

Concealed exclamations. What are they and what can they tell us about embedded *wh*-exclamatives?

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Goals: Discuss the notion of *concealed exclamation* and evaluate the implications the interpretation of CEs has for the analysis of embedded exclamatives.

1 Introduction

1.1 What have been called *concealed exclamations*

- Parallelism between CQs and DPs introduced by *exclamative* predicates (from Grimshaw (1979, p. 299)).
 - (1) a. John asked *the height of the building*.
 - b. John asked *what height the building was*.
 - (2) a. John couldn't believe *the height of the building*.
 - b. John couldn't believe *what a height the building was*.
- Cognitive factives that embed a DP are ambiguous between a CQ-reading and a CE-reading.
 - (3) John found out the height of the building. ⇒ Ambiguous
 - (4) a. John found out what height the building was. ⇒ Interrogative
 - b. John found out what a height the building was. ⇒ Exclamative
 - (5) John found out the incredible height of the building. ⇒ CE

- First-sight generalizations (cf. Elliott (1971), Grimshaw (1979)).¹
 - There is a parallelism between *wh*-embedding predicates, such that not only predicates that select for questions can introduce a DP, but also the predicates that select for exclamatives can embed a DP.
 - Factive predicates may embed a DP with (roughly) the corresponding meaning to the *wh*-exclamative counterpart.
 - We can derive the interpretation of CEs by determining the meaning of a *wh*-exclamative.

1.2 Puzzles

- There is no *wh*-DP correspondence in Catalan (and other Romance languages).
 - (6) Quin cotxe tan gran que s’ha comprat!
what car so big that him/herself.AUX bought.
 - (7) a. És increïble el cotxe que s’ha comprat.
is incredible the car that him/herself.AUX bought
‘It’s incredible the car s/he bought.’
b. ??És increïble quin cotxe tan gran que s’ha comprat.
‘It’s incredible what a big car he bought.’
- The DPs that behave as CQs and the DPs that appear as CEs have different properties.
 - (8) a. *I told him the school.
b. I told him the capital of California.
 - (9) a. *It’s amazing the school.
b. *It’s amazing the capital of California.
c. It’s amazing the cake Bill has baked.
- Surprise predicates also embed *wh*-interrogatives. Are DPs introduced by them ambiguous?

¹The point Grimshaw wants to make in her paper is that semantic selection and syntactic subcategorization happen at different levels of representation. On the one hand, predicates may have the semantic selection features [Q], [E] and/or [P], and on the other hand, they may subcategorize a *that*-clause, a *wh*-clause or even a DP. In the case at hand, there are instances of predicates that include the selecting property [Q], but which cannot introduce a CQ for syntactic reasons (cf. *I’m not sure what beer John drinks* vs. **I’m not sure the beer John drinks*).

- (10) a. It's amazing what Paul did.
b. It's amazing what a song Paul wrote.
- (11) It's amazing the song Paul wrote.

Plan

Main claims (section 2)
Terminology (section 3)
Properties (section 4)
Pre-Analysis (section 5)
Recap and prospective research (section 6)

2 Main claims

- CEs do not constitute a uniform phenomenon.
- CEs may not have the semantics of plain DPs, but they are not hidden exclamative clauses, either.
- CEs are DPs that include special constraints because of the predicates that introduce them.

3 Terminology

- I use the term *CE* to name the DPs that are interpreted as having an *exclamative flavor*, but I do not endorse the existence of concealed exclamations as such.
- Exclamative predicates (aka surprise predicates): it's amazing, it surprises me, you wouldn't believe.
 - Emotive factive predicates: it's amazing, it surprises me.
- Cognitive factive predicates: know, find out.

4 Properties

4.1 Relevant Catalan data

- The gradable adjective cannot modify the noun directly in Catalan.
- (12) a. És increïble el cotxe (??gran/vermell) que s'ha comprat.
'It's incredible the (big/red) car s/he bought.'

- b. Et sorprendries del cotxe (??gran/vermell) que s'ha comprat.
'You'd be surprised at the (big/red) car s/he bought.'
- (13) ?És increïble el cotxe tan gran que s'ha comprat.
is incredible the car so big that him/herself.AUX bought.
- o Agreement and interpretation.
- (14) a. Les coses que diu són fantàstiques.
the things that says are fantastic.PL.FEM
'The things he/she says are fantastic.'
- b. És fantàstic les coses que diu.
is fantastic.SG.MASC the things that says
'It's fantastic the things he says.'
- o The *wh*-counterpart (cf. with (2)).
- (15) Quin cotxe tan gran que s'ha comprat!
what car so big that him/herself.AUX bought.
- (16) ??És increïble quin cotxe tan gran que s'ha comprat.
- (17) *És increïble què ha comprat. [*wh*-interrogative]
is incredible what AUX.he/she bought

4.2 Restrictions on the DP

4.2.1 A [+def] DP

- (18) a. *It's amazing a secret that Mathew spread.
b. It's amazing the secret that Mathew spread.
- (19) a. *És increïble un secret que ha escampat en Mateu.
b. És increïble el secret que ha escampat en Mateu.
- (20) a. I know a doctor who can help you.
b. Bill told me a European capital.

4.2.2 A DP that includes a restrictive relative clause

- o Not just any NP can behave as a CE or as a CQ.
- (21) a. *It's amazing the table.
b. *I know the table.
- o Relational nouns do not make good CEs, either.

- (22) a. *It's amazing the capital of California.
b. Bill told me the capital of California.
- o Noun modification does not help interpret a DP as a CE, either.
- (23) a. *It's amazing the best carburetor of the market.
b. I know the best carburetor of the market.
- o Restrictive relative clauses are what DPs need to be used as CEs.
- (24) a. It's amazing the table John bought to Mary.
b. You wouldn't believe the carburetor my new car has.
- o Nonrestrictive relative clauses are out.
- (25) a. The table, which John bought to Mary, is now in the container. [regular DP with a nonrestrictive relative clause]
b. *You wouldn't believe the table, which John bought to Mary. [*CE with a nonrestrictive relative clause]
- o Possessives work.
- (26) a. You wouldn't believe the price of the milk. ⇒ You wouldn't believe the price the milk has.
b. ?It's amazing the temperature of the lake. ⇒ It's amazing the temperature the lake has.

4.2.3 Extraction of the object but not of the subject?

- (27) a. It's incredible the bread he eats.
b. *It's incredible the woman who had triplets.
- (28) a. It's incredible the things that happen to me.
b. It's incredible the person who was given the prize.
c. It's incredible the papers that were presented at the conference.
d. It's incredible the things which are contained in dog food.
e. It's incredible the things/teachers that scare him.

4.2.4 Adjacency between the complementizer and the verb

- (29) a. El pa que (la veïna) menja (la veïna) és del supermercat.
the bread that the neighbor eats the neighbor is of the supermarket
'The bread that my neighbor eats is from the supermarket.'

- b. És increíble el pa que (*la veïna) menja (la veïna).
'It's incredible the bread that my neighbor eats.'

4.2.5 Noun modification by a gradable adjective is possible – even inferred by the addressee

- (30) a. It's amazing the (big) car you bought.
b. You wouldn't believe the (beautiful) woman I met in that bar.
- (31) It's amazing the red car you bought. ⇒ It's amazing the (beautiful/expensive/big, etc.) red car you bought.
- (32) It's amazing the cars he owns.
a. It's amazing the amount of cars he owns.
b. It's amazing the beautiful/expensive/big cars he owns.

4.3 Restriction on the predicate

- It must select for an exclamative.

- (33) a. *I wonder what a tall boy you saw!
b. Em pregunto el preu de la llet. ⇒ Acceptable but not interpreted as a CE.
'I ask myself the price of the milk.'

- It must subcategorize a DP or a PP.

- (34) a. It's amazing the car he drives.
b. I am amazed at the car he drives.²

4.4 Analogy with *wh*-exclamatives

- Both CEs and *wh*-exclamatives are introduced by factive predicates (in English).

- (35) a. It's amazing the stupid thing he said.
b. It's amazing what a stupid thing he said.

- (36) a. I know the stupid thing he said.
b. I know what a stupid thing he said.

²The issue of whether this is to be interpreted as an individual or as an exclamative needs further research. The same holds for the DPs introduced by prepositions in question-embedding contexts. For more details, see Grimshaw (1979), Lahiri (1991) and Frana (to appear).

- The complements introduced by cognitive factives may be ambiguous between an interrogative and an exclamative reading.

- (37) a. I found out the things he said. \Rightarrow CQ or CE.
b. I found out what stupid things he said. \Rightarrow *wh*-interrogative or *wh*-exclamative.

- CEs and *wh*-exclamatives cannot occur in contexts of speaker ignorance (Grimshaw (1979, p. 299)):

- (38) a. I don't know the (*incredible) height of the building.
b. I don't know how (*incredibly) tall the building is.

- CEs and *wh*-exclamatives involve the speaker's evaluation of a property.

- (39) a. It's amazing the *incredible* height of the building.
b. What an *incredible* height the building is!

- Subject-object asymmetry (cf. 4.2.3).

- (40) a. Quines coses que ha dit!
'What things s/he said!'
b. *Quina dona que ha tingut trigèmins!
'What a woman had triplets!'

- In Catalan, modification of the N by an Adj is introduced by the degree word *tan* ('so').

- (41) a. ?És increïble l'alcada *tan* gran d'aquest edifici.
b. Quina alcada *tan* gran que té aquest edifici!

5 A beginning

- DPs are interpreted in a different manner depending on the predicate that introduces them. Hence, I will propose different paraphrases for DPs embedded in emotive factives and in the rest of *wh*-embedding predicates.
- CEs do not have an *exclamative flavor* because of their inner properties, but because of independent reasons.

5.1 CEs introduced by emotive factives

5.1.1 Claims

- CEs introduced by emotive factives are not exclamative *per se*. Their *exclamative flavor* derives from the meaning of the (surprise) predicate.
- I treat emotive factives as taking a proposition as argument (actually, a true proposition or fact) which can be spelled out as a *that*-clause in both Catalan and English.
- Since CEs include a relative clause, they can have a *clause-like meaning* (cf. Portner and Zanuttini (2003)).

5.1.2 A paraphrase

- I propose a paraphrase for the CEs that involves the accommodation of a *that*-clause out of the relative clause.

- (42)
- a. It's amazing the big car he bought.
 - b. It's amazing that he bought the big car he bought.
 - c. The fact that he bought the car he bought is amazing.
 - d. #The car he bought is amazing.

- This paraphrase is inspired by an example in Elliott (1974, p. 236):

- (43)
- a. That they went where they went on their vacation is fantastic. [*embedded exclamation* interpretation]
 - b. The place where they went on their vacation is fantastic. [free relative interpretation]

- Need for parallelism.

- (44)
- a. It's amazing the big car John bought.
 - b. It's amazing that John bought the big car he_i/#_j bought.
 - c. #It's amazing that John bought the big car he wanted to buy.

- The Catalan facts.

- Emotive factives are intransitive verbs \Rightarrow the proposition they take as argument is spelled out syntactically as a subject in languages without expletives.
- Languages like Catalan do not allow for *wh*-clauses as subjects, but they allow for a postposed *that*-clause.

- Two presuppositions.

- (45) It's amazing the cake he baked.
- a. Definite article \Rightarrow existence of a (single, familiar) cake.
 - b. Factive predicate \Rightarrow he baked the cake.

- Noun modification by a gradable predicate is interpreted nonrestrictively (as a side comment by the speaker, following current assumptions – cf. Morzycki (To appear in 2008)).

- (46) It's amazing the height of the building. \Rightarrow the speaker is surprised at the fact that the building is high.

- (47) It's amazing the incredible height of the building.
- a. The speaker is surprised at the fact that the building is high & s/he describes the height as incredible. [default interpretation]
 - b. The speaker is surprised at the fact that the building is incredibly high. [marked interpretation]

- Preposed adjectives in Catalan can only be interpreted nonrestrictively.

- (48) a. És sorprenent la increïble alcada de l'edifici. [same interpretation as (47-a)]
b. ??És sorprenent l'alcada increïble de l'edifici. [same interpretation as (47-b)]

- We do not want a contrastive interpretation but an *at-least* entailment (cf. Katz (2005)).

- (49) It's amazing the remarkable height of the building.
- a. It's amazing that the size of the building is at least as high as it is. [same interpretation as (47-a)]
 - b. It's amazing that the size of the building is remarkable (instead of average, instead of incredible). [same interpretation as (47-b)]

5.2 Interesting predictions

- Negation is quite marginal.

- (50) a. ?It's amazing the money he didn't steal.
b. ?It's amazing that he didn't steal the money he didn't steal.

- (51) It's amazing that he didn't steal the money he was accused of stealing. [This is not the paraphrase for (50-a)]

- Free relatives are also possible in these contexts.³

- (52) a. *És increíble el que has fet.*
‘It’s incredible what you have done.’
b. *És increíble que hagas fet el que has fet.*
‘It’s incredible that you have done what you have done.’⁴

- [+def] DP

- (53) a. *It’s amazing a secret that Mathew spread.
b. ??It’s amazing that Mathew spread a secret that he spread.

5.2.1 Loose ends

- Where are the compositional semantics and the formalization?!
- Asymmetry subject-object?
- Adjacency between complementizer and the verb.

5.3 CEs introduced by predicates that take *wh*-complements

5.3.1 Claims

- These *wh*-clauses are the complement (and not the subject) of the verb.
- The paraphrase in 5.1 is not useful to describe the interpretation of DPs in these contexts.
- These CEs are ordinary CQs.
- The presence of an adjective is viewed as a case of nonrestrictive modification and it is enabled by the presupposition according to which the speaker knows the answer to the CQ.

³The same probably applies to the so-called *degree relatives* in Spanish (cf. Gutiérrez-Rexach (1999)) in examples like the following:

- (i) *Es increíble lo contenta que estaba María.*
is incredible the glad that was Mary
‘It’s incredible how happy Mary was.’

⁴The assumption of this paraphrase raises a further interesting question: can it be the case that such *wh*-clauses embedded in emotive factives in English are not interrogatives but free relatives? And does it make sense to establish this distinction in such contexts?

5.3.2 Answers to a question

- Assume (for the ease of explanation) a Hamblin/Karttunen or a Groenendijk & Stokhof semantics for the verb *know*.
- The adjective that evaluates N is a nonrestrictive modifier (i.e., it is viewed as a side comment by the speaker and, hence, is not semantically composed with the regular descriptive meaning. Cf. Potts (2005)).

(54) a. I know the cake he baked.
b. I know which is the cake he baked. (I know the answer to the question: which is the cake he baked?)

(55) a. I know the tasty cake he baked.
b. I know which is the cake he baked.
c. I find the cake tasty.

(56) a. She doesn't know the stupid things her brother says.
b. #She doesn't know the answer to the question: which are the stupid things that your brother says?
c. She doesn't know the answer to the question: which are the things that your brother says? + the speaker finds these things stupid.

- These assumptions make the DPs in these contexts CQs and, thus, need to be explained on the same grounds (cf. Schwager (2007), Frana (to appear), Romero (to appear)).

5.3.3 *I know vs. You wouldn't believe*

- *I know* may introduce a *wh*-interrogative in Catalan, but not a *wh*-exclamative. *You wouldn't believe* can introduce both.
- Both *I know* and *You wouldn't believe* take a *wh*-clause as a complement (not as a subject. Cf. 5.1).
- *You wouldn't believe* includes the presupposition that the speaker is emotional about (say) the answer to the question represented by the *wh*-clause, but it does not behave like an emotive factive (at least it does not introduce a *that*-clause in the subjunctive mood in Catalan).

(57) a. Ja sé quina cosa us ha dit la Maria.
'I know what thing Maria told you.'
b. *Ja sé quina cosa tan graciosa que us ha dit la
already know.I what thing so funny that to.you has said the
Maria.
Mary

‘I know what a funny thing Maria told you.’

- (58) a. No et creuries mai quina cosa ens ha dit la Maria.
‘You would never believe what thing Maria told us.’
b. No et creuries mai quina cosa tan graciosa que ens ha
NEG you would.believe never what thing so funny that to.us has
dit la Maria.
said the Mary
‘You would never believe what a funny thing Mary told us.’

The ill-formedness of sentences like (57-b) derives from the context’s impossibility to license the degree word *tan* (‘so’), which has very specific conditions of appearance. Interestingly, being in the scope of an emotive predicate is such a context, and, thus, (58-b) is acceptable.

- DPs introduced by *You wouldn’t believe* are CQs. It is the presupposition according to which the speaker is emotional what makes us interpret the DP as having an unexpected property.

- (59) a. You wouldn’t believe the cake Bill has baked.
b. You wouldn’t believe the answer to the question: what cake did Bill bake?
c. There is a presupposition according to which the speaker is amazed at the properties the cake has. Hence s/he can add an evaluative adjective (e.g., *You wouldn’t believe the tasty/sweet/awful cake Bill baked*), which is interpreted nonrestrictively (cf. 5.3.2 and 5.1.2).

5.3.4 Interesting predictions

- A DP introduced by a [-Def] determiner has to be possible.

(60) I know a wonderful doctor who can help you.

- The same DPs that have been interpreted as CQs should be possible (i.e., no need of a relative clause).

- (61) a. I know the extreme price of the milk.
b. I know the beautiful name of this girl.
c. I know the awful poster on Jordan’s wall.

- Ns that are measurable make better CEs, because expressive meaning is usually triggered by high degree (of a certain property held by an individual).

(62) You wouldn't believe the extreme/incredible/surprising size/length/volume/sensitivity of N.

- Ambiguity in complements of cognitive factives where N is not modified derives from a conversational implicature, but the complement has a single semantic interpretation.

5.3.5 Loose ends

- Again, where is the formalization?!

5.4 A previous proposal by Portner and Zanuttini (2003)

- CEs are divided between *concealed exclamatives*⁵ ((63-a)) and *nominal exclamatives* ((63-b)).

(63) a. It's amazing the height of the building.
b. It's amazing the things he eats.

(64) a. #The height of the building!
b. The things he eats!

- Nominal exclamatives have the same semantic and pragmatic properties as *wh*-exclamatives: a factive morpheme + a set of propositions, which generates a pragmatic inference they call *widening* (cf. Zanuttini and Portner (2003)).

- DPs may have a *noun phrase meaning* and a *clause-like meaning*, and nominal exclamatives are of the latter type.
- Their analysis is based on Kayne (1994)'s approach according to which relative clauses are full clauses (CPs), which are the complement of the determiner.

(65) $[_{DP} \text{ the } [_{CP} [\text{ things which }]_i \text{ C } [_{IP} t_i \text{ are in this bag }]]]$

- There is a morpheme E built in the *wh*-word:

(66) The things that are in this bag!

(67) a. $[[\text{which}_{EXCL}]] = [\lambda P \lambda Q. \{p : w_0 \in p \& \exists x [p = \{w : P(w)(x) = 1 \text{ and } Q(w)(x) = 1\}]\}]$
b. $\{p : w_0 \in p \& \exists x [p = \{w : x \text{ is a thing in } w \text{ and } x \text{ is the bag in } w\}]\}$
c. P represents the property denoted by N, and Q, the property denoted by the IP.

⁵This is the term Portner and Zanuttini use to refer to what Grimshaw (1979) actually calls *concealed exclamations*.

- The article marks factivity (this derives from Heim (1988)'s idea that the definite article marks a familiarity presupposition).
- The set of prepositions that is provided by their analysis of exclamative-*which* and the factivity of the determiner produce widening (i.e., the same effect as a *wh*-exclamative).

5.4.1 Evaluation

- Portner and Zanuttini (2003) provide a single analysis for the DPs that can occur as free nominal exclamatives irrespectively of the predicate that introduces them.
- They account for the fact that nominal exclamatives can occur as matrix clauses or embedded in other predicates.
- Even if they claim that nominal exclamatives are not concealed exclamations, they do claim that CEs and *wh*-exclamatives are truth-conditionally equivalent (cf. Baker (1968), Heim (1979)).

6 Conclusions

6.1 Recap: the few answers and the important questions

- There is no such thing as a concealed exclamation. We either have DPs that can be interpreted as facts or CQs where the speaker qualifies N as a side comment.
- Noun modification by (expressive) gradable adjectives is usually interpreted as non-restrictive modification in the contexts where CEs occur.
- The *exclamative flavor* of CEs is either derived from the meaning of an emotive predicate and/or from the assumption that the speaker makes a subjective evaluation of the properties of N.
- If we agree that it is a syntactic constraint what prevents *wh*-exclamatives to embed in emotive factive predicates in Catalan, is this enough to get rid of the semantics of questions to interpret CEs in English or German?
- Do these facts challenge in any way the question-semantics of *wh*-clauses?

6.2 Now what?

- Formalize, check more data, find more tests to prove my intuitions, etc.
- Think about the (possibly puzzling) consequences that my claims can have for the analysis of matrix *wh*-exclamatives.

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