém,
     she   talked about some   thing   to   someone
     mas   eu   não   sei   *(sobre) o   que   *(para) quem
     but   I   not   know   about   the what   to   whom
     'She talked about something to someone, but I don't know about what to whom.'

Nevins e.a. (following Lasnik 2006): in multiple sluicing in a non-multiple wh-movement language like BP, the second wh-phrase is moved via extraposition, not wh-movement. The ungrammaticality of the P-stranded version of (49) then follows under the cleft analysis as a violation of the Right Roof Constraint (the second wh-phrase having been extraposed from the relative clause inside the cleft).

4.2.3 Polish (Szczegelniak 2005)

no P-stranding in regular wh-questions

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

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

P-stranding under sluicing

(52) Anna   tańczyła   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.'

Szczegelniak (2005): P-stranding violations under sluicing in Polish do not derive from regular wh-questions, but from an underlying cleft:

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

supporting evidence (I): no cleft rescue with simple wh-phrases

no P-stranding under sluicing with simple wh-phrases

(54) * Anna   tańcczyła   z   jednym mężczyzną ale nie wiem   kim.
       Anna   danced   with   one   man   but not know   who
       INTENDED: 'Anna danced with a man, but I don't know who.'

no clefts with simple wh-phrases as pivots

(55) * Kim   to   z   ona   tańcczyła?
       who   it   with   she   danced
       INTENDED: 'Who was it that she danced with?'

supporting evidence (II): clitic climbing

(auxiliary) clitic climbing is degraded in P-stranding clefts

(56) ?? Ktorego-ś to do mężczyzny ty   podszedł?
        which-AUX it to man   you   approached
        'Which man was it that you approached?'

(57) Ktorego   to   do mężczyzny-ś   ty   podszedł?
     which   it   to man-AUX   you   approached
     'Which man was it that you approached?'

(58) Ktorego-ś to   mężczyznę ty   sfotografował?
     which-AUX it   man   you   photographed
     'Which man was it that you photographed?'

auxiliary clitic degraded in P-stranding sluicing

(59) ?? Tyś wysłał książkę do jednego chłopca,   ale nie wiem   którego-ś
        you sent   book   to one   boy   but not know   which-AUX
        'You sent a book to a boy, but I don't know which boy.'

(60) Tyś dał   książkę jednemu   chłopcu,   ale nie wiem   któremu-ś
     you gave   book   one   boy   but not know   whom-AUX
     'You gave one boy a book, but I don't know which.'

supporting evidence (III): no P-stranding in multiple sluicing

multiple sluicing

(61)   Jan   dał   jednemu mężczyźnie jakąś   ksiażke ale nie wiem   komu którą
         Jan   gave   one   man   some   book but not know   whom which
         'Jan gave a book to some man, but I don't know which book to which man.'

no P-stranding in multiple sluicing

(62)   Jan napisał jakiś   list   do jakiegoś ucznia ale nie wiem
         Jan wrote   some letter   to some   student but not know
         który   *(do) którego.
         which   to which
         'John wrote some letter to some student, but I don't know which letter to which student.'

no multiple pivots in a cleft

(63) * Co   to było   komu   to ona   dała?
         what   it was   who   it she   gave

important note: the grammaticality of (64) (= (61) repeated) shows that it is not the case that *all* sluicing in Polish derives from an underlying cleft (cf. the ALWAYSCLEFT-scenario); compare the multiple wh-movement in (65)

(64)   Jan   dał   jednemu mężczyźnie jakąś   ksiażke ale nie wiem   komu którą
         Jan   gave   one   man   some   book but not know   whom which
         'Jan gave a book to some man, but I don't know which book to which man.'

(65)   Kto   komu   dał   ksiażkę?
         who   whom gave   book
         'Who gave a book to whom?'

4.2.4   English (Rosen 1976, Fortin 2007:215-217, D. Maier p.c.)

no P-stranding in regular wh-questions with certain prepositions

(66)   a.   *   Which city did you sleep in a car in?
         b.   *   Whose wishes did he get married against?

(67)   a.   In which city did you sleep in a car?
         b.   Against whose wishes did he get married?

P-stranding under sluicing with those prepositions

(68)   a.   Pat slept in a car in some city, but I don't know which city.
         b.   Terry got married against someone's wishes, but I don't know whose.

Van Craenenbroeck (2004:122):   P-stranding violations under sluicing in English do not derive from regular wh-questions, but from an underlying cleft:

(69)   a.   Pat slept in a car in some city, but I don't know which city ~~it was~~.
         b.   Terry got married against someone's wishes, but I don't know whose ~~it was~~.

supporting evidence: pied-piping the preposition

pied-piping under sluicing is degraded with 'unstrandable' prepositions

(70)   a.   ??   Pat slept in a car in some city, but I don't know in which city.
         b.   ?*   Terry got married against someone's wishes, but I don't know against whose wishes.

the same degradation is found in clefts

(71)   a.   ??   Pat slept in a car in some city, but I don't know in which city it was.
         b.   ?*   Terry got married against someone's wishes, but I don't know against whose wishes it was.

important note: the data reviewed in section 2 (Merchant's 10 arguments) show that it is not the case that *all* sluicing in English derives from an underlying cleft (cf. the ALWAYSCLEFT-scenario)

4.3   Conclusion

> The fact that sluicing in Spanish, Brazilian Portuguese, Polish and English resorts to an underlying cleft when the corresponding wh-question is not available (due to a P-stranding violation) provides strong support for the Last Resort scenario.

5   Part two of the puzzle: morphological case blocks rescue

5.1   Introduction: no P-stranding under sluicing in Greek
            (Merchant 2001:94,127; A. Giannakidou p.c., A. Alexiadou p.c., M. Lekakou p.c.)

Note: if clefts are used to circumvent an otherwise unavoidable P-stranding violation, this should be easily detectable in languages with morphological case marking on wh-phrases, e.g. Greek

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

accusative case for the object of a preposition
(72)   Me   pjon   milise?
          with   who.ACC   she.spoke
          'With whom did she speak?'

nominative case for the pivot of a cleft
(73)   Dhen ksero pjos   itan.
          not   I.know who.NOM   it.was
          'I don't know who it was.'

no P-stranding in regular wh-questions
(74) * Pjon   milise   me?
          who.ACC   she.spoke   with
          INTENDED: 'Who did she speak with?'

testing the prediction: P-stranding under sluicing in Greek

P-stranding under sluicing with an accusative wh-phrase
(75) * I   Anna   milise   me   kapjon,   alla dhe ksero   pjon.
          the Anna spoke   with   someone   but not I.know   who.ACC
          INTENDED: 'Anna spoke with someone, but I don't know who.'

P-stranding under sluicing with a nominative wh-phrase
(76) * I   Anna   milise   me   kapjon,   alla dhe ksero   pjos.
          the Anna spoke   with   someone   but not I.know   who.NOM
          INTENDED: 'Anna spoke with someone, but I don't know who.'

Note: the ill-formedness of (75) is expected given (74), but the ill-formedness of (76) is puzzling, esp. given the fact that (77) is perfectly well-formed, i.e. Greek has a perfectly acceptable cleft alternative for the P-stranding violation in (75), but doesn't use it.

(77)   I   Anna   milise   me   kapjon,   alla dhe 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.'

Question: Why can't sluicing apply in (77) to yield the surface string in (76)?

5.2   Expanding the data set

5.2.1   Czech (Merchant 2001:96; J. Dotlačil p.c., R. Šimík p.c., cf. also infra, section 9.6)

no P-stranding in regular wh-questions
(78) * Kým   mluvila Anna   s?
          who.INSTR spoke Anna   with
          INTENDED: 'Who did Anna speak with?'

no P-stranding under sluicing with a non-nominative wh-phrase
(79) * 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.'

no P-stranding under sluicing with a nominative wh-phrase
(80) * 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.'

non-elliptical cleft alternative
(81)   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.'

5.2.2   Slovene (Merchant 2001:97; T. Marvin p.c.)

no P-stranding in regular wh-questions
(82) * Kom   je   govorila Anna   s?
          who.INSTR AUX   spoke Anna   with
          INTENDED: 'Who did Anna speak with?'

no P-stranding under sluicing with a non-nominative wh-phrase

(83) * 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.'

no P-stranding under sluicing with a nominative wh-phrase

(84) * 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.'

non-elliptical cleft alternative

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

5.2.3　Serbo-Croatian (Merchant 2001:97; B. Arsenijević p.c., cf. also infra, section 9.6)

no P-stranding in regular wh-questions

(86) * Kim　　　je　　　govorila Ana　sa?
　　　　who.INSTR　AUX　spoke　Ana　with
　　　　INTENDED: 'Who did Ana speak with?'

no P-stranding under sluicing with a non-nominative wh-phrase

(87) * Ana　je　　　govorila　sa　　nekim,　　ali　ne　znam　kim.
　　　　Ana　AUX　spoke　　　with　someone　but　not　I.know　who.INSTR
　　　　INTENDED: 'Ana spoke with someone, but I don't know who.'

no P-stranding under sluicing with a nominative wh-phrase

(88) * Ana　je　　　govorila　sa　　nekim,　　ali　ne　znam　ko.
　　　　Ana　AUX　spoke　　　with　someone　but　not　I.know　who.NOM
　　　　INTENDED: 'Ana spoke with someone, but I don't know who.'

non-elliptical cleft alternative

(89)　　Ana　je　　　govorila　sa　　nekim,　　ali　　ne　znam
　　　　Ana　AUX　spoke　　　with　someone　but　　not　I.know
　　　　ko　　　　je　　　to　bio.
　　　　who.NOM　AUX　that been
　　　　'Ana spoke with someone, but I don't know who it was.'

5.2.4　Hungarian (A. Lipták p.c.)

no P-stranding in regular wh-questions

(90) * János　kin　　　　kapott híreket keresztül?
　　　　János　who.SUBL　got　　news　across
　　　　INTENDED: 'Via who did János get some news?'

no P-stranding under sluicing with a non-nominative wh-phrase

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

no P-stranding under sluicing with a nominative wh-phrase

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

non-elliptical cleft alternative

(93)　　János　híreket kapott valakin　　　keresztül,
　　　　János　news　got　　someone.SUBL　across
　　　　de　nem　tudom ki　　　　volt az, akin　　keresztül　híreket kapott..
　　　　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.'

5.2.5　Hindi (Merchant 2001:100; Dave e.a. 2002:29; R. Bhatt p.c.)

no P-stranding in regular wh-questions

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

no P-stranding under sluicing with a non-nominative wh-phrase

(95) * Gautamne   kisi   se   baat   kii thii,
       Gatuam.ERG   someone   with   talk   do PAST
       lekin   mujhe pataa   nahĩĩ   kis.
       but   I.DAT   knowledge NEG   who.OBL
       INTENDED: 'Gautam spoke with someone, but I don't know who.'

no P-stranding under sluicing with a nominative wh-phrase

(96) * Gautamne   kisi   se   baat   kii thii,
       Gatuam.ERG   someone   with   talk   do PAST
       lekin   mujhe pataa   nahĩĩ   kaun.
       but   I.DAT   knowledge NEG   who.NOM
       INTENDED: 'Gautam spoke with someone, but I don't know who.'

non-elliptical 'cleft' alternative

(97) Gautamne   kisi   se   baat   kii thii,
       Gatuam.ERG   someone   with   talk   do PAST
       lekin   mujhe nahĩĩ   pataa   ki vo kaun   thaa.
       but   I.DAT   NEG   knowledge thathe who.NOM   was
       'Gautam spoke with someone, but I don't know who he was.'

5.3   Exceptions: one apparent and one real

5.3.1   The apparent exception: Polish

(98)   *premise 1:*   Polish uses clefts to salvage P-stranding under sluicing (cf. section 5.2.3)
       premise 2:   Polish has morphological case marking on wh-phrases
       conclusion: Polish violates the generalization that morphological case blocks cleft rescue

However: note that the particular cleft strategy that Polish employs is case-sensitive, i.e. it bears the case assigned by the preposition (Szczegelniak 2005:18):

(99)   Którym   to z   mężczyzną ona   tańcczyła?
       which.INSTR   it with   man   she   danced
       'Which man was it with which she danced?'

Conclusion: the generalization seems to be that cleft rescue is blocked when the morphological form of the wh-phrase in the cleft is not identical to the morphological form of the wh-phrase in a regular wh-question

5.3.2   The real exception: German

no P-stranding in regular wh-questions (Merchant 2001:94)

(100) * Wem hat sie mit   gesprochen?
       who   has she with   spoken
       INTENDED: 'Who did she speak with?'

no P-stranding under sluicing with a non-nominative wh-phrase (Merchant 2001:94)

(101) * Anna hat mit   jemandem gesprochen, aber   ich weiβ   nicht   wem.
       Anna   has with   someone   spoken   but   I   know not   who.DAT
       INTENDED: 'Anna has spoken with someone, but I don't know who.'

P-stranding under sluicing with a nominative wh-phrase **for some speakers** (Szczegelniak 2005:15)

(102) % Anna hat mit   jemandem gesprochen, aber   ich weiβ   nicht   wer.
       Anna   has with   someone   spoken   but   I   know not   who.NOM
       INTENDED: 'Anna has spoken with someone, but I don't know who.'

non-elliptical cleft alternative (Szczegelniak 2005:15)

(103) Anna hat mit   jemandem gesprochen,
       Anna   has with   someone   spoken
       aber   ich weiβ   nicht   wer   es war.
       but   I   know   not   who.NOM   it was
       'Anna has spoken with someone, but I don't know who it was.'

Conclusion: those speakers for whom (102) is well-formed form a true exception to the generalization that a difference in morphological case marking between clefts and regular wh-questions blocks cleft rescue of P-stranding violations

5.4   Conclusion

P-stranding violations under sluicing cannot be salvaged with an underlying cleft when the morphological case of the wh-phrase in a cleft is not identical to that in a regular wh-question.

6.   Interim summary: the puzzle

Part one:	an underlying cleft can function as Last Resort in sluicing when the corresponding wh-question is unavailable (due to the ban on P-stranding)
Part two:	this rescue strategy is unavailable when it involves changing the case morphology of the wh-phrase

7.   Towards an analysis (I): two failed attempts

7.1   *Parallelism as a transderivational constraint*

Starting point: part one of the puzzle seems to suggest that the derivation involving an underlying cleft and the one involving an underlying wh-question are in competition; the relevant transderivational constraint choosing between them would then be as in (104)

(104)   **Parallelism**
If two derivations D_1 and D_2 are in the same reference set and D_1 involves strict structural isomorphism between ellipsis site and antecedent while D_2 doesn't, then D_1 is preferred over D_2.

(105)   a. D_1: John saw someone, but we don't know who ~~John saw~~.
        b. D_2: John saw someone, but we don't know who ~~it was~~.

Note: in order for Parallelism to yield the right result in (105), the definition of the reference set has to be based on surface representations, not on Numerations or LF-representations:

(106)   **Reference Set** (Müller 2005:85)
Two derivations D_1 and D_2 are in the same reference set iff:
  a. D_1 and D_2 have the same S-structure representation
  b. D_1 and D_2 do not violate local or global constraints

P-stranding violations and cleft rescue
(107)   a. D_1: John got married against someone's wishes, but we don't know whose ~~wishes he got married against~~.
        b. D_2: John got married against someone's wishes, but we don't know whose ~~it was~~.

Note: D_1 violates the ban on P-stranding and hence is not part of the reference set (cf. (106)b) $\Rightarrow$ the reference only contains D_2 $\Rightarrow$ the structure underlying the ellipsis site is correctly predicted to be a cleft

P-stranding under sluicing and morphological case (I): a non-nominative wh-phrase
(108) D_1:   * I   Anna   milise   me   kapjon,
               the   Anna   spoke   with   someone
               alla dhe ksero   pjon   ~~milise   me~~.
               but not I.know   who.ACC   ~~she.spoke   with~~

Note: D_1 violates the ban on P-stranding and there is no other derivation in the reference set $\Rightarrow$ the example is correctly predicted to be ill-formed

P-stranding under sluicing and morphological case (II): a nominative wh-phrase
(109) D_1:   * I   Anna   milise   me   kapjon,   alla dhe ksero pjos   ~~itan~~.
               the   Anna   spoke   with   someone   but not I.know   who.NOM   ~~it.was~~

Note: D_1 does not violate any local or global constraints and Parallelism does not apply because D_1 is the only derivation in the reference set (compare with (107)) $\Rightarrow$ this example is incorrectly predicted to be well-formed

Conclusions:
- implementing Parallelism as a transderivational constraint cannot explain why morphological case marking languages do not allow cleft rescue of P-stranding violations
- implementing Parallelism as a transderivational constraint implies defining the reference set on S-structure representations, which seems incompatible with other, more likely candidates for transderivational constraints such as Fewest Steps (cf. Müller 2005 for discussion)
- transderivational constraints are theoretically dubious to begin with and hence preferably avoided (cf. also Baltin 2005 for discussion)

7.2   *PF-deletion*

Central problem for a PF-deletion approach:
Why is PF-deletion possible in (110), but not in (111)?

(110)   John got married against someone's wishes, but we don't know whose ~~it was~~.

(111)   * I   Anna   milise   me   kapjon,   alla dhe ksero pjos   ~~itan~~.
       the   Anna   spoke   with   someone   but not I.know   who.NOM   ~~it.was~~

Possible reply: in English, ellipsis is conditioned by semantic identity (cf. Merchant 2001) and in Greek by structural identity (cf. Fiengo & May 1994)

Problems:
- how can this difference be linked to the presence/absence of morphological case marking on wh-phrases?
- other known cases of non-isomorphism (tense mismatches, vehicle changes, etc.; cf. Merchant 2001:10-38 for examples and discussion) apply both in languages with morphological case marking and in languages without morphological case marking
- how can such a difference be implemented/parametrized/acquired?

8.   Towards an analysis (II): LF-copy

8.1   Introduction

The basic intuition behind the analysis:
Determining the precise structure underlying the ellipsis site can only take place **after** the surface representation is completed. In languages without morphological case marking, this surface representation is compatible with both underlying structures and hence cleft rescue is an option. In languages with morphological case marking, a surface representation with a non-nominative wh-phrase is only compatible with a non-cleft source, and hence cleft rescue is not an option.
> → LF-copy offers precisely such an ordering of events

8.2   LF-copy: the basic idea (Chung, Ladusaw & McCloskey 1995, 2006; Fortin 2007)

Key ingredients:
- in narrow syntax and at Spell-Out the TP-portion of a sluiced clause is taken up by an empty slot (TP-proform, null lexical category, …):

(112)   John loves someone and I know [$_{CP}$ who C° [$_{TP}$ *e*]]

- at LF, the TP of the antecedent is re-used/recycled: it is copied/moved into (or shared with) the TP-position of the sluiced clause:

(113)   John loves someone and I know [$_{CP}$ who C° [$_{TP}$ **John loves someone**]]

- in the resulting structure the indefinite correlate gets coindexed with the wh-phrase and serves as the variable bound by the wh-operator:

(114)   John loves someone and I know [$_{CP}$ who^x C° [$_{TP}$ **John loves someone^x**]]

(115)   **Narrow syntax/Spell-Out**
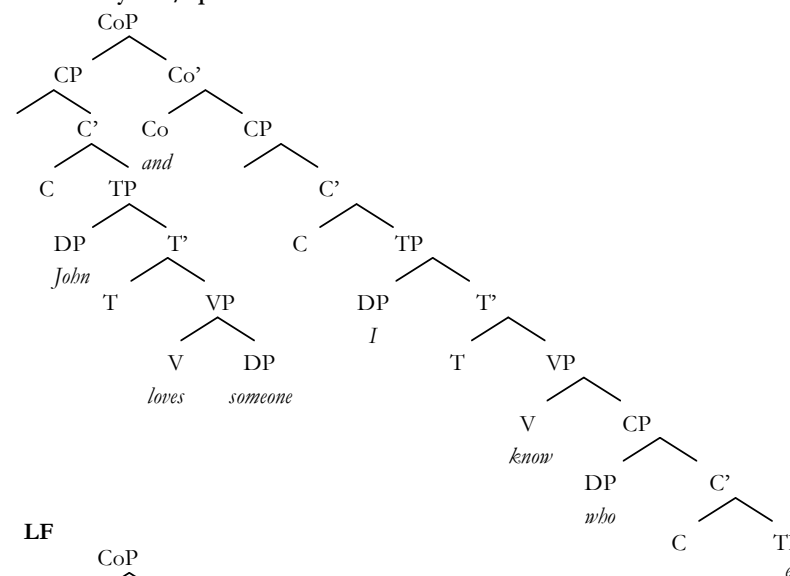
(116)   **LF**
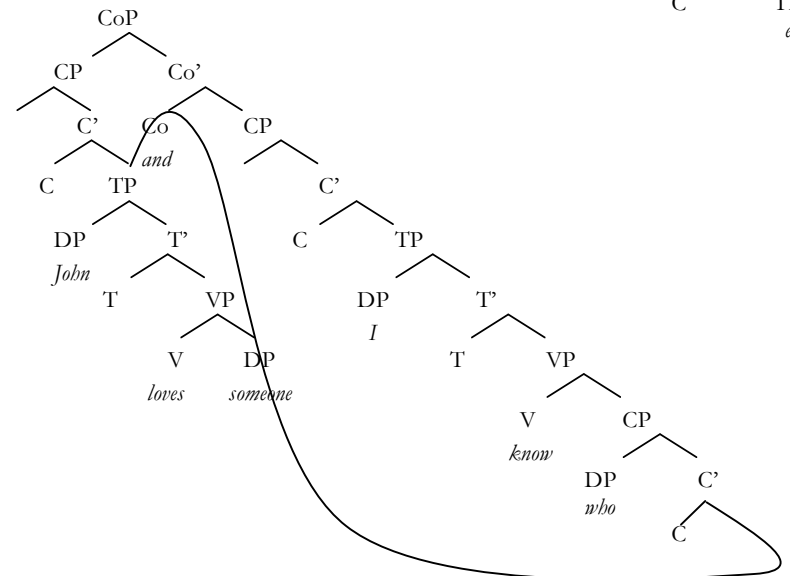
8.3 *A central problem for LF-copy: case matching*

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

Problem: if the wh-phrase is base-generated in specCP, how does its case feature get
checked (can't be at LF, because unchecked case features cause a crash at Spell-
Out/PF)? Moreover, how can we ensure that the wh-phrase will bear the 'correct'
case (i.e. the case matching that of its correlate)?

8.4 *Modifying LF-copy: a sluiced wh-phrase is (partly) recycled as well*

Starting point: wh-phrases consist of an operator part and an indefinite (cf. Chomsky 1964;
Katz & Postal 1964; Klima 1964; Tsai 1994, 1999):

(118) a. *who*   = [WH+someone]
       b. *what* = [WH+something]

Hypothesis: the indefinite part of the wh-phrase in a sluiced clause is copied from or
shared with the indefinite correlate in the antecedent clause ⇒ this allows for
its case feature to be checked and ensures that the case of the sluiced wh-
phrase will match that of the correlate

(119) **Narrow syntax/Spell-Out**
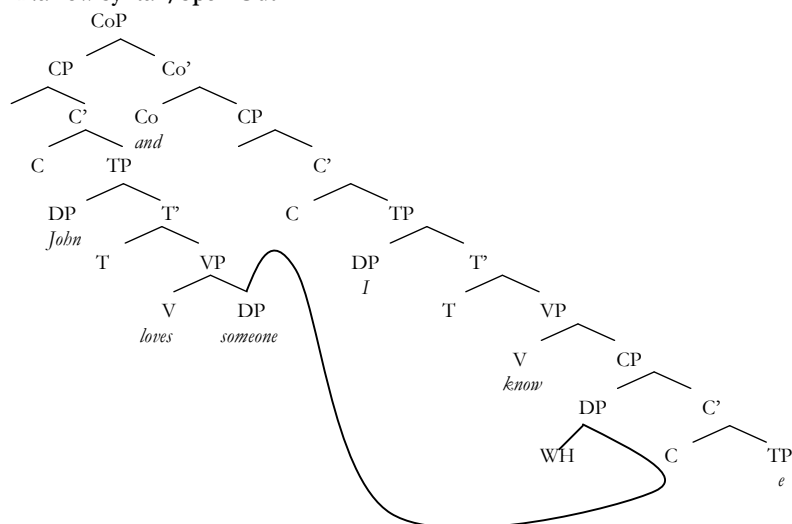
(120) **LF**
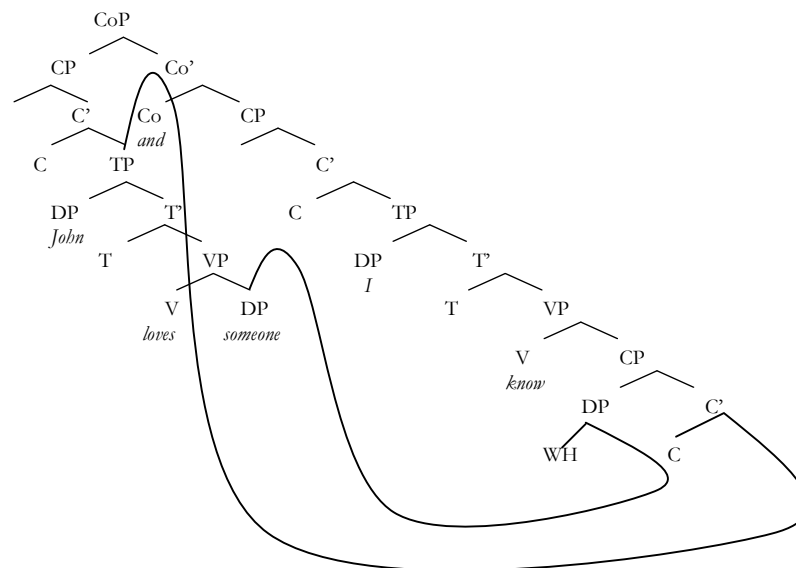
8.5 *Part one of the puzzle: clefts as Last Resort*

(121) Pat slept in a car in some city, but I don't know which city ~~it was~~.

Question: how does LF-copy allow for the cleft in the ellipsis site in (121)?

Auxiliary assumption: in 'filling in' the empty TP-slot, LF has two operations at its disposal:
copying/sharing (Move) and structure building (Merge). The former is costless and
hence the default operation; the latter is constrained by recoverability/semantic
parallelism with the antecedent

On the costlessness of copying/sharing: missing complexity effects in processing
(cf. Frazier & Clifton 1998, 2001, 2005)

(122) a. Sarah left her boyfriend last May. Tina did ~~leave her boyfriend last May~~ too.
       b. Sarah got up the courage to leave her boyfriend last May. Tina did ~~get up the~~
           ~~courage to leave her boyfriend last May~~ too.   (Frazier & Clifton 2001:14)

Note: despite the fact that the ellipsis site contains one clause in (122)a and two clauses in (122)b, these two examples yield the same reading times for the VPE-containing clause

On the constraints on LF structure building

(123) * Pat slept in a car in some city, but I don't know which city ~~Mary visited last year~~.

Note: the structure that is built at LF cannot add any new information; it has to be completely recoverable from the antecedent (e.g. e-GIVEN in Merchant's (2001) sense)

Aside: the approach adopted here is very reminiscent of/compatible with the processing literature on ellipsis (Frazier & Cllifton 1998, 2001, 2005), cf. in particular Arregui e.a.'s (2006) recycling hypothesis:

(124) **Recycling hypothesis** (Arregui e.a. 2006:242)
The central idea behind the recycling hypothesis is that an antecedent verb phrase is copied and, if it is of the wrong shape, it is then altered. (..) The recycling or fixing up of the copied structure should be easy to the extent that the following hold:
- it involves only a few steps
- those steps are defined by the grammar
- the copied structure is related to the target structure by systematic operations available for systematic paraphrase relations

Conclusion:

In the example in (121) copying/sharing of the antecedent TP yields an ill-formed result (P-stranding violation). As a result, LF-structure building is called upon. It creates a maximally simple structure that is recoverable from/semantically parallel to the antecedent. As a result, the derivation converges with an underlying cleft.

8.6   Part two of the puzzle: morphological case blocks rescue

recap: the basic data pattern
no P-stranding under sluicing with a non-nominative wh-phrase
(125) * I Anna milise me kapjon, alla dhe ksero pjon.
      the Anna spoke with someone but not I.know who.ACC
      INTENDED: 'Anna spoke with someone, but I don't know who.'

no P-stranding under sluicing with a nominative wh-phrase
(126) * I Anna milise me kapjon, alla dhe ksero pjos.
      the Anna spoke with someone but not I.know who.NOM
      INTENDED: 'Anna spoke with someone, but I don't know who.'

non-elliptical cleft alternative
(127) I Anna milise me kapjon, alla dhe 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.'

Analysis:
1. Given that the case of a sluiced wh-phrase is directly dependent on (i.e. recycled from) its indefinite correlate, the example in (126) is simply not generated (or even 'generatable')
2. The structure built at LF has to be syntactically compatible with the portion of the structure that was constructed in narrow syntax ⇒ a cleft cannot come to the rescue in (125) because the wh-phrase bears the wrong case (i.e. not nominative)

But wait a minute: doesn't the wh-phrase also bear the wrong case (albeit abstractly, not morphologically expressed) in (128)?

(128)   Pat slept in a car in [some city]OBLIQUE, but I don't know [which city]OBLIQUE ~~it was~~.

Solution: the LF-structure building mechanism is blind for case syncretism

Compare: case matching in free relatives (De Vries 2004; Groos & Van Riemsdijk 1981)

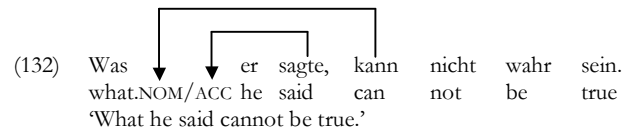*case marking on German wh-phrases: partial syncretism*

(129)

German	'who'	'what'
nominative	*wer*	*was*
accusative	*wen*	*was*

case matching in free relatives

(130) Ich grüßte wen   ich sah.
      I greeted who.ACC I saw
      'I greeted the person that I saw.'

(131) * Ich grüßte { wen   / wer} dort stand.
      I greeted who.ACC / who.NOM there stands
      'I greeted the person who was standing there.'

lack of case matching in case syncretism contexts

(132)　Was　　　 er　sagte,　kann　nicht　wahr　sein.
　　　 what.NOM/ACC　he　said　can　not　be　true
　　　 'What he said cannot be true.'

8.7　　Conclusion

- by recycling the indefinite correlate as part of the sluiced wh-phrase, the LF-copy theory of sluicing can account for case matching
- the fact that LF-copying is costless and LF-structure building is not accounts for the Last Resort nature of underlying clefts in sluicing
- given that these LF-operations cannot change (the output of) the narrow syntactic part of the derivation, cleft rescue is blocked when the morphological form of the sluiced wh-phrase is incompatible with a cleft source

9.　　Extensions, problems and open questions

9.1　　Other cases of non-isomorphism to the rescue (I): Antecedent Contained Sluicing (Yoshida 2007)

example
(133)　　　John kissed someone without knowing who.

the *without*-clause is VP-adjoined
(134)　　a.　　I thought John kissed someone without knowing who, and kiss someone without knowing who he did.
　　　　b.　　John kissed someone without knowing who, and Mary did so too.
　　　　c.　　John kissed someone without knowing who, and Mary did too.

the problem: infinite regress
(135)　　　John kissed someone without knowing who [IP John kissed without knowing who [IP John kissed without knowing who [IP John kissed without knowing who [IP …

Yoshida's solution: Antecedent Contained Sluicing takes a VP-antecedent
(136)　　　[IP John –ed [VP [VP t_John kiss someone] [PP without [CP [IP PRO [VP knowing [CP who [IP *e*]]]]]]]]

antecedent

supporting evidence: no negation in the ellipsis site
(137)　　a.　　John doesn't kiss anyone without knowing who.
　　　　b.　　John doesn't kiss anyone without knowing who ~~he kisses~~.
　　　　c.　*　John doesn't kiss anyone without knowing who ~~he doesn't kiss~~.

compare: regular sluicing
(138)　　a.　　(I heard that) John didn't kiss someone, but I don't know who.
　　　　b.　*　John didn't kiss someone, but I don't know who ~~he kissed~~.
　　　　c.　　John didn't kiss someone, but I don't know who ~~he didn't kiss~~.

Note:　the ungrammaticality of (138)b shows that the possibility of using a VP-antecedent is only allowed when the corresponding IP-antecedent is unavailable (i.e. as Last Resort) ⇒ this is another case of non-isomorphism to the rescue

9.2　　Other cases of non-isomorphism to the rescue (II): Swiping (Merchant 2002; Van Craenenbroeck forthcoming)

swiping generally requires the P(P) to be new information
(139)　　　John gave a talk, but I don't know what about.

exceptions
(140)　% Howard shares the apartment with someone, but I don't know who with.

Merchant's solution: swiping can take a VP-antecedent for some speakers
(141)　　　[IP Howard [VP [VP shares the apartment] with someone]], but I don't know [CP who with [IP *e*]]

antecedent

supporting evidence: no swiping with low VP-elements
(142)　　a.　　We were with somebody. I forget who (*with).
　　　　b.　　She got involved in something over her head, but I don't know what (*in).

Note:　the ungrammaticality of (138)b shows that the possibility of using a VP-antecedent is only allowed when the corresponding IP-antecedent is unavailable (i.e. as Last Resort) ⇒ this is another case of non-isomorphism to the rescue

9.3　　Problems for LF-copy (I): contrast sluices (Merchant 2001:35-37)

(143)　　a.　　John has ten CATS, but I don't know how many DOGS.
　　　　b.　　John invited Harry, but I don't know who else.

Problem: if the antecedent clause does not contain an indefinite correlate, the sluiced wh-phrase will have no variable to bind and it can't 'recycle' the case of the correlate

Possible way out: contrast sluices could be of a fundamentally different nature (and hence require a different analysis) than regular sluicing. In this respect it is worth pointing out that Indonesian has regular sluicing, but lacks contrast sluices (Fortin 2007:178-179).

9.4   *Problems for LF-copy (II): sluicing across discourse*

(144)   A: John invited someone.
         B: Really? Who?

Problem: how can the TP of the antecedent be copied/moved from or shared with the TP of the sluiced clause? Speaker B would have to construct a full LF-representation of speaker A's utterance.

9.5   *Last Resort vs. Optionality: nominal antecedents* (Beecher 2006, D. Maier p.c., N. Kula p.c.)

example
(145)   The only thing I can come up with is contamination, but I don't know what from.

the ellipsis site cannot be isomorphic to the antecedent
(146)   a.   *   I don't know what the only thing I can come up with is contamination from.
         b.   I don't know what the contamination is from.

However: the judgements in (147) seem to suggest that such a copular source for sluicing is available even when the full IP is well-formed ⇒ this could be a case of optionality between isomorphism and non-isomorphism

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

9.6   *Open question: non-cleft-related exceptions to the PSG*

9.6.1   P-stranding violations under sluicing in Serbo-Croatian (Stjepanović 2008)

Stjepanović (2008:180-2): Merchant's examples of (illicit) P-stranding violations under sluicing are out for independent reasons. On closer inspection, Serbo-Croatian is not so well-behaved with respect to the PSG:

no P-stranding in regular wh-movement
(148)   < Protiv> ega   je   Petar   glasao   <* protiv>?
         against what   AUX   Petar   voted   against
         'Against what did Petar vote?'

P-stranding under sluicing
(149)   Znam da je   Petar   glasao   protiv ne ega,   ali ne znam   ega.
         I.know that AUX   Petar   voted   against something   but not I.know   what
         'I know Petar voted against something, but I don't know what.'

Note: the example in (149) cannot be derived from an underlying cleft, as the wh-phrase is morphologically marked for genitive case. Pivots of clefts are nominative in SC, and (as was also pointed out in section 6.2.3) nominative wh-phrases do not allow for P-stranding under sluicing:

(150)   Petar   je   glasao protiv ne ega,   ali ne znam   šta   *(je
         Petar   AUX   voted   against something   but not I.know   what.NOM   AUX
         to bilo   protiv ega   je   on glasao).
         that been   against what   AUX   he voted
         'Petar voted against something, but I don't know what it was that he voted against.'

9.6.2   P-stranding violations under sluicing in Indonesian (Fortin 2007; C. Fortin p.c.)

no P-stranding in regular wh-questions
(151)   < Dengan> siapa   Pak Guru   sedang   berbicara   <* dengan>?
         with   who   Mr. Teacher PROG   INTR.speak   with
         'With whom is Mr. Teacher speaking?'

P-stranding under sluicing

(152) | Saya | melihat | Pak Guru | berbicara | dengan | seseorang | tapi | saya | tidak |
| 1SG | see | Mr. Teacher | INTR.speak | with | someone | but | 1SG | NEG |

tahu siapa.
know who.

'I see Mr. Teacher speaking to someone, but I don't know who.'

Note: the example in (152) cannot be derived from an underlying cleft, because P-stranding under sluicing is compatible with 'mention some'-modification, while clefts are not:

(153) A: | Kamu | mesti | berbicara | dengan | seseorang | di | kedutaan | besar. |
| 2SG | should | INTR.speak | with | someone | in | embassy | big |

'You should speak with someone at the embassy.'

B: Misalnya, siapa (* kah itu)?
for.example who Q that
'Who for example?'

9.6.3 P-stranding violations under sluicing in Czech (J. Dotlačil p.c.)

no P-stranding under sluicing in regular wh-movement with complex wh-phrases

(154) * | Anna | mluvila | s | nekterym | hostem, | ale | ja | nevim | <s> | kterym |
| Anna | talked | with | some | guest | but | I | don't.know | | with | which |

hostem to mluvila <*s>
guest it talked with

'Anna talked with a guest, but I don't know which guest she talked with.'

P-stranding under sluicing with complex wh-phrases

(155) ? | Anna | mluvila | s | nekterym | hostem, | ale | ja | nevim | kterym |
| Anna | talked | with | some | guest | but | I | don't.know | which |

'Anna talked with a guest, but I don't know which (one).'

Note: the example in (155) cannot be derived from an underlying cleft, as the wh-phrase is morphologically marked for instrumental case. Pivots of clefts are nominative in Czech, and nominative wh-phrases do not allow for P-stranding under sluicing:

(156) | Anna | mluvila | s | nekterym | hostem, | ale | ja | nevim | ktery |
| Anna | talked | with | some | guest | but | I | don't.know | which.NOM |

host *(to byl s kterym mluvila).
guest it was with which she.talked

'Anna talked with a guest, but I don't know which guest it was with which she talked.'

10   Summary and conclusions

1. The structure underlying sluicing/IP-ellipsis is not always a wh-question (or more generally: structurally isomorphic with its antecedent).

2. There is a Last Resort condition on the use of non-isomorphic ellipsis sites: they are only used when the isomorphic antecedent is unavailable/ill-formed.

3. This rescue strategy is only available when the non-isomorphic unpronounced structure is syntactically fully compatible with the surface representation of the elliptical clause.

4. The LF-copy analysis of sluicing is most straightforwardly suited to capture these facts.

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