

## *Whether*-exclamatives<sup>\*</sup>

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**Abstract.** We propose a new category of exclamatives, *whether*-exclamatives, based on data from European Portuguese and Standard German. We argue that these seem to function as answers to polar questions only because they are coordinated structures in which the first conjunct is an (optionally) elided assertion that answers the preceding question.

**Keywords:** Exclamatives · Answers · Polar questions

### 1 Introduction

Constitutive properties of exclamatives are still heavily debated (Elliot 1974, Grimshaw 1979, Zanuttini and Portner 2003, Villalba 2003, Trotzke and Villalba 2020, Castroviejo 2021). However, one of the properties that is widely agreed upon in the literature is their inability to answer questions (Grimshaw 1979, Villalba 2003, Zanuttini and Portner 2003, Castroviejo 2008, 2021, Rett 2012), as in (1) and (2):

- (1) (Zanuttini and Portner 2003: 48)  
A: How tall is Tony’s child?  
B: #How very tall he is!
- (2) (adapted from Rett 2012: 414)  
A: What desserts does John bake?  
A’: Does John bake delicious desserts?  
B: #What desserts John bakes!

The claim that exclamatives do not constitute good answers to questions has been made with respect to *wh*-exclamatives as in B in (1) and nominal exclamatives as in B in (2) (Grimshaw 1979, Zanuttini and Portner 2003, Castroviejo 2008). This is because exclamatives cannot assert, and according to Grimshaw (1979) and Zanuttini and Portner (2003) they presuppose the proposition they denote, i.e.  $\llbracket$ Tony is very tall $\rrbracket$  for (1) and  $\llbracket$ John bakes desserts $\rrbracket$  for (2). However,

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<sup>\*</sup> This research has been partially funded by project PGC2018-094029-A-I00 from the Spanish State Research Agency (AEI), the European Regional Development Fund (FEDER, UE), and the Catalan Research Agency (AGAUR).

answering an information-seeking question is typically done through the contribution of new, asserted information. Furthermore, Castroviejo (2008) notes that exclamatives can only answer polar questions indirectly, that is, via implicature, as in B in (3), similar to Trotzke and Villalba’s (2020) account of *that*-exclamatives as good responses (but not answers) to polar questions.

- (3) (Castroviejo 2021: 10)  
 A: Do you want to go hiking?  
 B: What a great idea!

In this paper, we look at certain expressions that look like exclamatives and which, upon first glance, seem to behave differently. Yet our account will conclude not only that they are exclamatives, but also that they behave in the same way with regard to their answer-to-question status, unifying the constitutive properties of *wh*- and nominal exclamatives with *whether*-exclamatives.

We provide an analysis of this natural sub-class, *whether*-exclamatives, supported by data from European Portuguese and Standard German (henceforth EP and SG, respectively). We build on ideas brought forward by Villalba (2003), Zanuttini and Portner (2003), and Castroviejo (2021). §2 introduces the challenge posed by *whether*-expressions, §3 tests *whether*-expressions for exclamative status, §4 is our account of how *whether*-expressions seem to function as felicitous answers to questions, but indeed don’t and are considered exclamatives after all. §5 concludes.

## 2 The puzzle

Data from EP and SG could pose a challenge to the claim that exclamatives are *stricto sensu* excluded as answers to questions. In (4-b), B uses a Portuguese *se*-expression as a follow-up move to a polar question posed by A. The German example with an *und ob*-expression is shown in (5-b). The correspondence between EP *se*- and SG *und ob*-expressions has been pointed out by Hundertmark-Santos Martins (2014) and we subsume both under *whether*-expressions (focus capitalized):

- (4) a. A: Gostava de ir a Marte?  
       A: liked of go to Mars  
       ‘Would she like to go to Mars?’  
       b. B: SE gostava!  
       B: whether liked  
       ‘(Yes, and) how much/... she would!’  
       c. B’: Gostava.  
       B’: liked  
       ‘Yes.’ (<https://tinyurl.com/4b68uj3b>)  
 (5) a. A: Würde Elon gerne zum Mars fliegen?  
       A: Would Elon gladly to Mars fly

- ‘Would Elon like to go to Mars?’
- b. B: Und OB (er gerne zum Mars würde)!
  - B: and whether he gladly to Mars would
  - ‘(Yes,) and how much/... he would!’
  - c. B’: Ja.
  - B’: Yes
  - ‘Yes.’

*Whether*-expressions seem to have characteristics of declarative sentences, since they seem to answer questions, but on the other hand they could also be classified as exclamatives due to a high degree interpretation which is not lexicalized. Within a QUD framework (Ginzburg 1994, 1995, Roberts 2012), B’s move in (4-b) and (5-b) answers the question ( $p?$ ) by A in the sense that  $p$  is added to the *Common Ground* (Stalnaker 1974, henceforth *CG*), thereby resolving  $p?$  and removing it from the question stack. What is more, *whether*-expressions contribute more than the unmarked assertion of  $p$ , as in (4-c) and (5-c), namely a high degree reading (they would like to go to Mars very much), a property of exclamatives (Villalba 2003, Rett 2011, 2012, Castroviejo 2021).

The first observations so far with regards to *whether*-expressions in EP and SG show two things: firstly, they function as seemingly felicitous answers to polar questions, where the *CG* has been updated with  $p$ . Secondly, something more than simply  $p$  is contributed by the utterance, namely the degree to which the person wants to go to Mars. An open question remains: are *whether*-expressions to be treated as exclamatives? In the following sections we show that the answer is yes.

### 3 *Whether*-expressions = *whether*-exclamatives?

In this section, we will review *se*- and *und ob*-expressions against existing theories by Villalba (2003) and Castroviejo (2021), in which they offer a catalogue of tests that can be used to identify exclamatives.

#### 3.1 Motivation

*Whether*-expressions do not pattern syntactically with declaratives nor interrogatives, which, in addition to their degree reading, motivates looking at them against frameworks for exclamatives. In EP, *se*-expressions cannot take overt subjects nor objects whereas in typical declaratives and interrogatives these are optional; in EP and SG, *whether*-expressions do not ask a question, like interrogatives, and therefore do not have answerability; in SG, *und* (‘and’) must necessarily precede *ob* (‘whether’), setting it apart from indirect polar echo questions; in *se*-expressions, *se* is necessarily stressed and in *und ob*-expressions, *ob* must be too (Oppenrieder 1989: 210), whereas in e.g. embedded interrogatives (where

‘whether’ occurs) intonation is variable by default in both EP and SG<sup>1</sup>. Moreover, *whether*-expressions contribute a degree reading (see Oppenrieder 1989, Näf 2021 for German).

In sum, the syntactic and semantic contrastive properties displayed by *whether*-expressions with regards to declaratives and interrogatives, as well as the interpreted degree reading, leads us to test whether they could be exclamatives.

### 3.2 Conditions for exclamatives: Villalba (2003) and Castroviejo (2021)

**Factivity:** One test, based on Elliot (1974), tells us that exclamatives are factives and therefore can only be embedded under factive predicates. Exclamatives, just like factive complement clauses, presuppose the truth of the proposition they denote (Grimshaw 1979, Zanuttini and Portner 2003). Since non-factive predicates cannot have a factive complement that is presupposed, they cannot embed exclamatives either. Therefore, embedding an exclamative in a non-factive predicate yields an infelicitous utterance as shown in (6).

- (6) (Zanuttini and Portner 2003: 46)  
 Mary knows/\*thinks/\*wonders how very cute he is.

However, structurally, neither *se*-expressions in EP nor *und ob*-expressions in SG can be embedded, therefore doing so would result in an ungrammatical construction, regardless of the quality of the embedding predicate. Therefore we use Simons’ (2001) *perhaps*-test: ‘perhaps *p*’ will only felicitously follow an utterance when *p* is not presupposed. In (7) and (8), ‘perhaps *p*’ is infelicitous, proving that *p* is in the *CG* (Stalnaker 1974).

- (7) A: A Maria gostou da comida?  
 ‘Did Maria enjoy the food?’  
 B: SE gostou! #E se calhar gostou.  
 ‘(Yes, and) how much/... she did! And perhaps she did.’
- (8) A: Hat Maria das Essen genossen?  
 ‘Did Maria enjoy the food?’  
 B: Und OB sie es genossen hat! #Und vielleicht hat sie es genossen.  
 ‘(Yes,) and how much/... she did! And perhaps she did.’

This point will be expanded on in §4.1 and §4.2.

<sup>1</sup> There is no clear consensus in the literature as to the sentence mood of *und ob*-expressions, which have been studied before: they have been classified as declaratives with exclamative properties (Oppenrieder 1989), as declaratives on the border of exclamatives (Thurmair 1989), and even as a competitive form (*Konkurrenzform*) to exclamatives (Näf 2021). What they agree on is that they express a degree. However, as we will show later, *und ob*-expressions pass the tests for exclamatives.

**Scalarity or high degree interpretation:** Exclamatives denote a high degree of a gradable property that is either explicit or contextually derived (Villalba 2003, Castroviejo 2021). In (9) the property is ‘tall’, of which Pau is to a high degree. In (10), Castroviejo (2007) and Rett (2008) argue that the implicit property is contextually derived, e.g. the property of being ‘exotic’, and that the degree to which the languages Mimi speaks are exotic is high.

- (9) (Castroviejo 2007: 143)  
How tall Pau is!
- (10) (Rett 2008: 604)  
What languages Mimi speaks!

The *se*-expression uttered by B in (11) and (12) denotes the high degree to which Maria sang well, sang loudly, sang quantity-wise, or some other contextually salient property. That is, she sang very well, or very loudly, or for a long time.

- (11) A: A Maria cantou?  
‘Did Maria sing?’  
B: SE cantou!  
‘(Yes, and) how well/loud/much... she sang!’
- (12) A: Hat Maria gesungen?  
‘Did Maria sing?’  
B: Und OB sie gesungen hat!  
‘(Yes,) and how well/loud/much... she sang!’

That is why exclamatives are generally odd with non-gradable properties, such as ‘four-legged’ in example (13), adapted from Villalba (2003).

- (13) ??How four-legged Luna is!

Since *whether*-expressions denote a high degree of a gradable property, they sound equally as odd with typically non-gradable properties.

- (14) A: A Luna é quadrúpede?  
‘Is Luna four-legged?’  
B: ??SE é!  
‘(Yes, and) how four-legged she is!’

We get the same felicity pattern with German *und ob*-expressions.

- (15) A: Ist Luna vierbeinig?  
‘Is Luna four-legged?’  
B: ??Und OB sie vierbeinig ist!  
‘(Yes,) and how four-legged she is!’

The pragmatic oddness, as opposed to complete infelicitousness, of (13) and B in (14) and (15) shows that exclamatives and *whether*-expressions actually force a degree reading even with unlikely predicates. That is, ‘four-legged’ is in principle a non-gradable predicate (an individual is either four-legged or not), but the obligatory degree interpretation of an exclamation forces the reconstruction of a context in which it becomes gradable (say from unusually or not-so-four-legged on one end to prototypically or very-four-legged on the other end).

With non-gradable predicates forced into a high degree, prototypicality seems to be the last-resort property available for retrieval (cf. Oppenrieder 1989: 209 and Castroviejo 2007: 138). The following example is used to clarify this point. Take a predicate like ‘German’, which semantically is a non-gradable predicate. But due to frequently prompted stereotypes, the property’s gradability is effortlessly inferrable:

(16) How German Tilmann is!

We immediately reconstruct a context in which Tilmann is not only German, but also fulfils many German stereotypes, e.g. he wears socks with sandals, does his taxes on the first day, has good boundaries, etc.

**The question/answer-test:** According to Zanuttini and Portner (2003) exclamatives cannot introduce a true question and therefore are not answerable as in (17), in which the exclamation uttered by A is unanswerable.

(17) (Zanuttini and Portner 2003: 47)  
A: How very tall he is!  
B: #Seven feet.

As shown in (18) and (19), the *whether*-expressions uttered by B do not introduce questions either and so C’s utterance as an answer is infelicitous (although it could be acceptable simply as an elaboration).

(18) A: A Maria comeu.  
‘Maria ate.’  
B: SE comeu!  
‘And how much she ate!’  
C: #Comeu.  
‘Yes.’

(19) A: Maria hat gegessen.  
‘Maria ate.’  
B: Und Ob (sie gegessen hat)!  
‘And how much she ate!’  
C: #Ja.  
‘Yes.’

The second part of the question/answer test is to demonstrate that exclamatives cannot be answers to questions. Here, we are back to our initial puzzle: *whether*-expressions may pose a problem because as we have seen in (4) and (5) they seem to be felicitous answers to questions. Our proposal in §4 shows that *whether*-expressions do not, in fact, answer questions.

### 3.3 Negation

Before moving on to the analysis, it is worth talking about negation in exclamatives. Gutierrez-Rexach and Andueza (2011) make a distinction between Spanish ‘degree exclamatives’, which include *wh*- and nominal exclamatives, and ‘propositional exclamatives’, which besides expressing the speaker’s attitude (towards the denoted proposition), differ from the former in that they have declarative syntax and assertive force. One of the characteristics that sets these two apart is the role of negation. Whereas in propositional exclamatives (which we do not consider exclamatives), negation is allowed, as seen in (20), in degree exclamatives it is either ungrammatical as in (21) or expletive. That is, whether it is present or not, it does not effectively contribute negation to the semantics: (22) is still about the lies Juan told, not the lies Juan has not told. The following three examples are taken from Gutierrez-Rexach and Andueza (2011).

- (20) ¡No aprobaste el examen de conducir!  
‘You did not pass the driving test!’
- (21) \*¡Que alto no es!  
‘How tall he is not!’
- (22) ¡Cuántas mentiras (no) nos habrá dicho Juan!  
‘The (many) lies Juan has told us!’

According to Castroviejo (2006), exclamatives denote a high degree of a property. Semantic negation would translate as there being no such high degree of the property, which is applied to an individual. Since, according to Castroviejo, the function of an exclamative is to convey a speaker’s “emotional attitude towards a [high] degree” (2008: 57), if there is no such high degree, then an utterance that expresses the speaker’s emotional attitude is not founded. Therefore, it is expected that negation is either non-existent or expletive in (degree) exclamatives.

*Whether*-expressions continue to pattern with *wh*- and nominal exclamatives in that negation is simply not available, regardless of whether they follow a positive or a negative polar question. The ungrammaticality with negation could be accounted for in the same way: there is no maximal degree (of food) which Maria didn’t eat.

- (23) A: A Maria comeu?/ A Maria não comeu?  
‘Did Maria eat?/ Did Maria not eat?’

- B: SE *comeu*!  
 ‘(Yes, and) how much/... she ate!’  
 B’: \*SE *não comeu*!  
 ‘(No, and) how much/... she didn’t eat!’
- (24) A: Hat Maria gegessen?/ Hat Maria nicht gegessen?  
 ‘Did Maria eat?/ Did Maria not eat?’  
 B: Und OB sie gegessen hat!  
 ‘(Yes,) and how much/... she ate!’  
 B’: \*Und OB sie nicht gegessen hat!  
 ‘(No,) and how much/... she didn’t eat!’

## 4 Towards an analysis of *whether*-exclamatives

At this point, we have two possible hypotheses: either *whether*-expressions are not exclamatives because they can be answers to questions, and therefore fail to pattern with *wh*- and nominal exclamatives on this test alone. Or, *whether*-expressions are classed as exclamatives because they are not truly answers to questions, as they appear to be. In the following, we will provide an informal outlook of an analysis and argue that the second hypothesis is plausible.

### 4.1 *Whether*-exclamatives as coordinated conjuncts

We assume that *whether*-exclamatives are not structures that stand on their own, but always occur in a coordinated structure as second conjuncts where the first conjunct in the form of an affirmative answer to the polar question is (optionally) elided.

The account is as follows: when *whether*-expressions are subsequent moves to polar questions and seem to answer them, we propose, following Zanuttini and Portner’s (2003: 48) speculation regarding English *And how!*, that there is an elided affirmation that precedes them (possibly elided content marked with ‘⟨...⟩’).

- (25) A: Is Tony’s child tall?  
 B: ⟨Yes,⟩ And how ⟨he’s tall⟩!

Looking at our data, then, we observe that an overt affirmation preceding a *whether*-expression does not change the meaning of the whole utterance. (26) shows that either affirmative *gostava* (‘yes’), or both *gostava* and *e* (‘and’), can be elided without causing changes in meaning:

- (26) A: Gostava de ir a Marte?  
 ‘Would she like to go to Mars?’  
 B: ⟨⟨Gostava⟩, e⟩ SE *gostava*!  
 ‘Yes, and how much/... she would!’



More evidence comes from the fact that *whether*-expressions in SG cannot occur without the conjunction *und* (and) preceding *ob* (whether) as in (27), thereby implying preceding elided content just like in the EP data in (26). Note that if the conjunction is omitted, an exclamative reading is not possible in SG.

- (27) A: Würde Elon gerne zum Mars fliegen?  
 ‘Would Elon like to go to Mars?’  
 B: ⟨Ja⟩ Und OB ⟨er gerne zum Mars würde⟩!  
 ‘Yes and how much he would!’  
 B’: #Ob er gerne zum Mars würde!  
 ‘...whether he would go to Mars.’

## 4.2 A hidden update of $p$

With the second hypothesis in mind that *whether*-expressions are indeed exclamatives, we will have to assume that they do not function as true answers to questions. More so, we will then have to assume that the elided first conjunct contains the asserted proposition  $p$ .

Based on the evidence in our data that the answer to the preceding polar question is not to be found in the *whether*-expression but in the coordinated and optionally elided first conjunct, this further motivates our analysis that the elided answer corresponds to an asserted  $p$  which answers the question, and adds the propositional content to the *CG* (Roberts 2012).

An objection that could jeopardise this approach might, of course, be that the cases of *whether*-expressions are an instantiation of presupposition accommodation (Lewis 1979). Two things speak against this. First, in responses that require presupposition accommodation, for example, it is not possible to assume a coordinated elided  $p$  preceding it. In (28), only the response that displays presupposition accommodation without any coordinated propositional content is well-formed:

- (28) A: Have you ever been to Paris?  
 B: In 1996.  
 B’: #⟨Yes and⟩ in 1996.

Second, given that the elided first conjunct is strictly implied in at least German *whether*-expressions through *und* as in (27) for instance, we are safe to discard an explanation based on presupposition accommodation. What is more plausible is that  $p$  is added to the *CG*, i.e. by the elided assertion of  $p$  in the first conjunct. Moreover, this would not detract from our test that *whether*-expressions are factive, since they presuppose exactly what is asserted in the first conjunct and is thus part of the *CG* (Stalnaker 1974). A formal analysis of the phenomenon at hand including a thorough explanation as for the question of whether there is an elided assertion of  $p$  or a presupposition carried by the *whether*-exclamative

(accommodated into the *CG*) is beyond the scope of this paper. Further research will show this.

With regard to the present facts, we hold that *whether*-expressions are indeed exclamatives because coordination explains their passing of the last test in §3.2. That is, the exclamatives cannot answer questions but the optionally elided first conjunct does. Following the tests extracted from Villalba (2003) and Castroviejo (2021), we observe that they pattern with *wh*- and nominal exclamatives, and so we call them *whether*-exclamatives.

## 5 Conclusion

Portuguese *se*-expressions have received, to the best of our knowledge, none or very little attention in the literature. In this paper, we draw out the patterns between the latter and the better-studied German *und ob*-expressions. We present potential challenges to existing theories of exclamatives posed by these data. Our proposal for a natural *whether*-exclamative class builds on Villalba (2003), Zanuttini and Portner (2003), and Castroviejo (2021), providing further evidence that (*whether*-)exclamatives by themselves do not answer questions but are preceded by an optionally elided asserted *p* that is coordinated together with the (*whether*-)exclamative. When they are subsequent moves to polar questions and seem to answer them, it is the propositional content that precedes them, that answers, or resolves, the question.

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