## Tag questions and ellipsis

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#### 1 Introduction

- main topic: the degree of syntactic isomorphism between an ellipsis site and its antecedent
- new empirical generalization: clausal ellipsis defaults to a nonisomorphic ellipsis site containing a short cleft rather than to one that is isomorphic to the ellipsis antecedent.
- central data: dependent tag questions that attach to fragment answers
- main gist of the analysis: short clefts are the default sources for clausal ellipsis because pronouns and copulas are freely available as ellipsis antecedents in any discourse

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# 2 Background: clefts as underlying source for clausal ellipsis

- 2.1 Introduction: clausal ellipsis and isomorphism
- (1) John saw someone, but I don't know who.
- question: assuming that there is unpronounced syntactic structure in sluicing, what exactly does it look like?
- **option (i):** the elliptical clause in (1) is derived from a regular, full whquestion (Ross (1969); Merchant (2001)):
- (2) John saw someone, but I don't know who John saw.
- **option (ii):** the sluiced clause in (1) is derived from an underlying short cleft (or copular clause) (Erteschik-Shir (1977); Pollmann (1975)):
- 3) John saw someone, but I don't know who it was.
- more generally: the issue raised here is if (and if so, to what extent) an ellipsis site has to be syntactically isomorphic to its antecedent:
- 1. approaches that posit structural, syntactic parallelism such as Fiengo and May (1994) or Merchant (2013) only allow for option (i)
- 2. approaches that posit only semantic parallelism such as Merchant (2001) or Anderbois (2010) allow for both option (i) and option (ii)

## 2.2 Sluicing and clefts: a case of Last Resort

 $\rightarrow$  there is both evidence for and counterevidence against the hypothesis that clefts can underlie sluicing

## 2.2.1 Evidence: preposition stranding

(4) **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

- (5) Peter was talking with someone, but I don't know (with) who.
- (6) Who was Peter talking with?

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

- (7) 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.'
- (8) \*Pjon milise me?
  who she.spoke with
  INTENDED: 'Who did she speak with?'
- $\rightarrow$  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:

(9) \*¿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:

(10) 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:

(11) 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

(12) \*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

(13) \*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

(14) 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.'

**conclusion:** clefts—or more generally: structures that are not isomorphic

to the antecedent—can be used as the underlying source for sluicing in preposition stranding contexts in non-preposition stranding languages

#### 2.2.2 Counterevidence: morphological case

at the same time there is clear evidence suggesting that clefts are *not* (generally) available: e.g. languages with morphological case marking often make a case distinction between cleft pivots and direct objects, e.g. Greek:

## cleft pivots: nominative

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

#### direct objects: accusative

- (16) I astinomia anekrine enan apo tous Kiprious prota, ala the police interrogated one.ACC from the Cypriots first but dhen ksero {\*pjos / pjon} anekrine i astinomia. not I.know who.NOM / who.ACC interrogated the police 'The police interrogated one of the Cypriots first, but I don't know who the police interrogated.'
- $\rightarrow$  in such a scenario, the case on the corresponding sluiced wh-phrase uniquely tracks that of the direct object:
- (17) 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

who.'

**conclusion:** the case facts suggests that clefts do not underlie the ellipsis site in sluicing, not even optionally

#### 2.2.3 Reconciling the data: non-isomorphism as Last Resort

- Craenenbroeck (2010): one way of reconciling the data from the previous two subsections is by assuming that non-isomorphic ellipsis sites are only allowed as Last Resort, i.e. when an isomorphic ellipsis site would yield an illicit derivation or representation (see also Hardt (2004, 2007); Sauerland (2004)):
- in the Greek example in (17), an isomorphic ellipsis site is well-formed, and as a result, a non-isomorphic one does not surface
- in the Spanish example in (10), the isomorphic ellipsis site is ruled out due to the ban on preposition stranding, and as a result, the non-isomorphic one shows up

#### 2.3 Interim summary

The general—though often implicit—consensus in the literature seems to be that non-isomorphic ellipsis sites are only used when needed to repair an otherwise illicit derivation or representation that would arise in the corresponding isomorphic ellipsis site.

**prediction:** there should be no contexts in which an isomorphic ellipsis site is well-formed and yet a non-isomorphic one shows up (either as one of the options or as the only one)

#### 3 New data

#### 3.1 Dependent tag questions

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

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

Sailor (2011): DTQs are yes/no questions formed on (and adjoined to) the host clause, with VP ellipsis

(19) Jack left, he left  $\rightarrow$  didn't he leave?  $\rightarrow$  didn't he leave?

**note:** the elided DTQ-clause and its host are subject to stringent identity requirements (though see section 5 for a complication):

- $(20) \qquad \text{a.} \quad \text{Jack is sleeping, isn't he?}$ 
  - b. \*Jack is sleeping, isn't it?
- (21) a. \*It is Jack, isn't he?
  - b. It is Jack, isn't it?
- $\rightarrow$  we will use this property of DTQs as a window into the internal syntactic structure of clausal ellipsis sites

## 3.2 DTQs and clausal ellipsis: default non-isomorphism

#### 3.2.1 The basic data

another common type of clausal ellipsis: fragment answers (Merchant (2004))

- (22) A: Someone left. B: Yes, Jack.
- **note:** since fragment answers are themselves assertions, we should be able to tag them with DTQs:

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

moreover: given the identity requirements in (20)-(21), the choice of DTQ (cleft or non-cleft) should provide direct insight into the structure of the ellipsis site:

- (24) A: Bill met a member of the Linguistics Department. B: Yes, Ken Safir, {wasn't it/??didn't he}?
- (25) A: Who can Bill talk to? B: Ken Safir, {isn't it/??can't he}?

**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:

- (26) A: Bill met a member of the Linguistics Department. B: Yes, he met Ken Safir, {\*wasn't it/didn't he}?
- (27) A: Who can Bill talk to?
  B: He can talk to Ken Safir, {\*isn't it/can't he}?

## 3.2.2 Experimental support

 $\rightarrow$  in an attempt to confirm or disconfirm these initial findings, we ran an online acceptability judgement task:

## design:

- 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

#### 3.3 Fleshing out the data further

#### 3.3.1 Crosslinguistic support

- Brazilian Portuguese: like Spanish, Brazilian Portuguese (BP) is a language that disallows preposition stranding, but does seem to strand prepositions under clausal ellipsis (Almeida and Yoshida (2007); Nevins et al. (2007); Vicente (2008)):
- (28) \*Quem que a Maria dançou com?
  who that the Maria danced with
  INTENDED: 'Who did Maria dance with?'
- (29) A Maria dançou com alguém, mas eu não me lembro quem. the Maria danced with someone, but I not me remember who 'Maria danced with someone, but I don't know who.'

**note:** the same holds for fragment answers:

(30) A: Maria falou com quem? B: Mateus.

Maria spoke with whom Matthew

'A: Who did Maria speak with? B: Matthew.'

- Vicente (2008): apparent cases of preposition stranding in clausal ellipsis in BP should be reanalyzed as involving short clefts (or copular clauses) which didn't contain a preposition in the first place, i.e. they represent another case of a non-isomorphic ellipsis site:
- (31) A: Maria falou com quem? B: Mateus foi.

  Maria spoke with whom Matthew was

  'A: Who did Maria speak with? B: It was Matthew.'

#### interestingly for us: BP also has DTQs:

- (32) Maria falou com Mateus, não falou?

  Maria spoke with Matthew not spoke
  'Maria spoke with Matthew, didn't she?'
- moreover: they fully corroborate our findings for English: regardless of whether the fragment strands (or appears to strand) a preposition or not, it is the non-isomorphic (cleft-based) DTQ that shows up next to fragment answers:
- (33) A: Maria falou com quem? B: (Com) Mateus, {não foi / \*não Maria spoke with who (with) Matthew not was / not falou}?
  spoke
  'A: Who did Maria speak with? B: (With) Matthew, {wasn't it/didn't she}?'

conclusion: DTQ-data from BP confirm our earlier findings for English

- Western Scottish English: Western Scottish English (WSE) has a taglike structure which contains so (in the affirmative) or neither (in the negative). This structure can also be used in dialogues, i.e. across speakers (all WSE data are G. Thoms p.c.):
- (34) He's an idiot, so he is.

- (35) You'll never finish that, neither you will.
- (36) A: I'll be there on time. B: (sarcastic) Aye, so you will.

**note:** when used in reply to fragment answers, WSE-tags once again show a preference for the non-isomorphic version (though see below, section 5 for a complication re. contrastive fragments):

- (37) A: Mary saw Tam and some woman canoodling in the park earlier.
  - B: Aye, Christine.
  - C: Pfft, {so it was/\*so she did}!<sup>1</sup>

conclusion: DTQ-data from WSE confirm our earlier findings for English

#### 3.3.2 Isomorphism-only contexts

**question:** what kind of DTQs do we find in contexts where non-isomorphic ellipsis sites are independently ruled out? Do isomorphic DTQs resurface?

 $\rightarrow$  yes

- exhaustivity (I): as is well known, clefts express exhaustivity (Halvorsen (1978)) in that the cleft pivot denotes all and only the entities for which the cleft relative clause property holds. As a result, cleft pivots cannot be modified by *also* or *too*:
- (38) It was a jacket (\*too) that Bill bought.

this means that combining *also* or *too* with a fragment answer should cause the non-isomorphic (i.e. cleft) DTQ to be out:

(39) A: Jack likes Sally. B: Christine too, {doesn't he/\*isn't it}? **note:** not only is the non-isomorphic DTQ ruled out, the isomorphic one now becomes good  $\rightarrow$  this suggests that if the non-isomorphic ellipsis site is independently ruled out, the isomorphic one resurfaces

exhaustivity (II): another exhaustivity test is what Merchant (2001, 122) calls 'mention some'-modification:

- (40) A: You should talk to somebody in the legal department for help with that.
  - B: Who (\*is it), for example?

as expected, this same type of modification rules out non-isomorphic DTQs in fragment answers (and allows the isomorphic DTQ to resurface):

- (41) A: Jack likes expensive cars. B: Right, for instance, BMWs and Corvettes {doesn't he/\*isn't it}?
- **conclusion:** when a non-isomorphic ellipsis site is independently ruled out, the isomorphic one (and its concomitant DTQs) resurface

## 3.3.3 Non-isomorphism-only contexts

**prediction:** in contexts where the isomorphic ellipsis site is independently ruled out, isomorphic tags shouldn't be merely dispreferred, but completely out

example: islands

- (42) A: She saw Bill and someone from accounting talking.
  - B: Yes, Christine, {\*didn't she/wasn't it}?
- this suggests that (at least some) island violations are repaired under ellipsis not because the island violation itself is lifted, but because a non-isomorphic (and non-island containing) ellipsis site is used (see Barros (2012) for more general discussion)

<sup>&</sup>lt;sup>1</sup>Note that the isomorphic tag is well-formed under the irrelevant reading where it takes A's utterance as its antecedent.

#### 3.4 Data summary

the data reviewed so far can be summarized as follows:

## (43) Default Non-Isomorphism (DNI)

Clausal ellipsis defaults to a non-isomorphic ellipsis site containing a short cleft rather than to one that is isomorphic to the ellipsis antecedent.

## 4 Analysis

- main gist of the analysis: the reason why clefts are the default is Economy-related: they are the least costly option available for the ellipsis site and hence preferred
- **consider** pragmatic control, i.e. discourse-initial contexts where there is no linguistic antecedent available and yet ellipsis is still possible
- 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
- (44) [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.
- (45) [some guy she met at the park]<sub>i</sub>  $[TP \text{ he is } t_i]$
- (46) [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!

(47) [from Germany]<sub>i</sub>  $\{TP \text{ this is } t_i\}$ 

- (48) "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 (or rather, virtually any context, see section 5 for a refinement)

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

- (49) {Kapjos / \*Kapjon} pu gnorisi sto parko. someone.NOM / someone.ACC that she.met in.the park 'Someone she met in the park.'
- (50) Aftos ine {kapjos / \*kapjon} pu gnorisi sto parko. he is someone.NOM / someone.ACC that she.met in.the park 'He is someone she met in the park.'

**DTQs:**  $DI_{lang}$ -fragments can be combined with cleft-based DTQs:

- (51) [Upon meeting someone in the park:] Nice weather, isn't it?
- (52) [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?
- (53) It is nice weather, isn't it?
- (54) It is John Smith, is it?

conclusion: given that short clefts are even available in the absence of any linguistic antecedent, they are the least costly structure available for the ellipsis site. As a result, they are used as default whenever possible (i.e. provided they are not ruled out for independent reasons) and DNI follows.

## 5 Complications & extensions

#### 5.1 Non-isomorphic tags

Sailor (2011): it is not the case that DTQs are always fully structurally isomorphic to their host clause. In particular, in certain contexts cleft-DTQs can be attached to non-cleft host clauses (Sailor, 2011, 38):

- (55) a. Mark wasn't arrested that MONDAY, was it?
  - b. Mr. Nelson usually smokes opium before class, isn't it?
  - c. Doug went home with that girl Bambi, wasn't it?

**potential problem:** if cleft-DTQs can be attached to non-cleft host clauses, DTQs seem to lose their force as a diagnostic for the underlying structure of the ellipsis site in cases such as (56)

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

**however:** a look at the complete data set reveals that the judgements in (56) are only compatible with a cleft in the ellipsis site: while a non-cleft

host clause can be combined with both cleft- and non-cleft-DTQs (see (57)), a cleft host clause is only compatible with a cleft-DTQ (see (58)), exactly as in (56)

- (57) a. Mark wasn't arrested that Monday, {was it/was he}?
  - b. Mr. Nelson usually smokes opium BEFORE class, {isn't it/doesn't he}?
  - c. Doug went home with that girl BAMBI, {wasn't it/didn't he}?
- (58) a. It wasn't on Monday that Mark was arrested, {was it/\*was he}?
  - b. It's Before class that Mr. Nelson smokes opium, {isn't it/\*doesn't he}?
  - c. It wasn't that girl BAMBI that Doug went home with, {was it/\*did he}?

conclusion: the identity requirements of DTQs vis-à-vis their host clause aren't as strict as we have been assuming so far, but this complication doesn't affect our main conclusions

#### 5.2 Non-DTQ-VPE

**prediction:** if DTQs involve VPE (as argued convincingly by Sailor (2011)), then the data and generalizations illustrated so far should be reproducible for non-DTQ-VPE  $\rightarrow$  at first sight, this is exactly what we find:

- (59) A: John met someone at the linguistics department.
  - B: Yes, Matt.
  - C: No, {it wasn't/\*he didn't}. $^2$

**however:** in contrastive fragments (see Griffiths and Lipták (2012) for a definition), the judgements are reversed:

 $<sup>^2</sup>$ Note that this example is grammatical under the irrelevant reading whereby C's reply takes A's original utterance as its antecedent. See also example (37) and footnote 1

- (60) A: Did John meet Ken?
  - B: No, Matt.
  - C: No, {?\*it wasn't/he didn't}!

**control:** if B's reply is a non-elliptical cleft, the judgements on C's VPE are reversed again → this shows that C's reply is indeed taking B's utterance as its antecedent (rather than e.g. A's)

- (61) A: Did John meet KEN?
  - B: No, it was Matt.
  - C: No, {it wasn't/\*he didn't}!

moreover the WSE tag-like construction behaves the same: as soon as we consider contrastive fragments, non-DTQ-VPE prefers the isomorphic source over the non-isomorphic one:

- (62) A: Did Mary slag off Ben?
  - B: No. TAM.
  - C: Oh aye, so {??it was/she did}.

interim conclusion: non-DTQ-VPE following contrastive fragments seem to provide direct counterevidence against DNI in that they are only compatible with an isomorphic version of (the ellipsis site in) the fragment

tentative analysis: what characterizes contrastive fragments is that clefts are not recoverable (i.e. cannot be accommodated) in these contexts. As a result, contrastive fragments constitute an 'isomorphism-only' context, and the non-DTQ-VPE in C's reply can only pick up the isomorphic ellipsis site as antecedent

some supporting evidence: material that cannot be accommodated in and of itself, can become 'accommodatable' provided there is accommodation-seeking material (see Fox (1999); Johnson (2012); Craenenbroeck (2012))  $\rightarrow$  suppose a DTQ can serve as such; this would predict that if B's reply in (60) were to host a cleft-based DTQ, the

judgements for C's reply should be reversed:

- (63) A: Did John meet Ken?
  - B: No, Matt, wasn't it?
  - C: No, {it wasn't/??he didn't}!

**note:** the DTQ in B's reply serves as accommodation-seeking material, and allows a cleft to be recovered even in this contrastive fragment; in turn, the non-DTQ-VPE in C's reply tracks the non-isomorphic ellipsis site in B

moreover: the fact that the isomorphic version is not allowed in C shows that the ellipsis site in B does indeed contain a cleft—recall from (55) that cleft-DTQs can also be adjoined to non-cleft host clauses—which means that even in this example DNI is operative: in this context, both the cleft and the non-cleft ellipsis site are in principle available to B and in accordance with DNI, it is only the non-isomorphic one that shows up

conclusion: while it is clear that the distinction between DTQ-VPE and non-DTQ-VPE and between contrastive and non-contrastive contexts require further investigation, our preliminary findings suggest that despite first appearances, even non-DTQ-VPE in contrastive fragments is subject to DNI

## 6 Conclusions & prospects

#### conclusions:

- dependent tag questions can be used as a window into the underlying syntactic structure of ellipsis sites
- the interaction between dependent tags and fragment answers suggests that clausal ellipsis defaults to a non-isomorphic ellipsis site containing a short cleft rather than to one that is isomorphic to the ellipsis antecedent (Default Non-Isomorphism), contrary to what is assumed in much of the literature on this topic

• this primacy of cleft sources follows from the hypothesis that pronouns and copulas can be (fairly) freely accommodated

• one context in which this free accommodation is blocked is contrastive fragments; as a result, ellipsis feeding off such fragments seem to default to isomorphic ellipsis sites

#### topics for further research:

- the precise relation between DTQ-VPE and non-DTQ-VPE
- the similarities and differences between contrastive and non-contrastive fragments
- the range of possible non-isomorphic ellipsis sites; consider for example the predicate copular source in (64)
- (64) A: Jack talked to Mick Jagger.
  B: Ah yes, a member of the Rolling Stones, {\*didn't he/isn't he}?
  - the range of possible antecedent/fragment assertion pairs: corrective, elaborative, answers to alternative questions with/without a contrastive correlate, etc.

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