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Exclamations as emotive assertions: more questions (than answers)

Abstract: This commentary offers a personal assessment of Trotzke and Giannakidou's proposal and explores two key aspects: the status of the descriptive meaning of emotive assertions and the emotions conveyed by exclamations. By revisiting the data points and claims presented in the original paper, it raises questions that may contribute to a deeper understanding of exclamations.

Keywords: exclamatives; refutation; answerhood; emotions

1 Trotzke & Giannakidou's proposal in a nutshell

The purpose of Trotzke and Giannakidou's target paper entitled "Exclamation, intensity, and emotive assertion" is to present a novel analysis of exclamations. The main idea put forth by Trotzke and Giannakidou (henceforth T&G) is summarized in the following sentence: exclamations are emotive assertions, a specific kind of assertion that "asserts emotion, is veridically committed to the truth of the sentence, and presupposes intensity" (p. 5). In a nutshell, in this contribution, T&G argue against the illocutionary force hypothesis, according to which exclamations have a distinctive illocutionary force, an idea that is generally encoded in semantic analyses as a force operator, responsible for conveying the emotive/exclamatory component in the semantics of exclamative clauses. Instead, T&G claim that this emotive component is expressed via a syntactically represented null emotive predicate. More specifically, they propose that exclamatives are semantically equivalent (i.e., identical in terms of what they assert and presuppose) to sentences consisting of an emotive predicate and an embedded clause, (1) (their examples (43) and (44)).

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(1)   a.   How fast Eliud Kipchoge was!
        b.   I am amazed at how extremely fast Eliud Kipchoge was.

In their own words (p. 26):

> They both assert that the speaker has the emotion of amazement towards the believed prop-
> osition 'Eliud Kipchoge was extremely fast', and presuppose that the speaker has this very belief.

The emotive predicate (*be amazed/surprised*) is central in this analysis. A second and
related meaning component is subjective veridicality, which replaces factivity, one
of the hallmarks of exclamatives since Elliott (1974) and Grimshaw (1979). Subjective
veridicality is a presupposition of proposition-embedding emotive predicates, as
argued for in Giannakidou and Mari (2021), according to which the subject of the
emotion believes that the embedded proposition is true. In other words, this pre-
supposition is weaker than factivity, which they call *objective veridicality*, charac-
teristic of a predicate like *know*. While in proposals such as Zanuttini and Portner
(2003) factivity was conceived of as a formal feature represented in the left periphery
of a matrix clause, here subjective veridicality naturally follows from the lexical
semantics of a null V-emotive predicate. To support this claim, novel data from Greek
exclamatives are presented, whereby the emotive complementizer *pu* is shown to
typically follow the *wh*-phrase in a *wh*-exclamative. Crucially, Greek has three
complementizers, but *pu* is the one selected by V-emotive predicates when they select
propositions.

     A final – but differentiated – meaning component is that of intensity, which is
triggered by the combination of counterexpectation (conveyed by the V-emotive
predicate) and extreme degree (represented in the propositional content of struc-
tures including *so* and a gradable predicate, here named *SO-degree*: *I am surprised /
amazed that Kipchoge ran so fast.*).

     Syntactically, exclamative sentences are not instances of insubordinated con-
structions (truncated main clauses), but rather are embedded structures under an
elided predicate. The data from German *dass*-exclamatives, which contrast with
main clauses introduced by *ob* 'whether', argue in favor of this analysis. *Dass* 'that'
being the default complementizer in proposition-embedding predicates also sup-
ports the claim that exclamations are nothing but covert embedded structures under
a higher assertive predicate.

     A natural corollary of this analysis is that the distinction between sentence
exclamations and *wh*-exclamatives (Rett 2011) merely points at differences in the
embedding structures; exclamatives have *SO*-degree as their descriptive content,
whereas sentence exclamations are embedded propositions that do not describe
extreme degrees. They both make emotive assertions, though. In relation to this, the

expression of extreme degree, which has been another hallmark in the character-
ization of *wh*-exclamatives (Castroviejo 2006, 2007; Rett 2008, 2009, 2011; Zanuttini
and Portner 2003), is viewed in this proposal as the trigger of intensity, but is not a
critical component in exclamations.

2 Overall assessment

I would like to highlight three main merits of this proposal as well as point out related
questions that may need further clarification.

First, beyond proposing that the emotive component in exclamations is an
attitude rather than a speech act, T&G are explicit about how emotivity is unpacked
by relating to the previous literature on emotive predicates. Moreover, in doing so,
subjective veridicality overcomes factivity, and with it, the idea that exclamatives are
factive is now qualified. By establishing this close relationship between overt
emotive predicates and exclamations, it is possible to make precise predictions
regarding what is presupposed in exclamations and how these presuppositions are
triggered.

Something that may need more elaboration would be how these embedding
predicates compose with a *wh*-complement. In fact, in the paper there are no Greek
and German examples of embedded *wh*-clauses under V-emotive predicates. Instead,
the Greek and German data revolve around embedded *that*-complements, where the
V-emotive takes a proposition as an argument. In relation to this, as far as I can tell,
by positing *SO*-degree as the proposition denoted by exclamatives, the authors opt to
not treat *wh*-exclamatives as semantically interrogative. In other words, the *wh*
component is not given a semantic correlate or even a particular relevance for
exclamative building. The same strategy was followed in Castroviejo (2006) for
Catalan *wh*-exclamatives, where the burden of the degree component also fell on *tan*
'so'. This could make sense given the existence of exclamative-only *wh*-words and
phrases (Greek *ti* + ADJ being a case in point). However, in adopting this strategy,
non-degree *wh*-clauses embedded under V-emotive predicates (e.g., *It surprised
Sonia who won the election.*) have to receive a different compositional derivation
from degree *wh*-clauses. Whether preserving the commonalities of the *wh*-family is a
desirable goal can be a matter of debate.[1] Another related question that this
embedding analysis raises is how T&G would interpret *wh*-exclamatives embedded

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1 Admittedly, as pointed out by Villalba (2023), the variety of clause types than can be used to perform
exclamations cross-linguistically suggests that languages recycle different syntactic structures for the
purpose of exclaiming (*wh*-clauses, *that*-clauses, DPs, …); providing a unified compositional account
seems an extremely ambitious goal.

under cognitive factives (e.g., *Bill knows how extremely slow this car is.*). If *how extremely* were to be analyzed as the *SO*-degree component, we could conclude that such structures denote extreme degree but not counterexpectation, possibly an accurate depiction of the facts and a desirable outcome of T&G's proposal. Certainly, this phenomenon is not T&G's concern, since their goal is to discuss exclamations rather than exclamatives, but this could be seen as a relevant question for further research.

In relation to this last point, another neat aspect in this proposal is that it disentangles extreme degree from emotion by positing intensity as a third – but interconnected – meaning component. In this view, the intensity of an exclamation relies on how high the degree of some property is with respect to the speaker's expectation. A consequence of this claim is that sentence exclamations that are devoid of this degree component (2), being embeddings under a V-emotive predicate (3), should in principle be "neutral in intensity" (p. 35).

(2)   It's snowing in Barcelona!

(3)   I am surprised/amazed that it is snowing in Barcelona.

At the same time, it is said that intensity in degree-less declarative exclamations involves intensity due to the counterexpectation of the null V-emotive verb (p. 36). I agree that, depending on the expectations of *p* being the case, when the speaker learns that *p* is true, intensity may vary; in this sense, it is present even in the absence of *SO*-degree. Hence, *It's raining in Barcelona!* uttered by the same speaker in (2), may be less intense. It seems that this proposal is flexible enough to derive intensity through two different strategies, but the non-degree strategy is left more unspecified and we lack a clear parallelism between overt and null embeddings. While I share the intuition that (3) can be neutral in intensity, it seems that neutrality in intensity in the case of (2) would yield a non-emotive assertion. Could it be that degree-less sentence exclamations necessarily express some degree of intensity?

Third, another valuable contribution of T&G is their compilation of empirical data from recent literature, which challenges the empirical tests that had formed the basis of earlier theoretical analyses of exclamatives. Specifically, the following:
1. The descriptive content of a *wh*-exclamative cannot be directly refuted (Rett 2008, 2011).
2. *Wh*-exclamatives cannot be used to answer an information-seeking question (Grimshaw 1979; Zanuttini and Portner 2003).

Rejecting these two claims through experimental work, T&G challenge earlier accounts and provide an opportunity to gain new insights into exclamations. At the same time, though, they bring up an interesting reflection on how to interpret the results of diagnostics such as refutation and answerhood. Further research could

explore whether these tests identify at-issue meaning, a commitment by the speaker, or a foregrounded proposition introduced by the exclamative clause.

Summing up, this is a bold proposal with strong theoretical and empirical foundations. Its explicit analysis invites readers to critically examine the predictions it generates. As such, this contribution provides the necessary tools to challenge established assumptions, refine previously accepted premises, and foster new debates that will undoubtedly enhance our understanding of exclamatives and exclamations.

Building on these previous points, the remainder of this commentary speculates on two particularly inspiring aspects of the proposal: the status of the various layers of meaning in emotive assertions (with respect to refutation and answerhood) and the capabilities of V-emotive predicates to convey emotions in exclamations.

3 Layers of meaning

I would like to start by reflecting on the predictions made by T&G's proposal. To do so, I will informally break down the layers of meaning in their analysis on the basis of example (1) (leaving aside the presupposition of intensity).

(4) a. p_1: I am amazed that EK was extremely fast.
        ASSERTION
     b. p_2: I believe that EK was extremely fast.
        SUBJECTIVE VERIDICALITY PRESUPPOSITION
     c. p_3: I didn't expect EK to be extremely fast.
        EMOTIVE NONVERIDICAL PRESUPPOSITION
     d. p_4: EK was extremely fast.
        OBJECT OF BELIEF/SURPRISE

Notice that this analysis is meant to cover the interpretation of a variety of exclamatory types from a syntactic perspective; as said, unlike previous accounts, *wh*-clauses, in the case of *wh*-exclamatives, do not receive a question analysis (Zanuttini and Portner 2003) or a degree property analysis (Rett 2011). The exclamative clause denotes a proposition, which is embedded under an emotive predicate. On another note, recall that p_4 in (4) is not treated as a factive presupposition. Rather, p_4 is not analyzed independently from p_1; they are both *affirmed* and also *asserted*. This might explain why most of the assertivity tests (refutation and answerhood) are strictly directed towards p_4. The so-called "descriptive content" of the exclamation is identified as p_4.

In the following two subsections, I discuss refutation and answerhood of the descriptive content of exclamations as assertivity diagnostics.

3.1 Refutation

In view of this analysis, the first straightforward prediction concerning refutation could be that p_1 must be an available target, because it is the asserted content in emotive assertions.[2] As Villalba (2024) argues, rejecting the emotive component in exclamations would be analogous to challenging the sincerity conditions of the speaker, which is problematic on independent grounds. So, in principle, the ill-formedness of exchanges such as T&G's (15), from Castroviejo (2008), repeated below for convenience, does not rule out the possibility that p_1 is asserted.

(5) a. A: How tall Bill is!
     b. B: # That's not true, you are not emotional.

If we now turn to the other examples of refutations discussed by T&G we realize that they are mostly instances of refutation of p_4. Experimentally-based data (Trotzke 2019) are provided to reject two main ideas that had been defended before on the basis of introspection (Rett 2011): (*i*) the descriptive content of sentence exclamations can be directly denied, but *wh*-exclamatives cannot (empirical claim #1 above), and (*ii*) *wh*-exclamatives do not have asserted content (on this, see also Castroviejo 2008). In particular, T&G claim that Rett's example in (6) would not need the question mark.

(6) a. A: (My,) What delicious desserts John bakes!
     b. B: ?No (he doesn't), these are store-bought. John's actually a terrible cook.

In fact, in their example (14), where the denial is on the assertion *John bakes delicious desserts*, T&G even state that "The denial of the descriptive content of the previous assertion is indistinguishable from the denial of the descriptive content of an exclamative" (p. 12). What lesson can we draw from these facts? Is it predicted that p_4 be asserted in an emotive assertion? In line with the proposed analysis, would we not predict that the following exchange have the same judgment as (6)?

(7) a. A: I'm surprised that John bakes such delicious desserts.
     b. B: No (he doesn't), these are store bought. John's actually a terrible cook.

Experimentally testing this paradigm may be revealing.

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[2] I refer the reader to Villalba (2024) for a much more in-depth empirical view on the targets of refutation in exclamations.

3.2 Answerhood

Turning to the test of answerhood, the Question Under Discussion (QUD) framework (Roberts 2012; a.o.) has vindicated the role of questions as shaping interlocutors' goals in discourse, as well as the much needed congruence between the QUD and information structure, according to which there is a correspondence between the focal alternatives of an answer and the alternatives evoked by the question the answer addresses. As pointed out by T&G, building on Simons (2007), the main point of the utterance in a complex sentence can sometimes shift from the predicate to the embedded clause, depending on the QUD. However, by default, in view of (4) above, we may be led to assume that the emotive component is the main point of an exclamation.[3]

On the other hand, drawing from Trotzke and Villalba (2020), T&G support the claim that exclamatives involve broad focus, and this is taken to explain the lack of congruence in question-answer pairings presented in seminal work such as Grimshaw (1979) and Zanuttini and Portner (2003) (empirical claim #2). T&G argue that the purported lack of answerhood capabilities of *wh*-exclamatives is not due to their content being presupposed – a consequence of factivity – but rather the kind of questions these *wh*-exclamatives were supposed to be addressing in the tested examples in the previous literature, generally *wh*-interrogatives. As shown by Trotzke and Villalba (2020) and T&G, exclamatives can indeed answer a question as long as they address a broad-focus question. This may be initially counter-intuitive, especially in the case of *wh*-exclamatives, which are endowed with a *wh*-expression usually ranging over degrees or amounts, but it seems empirically accurate, in view of the felicity of their example (20), repeated below for convenience.

(8)   a.   A: Tell me, how did Eliud Kipchoge do in the race?
       b.   B': [He was very fast]$_F$.
       c.   B": My god! [How fast he was!]$_F$.

Now, the propositional content that is taken to be broad focus is p_4 rather than p_1. Following up on the predictions of the proposed analysis, we could raise the question of whether (9) is the equivalent answer to B" in (8).

(9)   B''': [I'm amazed at how fast he was]$_F$.

I would say the context created in (8) is rich enough to accommodate (9) as an answer, but (9) could also be a plausible answer to a question such as *How do you feel about*

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3 Unlike in the case of refutation, where we have seen that challenging the speaker's sincerity conditions yields marginal results, nothing seems to prevent an emotive predicate from being the focus or main point of an utterance.

EK's race? The authors do not pursue the equivalence between B'' and B''', though.[4] Instead, they draw on Simons (2007) to support the claim that embedded clauses can become the main point and, so, address a question (their example (23), my (10)). Hence, in parallel to the previous strategy in the case of denials, T&G's purpose is to convince the reader that p_4 is asserted in emotive assertions.

(10)   a.   A: Tell me, what is the most striking feature about John?
        b.   B: I am amazed that John is extremely tall.

In view of (10), we would expect (11) to also be a plausible answer, since the two utterances are claimed to be equivalent. Although this scenario is in principle very similar to (8), maybe the lack of an interjection or the difficulty accommodating intensity question the felicity of (11) as an answer to (10-A). This is again something worth exploring in more depth.

(11)   B': How tall John is!

Summarizing, broad focus in emotive assertions seems to be restricted to the embedded CP. If that is the case, a follow-up question would be why emotive assertions have this information structure, such that p_4, but not p_1, is foregrounded.

4 Emotions and contexts that license exclamations

Teasing apart the emotive component from the extreme degree component in exclamatives has been an important challenge when trying to account for the semantics of exclamatives. As noted earlier in this commentary, one of the strengths of T&G's proposal is to provide a precise decomoposition of the emotive meaning underlying in exclamatives by appealing to subjective veridicality and to the negative nonveridical presupposition of contrary emotives (Giannakidou and Mari 2021).

Drawing from T&G's analysis of the emotive component, I propose two potential avenues for development. The first one concerns a set of contexts that license exclamations, but which have not raised a lot of attention. Leaving aside for now whether they constitute a clear example of exclamation, Michaelis (2001) discusses cases such as (12), in which the speaker invites the addressee to "share the speaker's judgment" (p. 1039). The speaker was surprised when learning the news, and she thinks the addressee would also be, if he knew the value of *who* in the embedded clause (e.g., Tessa, the shiest member of the family).

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4 However, their example (68) with an instance of a German *dass*-exclamative under an overt and a covert embedding suggests that they endorse this parallelism.

(12)   You wouldn't believe who spoke up.

I find this sort of examples especially appealing, because they are also present in matrix contexts in languages such as Spanish and Catalan, where they are frequently realized as DPs – as *concealed exclamations* (Grimshaw 1979). Consider for instance (13a) (Spanish). This sentence could be uttered by a worried and upset grandparent telling their friend about their forgetful grandchild, thus projecting surprise or shock in the addressee. Pending an empirical study, (13a) and (13b) appear to be inter-changeable, except that (13b) contains an overt embedding predicate.

(13) a. ¡El   tiempo que   hace   que   no   llama!
          the   time   that have.3sg that NEG call.3sg
          'The time it's been since s/he last called!'
      b. Tú   no   sabes   el   tiempo que   hace   que   no   llama.
          you NEG know.2sg the   time   that have.3sg that NEG call.3sg
          '(lit.) You don't know the time it's been since s/he last called.'
          ~ 'You have no idea how long it's been since s/he last called.'

This set of predicates also includes *you have no idea* or *you can't imagine.* Interest-ingly, they do not typically take *that*-complements, but they usually take *wh*-clauses, and also DPs in Romance languages.

   If we now turn to the *wh*-version of (13a), i.e., (14a) (Spanish), it would be rather uttered in a situation more aligned with the depiction of contrary emotives in T&G's proposal. Specifically, in (14a), the grandparent may have recently realized that their grandchild has not called in a long time, or they suddenly bring this idea to mind. They are not making any hypotheses about the addressee's doxastic state or pro-jecting the addressee's future surprise. Hence, (14a) is not equivalent to (14b).

(14) a. ¡Cuánto   tiempo hace   que   no   llama!
          how much   time   have.2sg that NEG call.3sg
          'How much time it's been since s/he last called!'
      b. Tú   no   sabes   cuánto   tiempo hace   que   no   llama.
          you NEG know.2sg how much time   have.2sg that NEG call.3sg
          'You don't know how long it's been since s/he last called.'

I do not want to convey that concealed exclamations are always uttered in situations where the speaker projects future or potential emotions in the addressee. These sentences can also make sense in contexts which are equivalent to an embedding under *I can't believe*, in which the speaker is expressing that p_4 is incompatible with what she thought possible. Intuitively, (15a), (15b), and (15c) (Catalan) can be felicitous in the same context.

(15)   a.   El   gol   que   ha   fallat   en   Lamine!
            the   goal   that   have.3sg   missed   the   Lamine
            'The goal that Lamine missed!'

       b.   No   em   puc   creure   el   gol   que   ha   fallat   en   Lamine.
            NEG   me   can.1sg   believe   the   goal   that   have.3sg   missed   the   Lamine
            'I can't believe the goal that Lamine missed.'

       c.   Quin   gol   que   ha   fallat   en   Lamine!
            what   goal   that   have.3sg   missed   the   Lamine
            'What a goal Lamine missed!'

Taken together – and, again, pending a deeper empirical study – this set of data may suggest that not all exclamatory types are felicitous in the same contexts (see also Castroviejo 2008), but also that exclamations may convey different messages associated with emotions; in an account where exclamations are embeddings under emotive predicates, this raises the issue of whether a unique semantic representation for the V-emotive predicate will suffice.

     Related to this latter point, I would like to raise a second question, one that concerns the paraphrase of the V-emotive; more specifically, the differences between *I am amazed* and *It's amazing*. T&G opt for the former as a paraphrase for the embedding verb in the asserted content of an exclamation (remember, p_1 in (4)). One important difference between the two could be that the speaker maps onto the subject in the former, but onto the judge in the latter (see, e.g., Lasersohn 2005; Stephenson 2007; a.o.). Consider (16) briefly.

(16)   a.   I am amazed that EK ran so fast.
       b.   It's amazing (to me) that EK ran so fast.

Observe that refuting (16a) may amount to negating the speaker's amazement (as said above, something that challenges the sincerity condition of the speaker, highly marginal). However, refuting (16b) could be interpreted as an instance of faultless disagreement (*It's not amazing to me*, see Kölbel 2004; a.o.). At first sight, if (16b) were a more promising approach than (16a), this small difference could be easily accommodated within the framework of the adopted theory of emotive predicates. I can identify two reasons to support this alternative solution. For one, it may straightforwardly explain why "exclamatives are always interpreted as conveying the surprise of the speaker (and not that of any other subject)" (p. 28). Additionally, it could fit in with the utterance of exclamations by speakers who are expressing their current state of amazement (illustrated in (16a) or by an embedding under *I can't believe*), but also with exclamations that convey that some state of affairs deserves to be considered amazing (illustrated in (16b) or by an embedding under *You wouldn't believe*). For instance, (17) (Catalan) could be

uttered to express that the speaker is amazed or surprised by how much she loves the addressee, but it will more often be uttered when the speaker characterizes her loving towards the addressee as amazing, which amounts to saying she loves him a lot.

(17)   Com   t'estimo!
        how   2SG.love.1SG
        '(lit.) How I love you!' ~ I love you so much!

Consider now the example in (18) (Catalan). It illustrates another context where the speaker is usually not surprised or amazed (at the utterance time) by what a great time she and her friends have had. They are more frequently uttered to tell the addressee that they have had an amazing time.

(18)   Que   bé   que   ens   ho   hem   passat!
        how.EXCL well   that   1PL.CL IT.CL have.1PL spend.PAST
        '(lit.) How well we have spent it!' ~ We had such a great time!

Interestingly, because of the first person depiction of internal states (loving, having fun), in both (17) and (18), the speaker is supposed to be more opinionated than the addressee. Unlike (14a) above, these *wh*-exclamatives are typically uttered in the kind of contexts where the speaker wants to convince the addressee about *SO*-degree, so the extreme degree component seems more foregrounded than the emotive component.

     To summarize this second point: it may be interesting to investigate whether the duality *I am amazed* versus *It's amazing* underlies a more adequate characterization of exclamations, one that best captures the variety of contexts that license them with respect to the doxastic states of speaker and addressee at the moment of utterance of an exclamation.

5 Conclusions

Fortunately or not, exclamations and exclamatives remain far from fully understood. T&G take another significant step toward this ambitious objective. In this commentary, I have sought to honor their contribution by posing new questions that may help us advance toward that understanding.

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