An expressive answer

Some considerations on the semantics and pragmatics of matrix wh-exclamative

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Questions I want to answer

- In what way is the semantics of *wh*-exclamative different from the semantics of questions?
- In what way is their contribution to discourse different from the contribution of declaratives?

My object of study

Matrix *wh*-exclamatives that are introduced by an interrogative *wh*-phrase, both in English and Catalan.

Example

(1) a. How long this flight is!
b. How long is this flight?

(2) a. Com és de llarg aquest vol!
how is of long this flight
'How long this flight is!'
b. Com és de llarg aquest vol?

(3) a. Quanta gent que hi ha a l'aeroport!
how many people that there is at the airport
'How many people there is at the airport!'
b. Quanta gent hi ha a l'aeroport?

Outline

1. Data and background
2. Claims
3. Proposal
    1. How sets of alternatives manage to make a meaningful contribution to discourse
    2. Ordered sets of propositions as suitable sets for *wh*-exclamative
    3. Evaluative intonation and monotonicity effects
    4. Evaluative intonation as an expressive
4. Recap and prospects

Properties

No questions

They are *wh*-clauses, but they do not make questions (Zanuttini and Portner (2003)).

Example

(4) a. A: How tall Bill is! B: # 1.85 meters tall.
b. A: How tall is Bill? B: 1.85 meters tall.

(5) a. How tall Bill is! # 1.85 or 2 meters tall?
b. How tall is Bill? 1.85 or 2 meters tall?

Properties

No assertions

They do not function as questions, but they do not make assertions, either (Grimshaw (1979), Zanuttini and Portner (2003)).

Example

(6) a. A: How tall is Bill? B1: # How tall he is! B2: Very tall.
b. A: Is Bill tall? B1: # How tall he is! B2: Very tall.

Properties

Wh-words

Only a subset of the set of *wh*-words can introduce *wh*-exclamative (Elliott (1974), Zanuttini and Portner (2003)).

Example

(7) a. How tall Bill is!
b. #Who I saw at that party!
c. #What I found in my room!
d. #Where you went on vacation!

Previous accounts

- The question approach: matrix *wh*-exclamative denote sets of alternatives, just like questions, but *wh*-exclamative include a factive morpheme that widens the quantificational domain associated with the *wh*-phrase, which in turn singles them out as a proper clause type (Zanuttini and Portner (2003)).

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- THE DEGREE APPROACH: *wh*-exclamative are a kind of clause whose descriptive content is a degree construction and which involves an implicated meaning identified with an attitude towards a degree (Castroviejo (2006)).

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- The degree approach: *wh*-exclamative are a kind of clause whose descriptive content is a degree construction and which involves an implicated meaning identified with an attitude towards a degree (Castroviejo (2006)).
- The non-exclamative approach: Embedded *wh*-clauses in surprise predicates are not *wh*-exclamative but interrogatives and their exclamative flavor stems from the semantics of the predicate (D'Avis (2002), Abels (2005)).

Claims

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Claims

1. The different pragmatic behavior of *wh*-interrogatives and *wh*-exclamative stems from differences in parameters such as speaker commitment and contribution of intonation.
2. *Wh*-exclamatives make expressive speech acts insofar they are meaningful expressions thanks to evaluative intonation.
3. Evaluative intonation composes at the CONVENTIONAL IMPLICATURE TIER with a set of propositions, only if they come ordered according to a scale.

Sets of alternatives in discourse

Assumptions

- There is a domain of meaning that corresponds to regular assertive meaning (ASSERTION TIER) and another domain where expressive meaning is computed (CI TIER) (Potts (2005)).
- Declaratives make assertions by virtue of their syntactic form, and speaker commitment is the default option (Gunlogson (2003)). I take verb-subject inversion and *do*-support to be a marker for lack of speaker commitment in English, so declarative word order in *wh*-exclamative is the default one.
- *Wh*-clauses denote sets of alternatives (Hamblin (1973), Karttunen (1977)), i.e, $<< s, t >, t >$.

Sets of alternatives in discourse

2 possibilities for wh-clauses

Sets of alternatives cannot make assertions, because they do not introduce a proposition into the common ground.

- If the speaker is not knowledgeable (verb-subject inversion, *do*-insertion) and s/he introduces *question intonation*, we obtain a meaningful expression, namely a question.

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Sets of alternatives cannot make assertions, because they do not introduce a proposition into the common ground.

- If the speaker is not knowledgeable (verb-subject inversion, *do*-insertion) and s/he introduces *question intonation*, we obtain a meaningful expression, namely a question.
- If the speaker is knowledgeable (the default option) and s/he introduces evaluative intonation (henceforth EI), we obtain a meaningful expression, namely an exclamative.

Sets of alternatives in discourse

A first condition

1st condition

In a *wh*-exclamative it must not be explicitly conveyed that the speaker lacks commitment.

Sets of alternatives in discourse

A first condition

1st condition

In a *wh*-exclamative it must not be explicitly conveyed that the speaker lacks commitment.

But this assumption does not explain why we cannot utter (8):

Example

(8) #Who I saw at that party!

Naturally ordered sets of alternatives

A second condition

2nd condition

Only *wh*-clauses that introduce sets of propositions that are ordered according to a scale may be the arguments of EI.

Naturally ordered sets of alternatives

Prototypical examples

This obtains if the propositions in the set include in the restriction a gradable property or an amount, both of which involve the $\prec$ relation (i) and the proposition on the right entails all the propositions on its left (ii).

Example

(9) a. How tall Bill is!

b. {Bill is d_1-tall, Bill is d_2-tall, Bill is d_3-tall,. . . , Bill is d_n-tall}

(10) a. Quantes mentides que diu aquest polític!
how many lies that tells this politician
'How many lies this politician tells!'

b. {this politician tells 2 lies, this politician tells 3 lies,. . . , this politician tells *n* lies}

Naturally ordered sets of alternatives

At the CI tier

- EI takes the *wh*-clause as argument at the CI TIER.
- EI takes an ordered set of propositions and it makes sure that the strongest true proposition entails the expected propositions in the actual world.

Example

(11) How tall Bill is!

(12) a. strongest true proposition: Bill is d_{189}-tall.
b. expected proposition 1: Bill is d_{170}-tall.
c. expected proposition 40: Bill is d_{180}-tall.

Naturally ordered sets of alternatives

At the CI tier

How come EI has this particular restriction?

Naturally ordered sets of alternatives

At the CI tier

How come EI has this particular restriction?

Monotonicity restriction

EI is a monotone decreasing function that must take as argument a monotone increasing function.

Evaluation and monotonicity

Assumptions

Gradable predicates (e.g., *tall*) and evaluative adverbs (e.g., *surprisingly*) are monotonic functions (Nouwen (2005)):

Definition

(13) A function f of type $< e, d >$ is MON$\uparrow$ iff
$\forall x \forall d \forall d' [f(x) = d \wedge d' \prec d \rightarrow f(x) = d']$

a. 1.85 m $\rightarrow$ 1.80 m.

b. being 1.85 m-tall $\rightarrow$ being 1.80 m-tall.

(14) P is MON$\downarrow$ iff $p \rightarrow p' \Rightarrow P(p') \rightarrow P(p)$

(14) a. being 1.85 m-tall $\rightarrow$ being 1.80 m-tall.

b. surprisingly tall(Bill,1.80) $\rightarrow$ surprisingly tall(Bill,1.85)

Evaluation and monotonicity

EI is monotone

- EI is a MON↓ function, because, like *surprisingly*, it conveys the speaker's emotional state of mind caused by unexpectedness.
- EI must combine with a MON↑ function, so that if the proposition that is true in the actual world were further on the right hand side of the set, the unexpectedness would still hold.

(15) EI (how tall Bill is, where he is 1.80 m-tall) → EI (how tall Bill is, where he is 1.85 m-tall)

Evaluation and monotonicity

EI is monotone

Definition

$[\![\text{EI}]\!](Q)_{<<st>,t>}(w)(a)$
(EI takes a set of propositions, a world w that is always the actual world and an individual a that is always the speaker.)

- The strongest true proposition q entails all the expected propositions q' in the actual world.
- All the propositions p that are not true in the actual world entail the propositions that are true in the actual world, and so they are unexpected, too.

Evaluation and monotonicity

EI is monotone

Example

(16) $[\![\text{How tall Bill is}]\!] = \{\text{Bill is } d_1\text{-tall}, \text{Bill is } d_2\text{-tall}, \ldots, \text{Bill is } d_{35}\text{-tall}\}$

a. strongest true proposition: Bill is d_4-tall.

b. expected proposition$_{15}$: Bill is d_1-tall.

c. false proposition$_{23}$: Bill is d_{30}-tall.

(17) $[\![\text{Who I saw at that party}]\!] = \{$I saw Anna, I saw Peter, I saw Mary, I saw Anna and Peter, I saw Rose and Anna, I saw George, $\ldots\}$

a. strongest true proposition: I saw Anna and Peter.

b. expected proposition$_{15}$: I saw Anna.

c. false proposition$_{23}$: I saw Rose and Anna.

EI as an expressive

Properties of expressives

- Most importantly, EI is a speaker judgement, aka an ancillary commitment (Bonami and Godard (2008)).
- We cannot deny the expressive meaning, but we can deny the inference according to which individual x is ADJ to a high degree.

Example

(18) How tall Bill is! # But I'm not emotional.

(19) a. A: How tall Bill is!
b. B1: # That's not true, you are not emotional.
c. B2: Come on, he's not that tall.

EI as an expressive

Exclamatives in dialog

Assertion in a dialog gameboard, when the speaker introduces p into the common ground (Bonami and Godard (2008)):

Example

(20)
$$\begin{bmatrix} \text{cmt} & \boxed{C} \\ \text{cg} & \boxed{G} \\ \text{qud} & \boxed{Q} \end{bmatrix} \rightsquigarrow \begin{bmatrix} \text{cmt} & \{p\} \cup \boxed{C} \\ \text{cg} & \boxed{G} \\ \text{qud} & \langle p\textbf{?} \rangle \oplus \boxed{Q} \end{bmatrix}$$

EI as an expressive

Exclamatives in dialog

Following Bonami and Godard, I argue that expressives do not update the common ground like assertions. When the speaker introduces EI(Q) to discourse, EI(Q) is never part of QUD:

Example

(21)
$$\begin{bmatrix} \text{cmt} & \boxed{C} \\ \text{cg} & \boxed{G} \\ \text{qud} & \boxed{Q} \end{bmatrix} \rightsquigarrow \begin{bmatrix} \text{cmt} & \text{EI}(\text{Q}) \cup \boxed{C} \\ \text{cg} & \boxed{G} \\ \text{qud} & \boxed{Q} \end{bmatrix}$$

EI as an expressive

Exclamatives in dialog

Why can't expressive meaning answer a question?

Example

(22) A: How do you feel about Bill?

a. B1: I'm amazed at his degree of tallness.
b. B2: # How tall he is!
c. B3: # Wow!
d. B4: # (speaker smiling)

- Expressive meaning cannot be challenged or accepted by the discourse participants.
- The sole purpose of using expressive meaning is to convey one's emotional attitude without considering it information that needs to be checked by the discourse participants before being incorporated into the common ground.

Conclusions

Recap

- *Wh*-exclamatives are *wh*-clauses which are uttered by knowledgeable speakers and which are able to satisfy the monotonicity requirement of evaluative intonation.
- *Wh*-clauses do not have the proper semantic type to be able to update the common ground as an assertion, and the meaning derived from EI is not suitable, either, because it is an expressive.

Conclusions

Advantages

- It is simple and it does not rely on construction-specific or ad-hoc mechanisms.
- It makes the right predictions about my object of study.
- It provides a promising way to account for the formal similarities between *wh*-exclamative and *wh*-interrogatives.

Conclusions

Prospects

It would be interesting to . . .

- . . . check whether we can extend this hypothesis to explain a larger number of exclamative constructions, starting with the ones that are not so similar to interrogatives.
- . . . analyze the effect of EI in other contexts, e.g., when it accompanies a declarative clause.
- . . . study the difference between EI and emotive predicates like *it's amazing*.

Thank you for your attention!

(and prospective comments, improvement tips, help, etc.)

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