



Emotions and grammar: Challenges from the periphery

Andreas Trotzke^a

^a University of Zurich, trotzke@ds.uzh.ch.

DOI: 10.31885/lud.7.1.265

Paper received: 21 March 2025

Published online: 2 September 2025

Abstract. In this short note, I highlight my agreement with Wiltschko's (2024) main claim that emotions are not represented in grammar by dedicated categories. My own work on both exclamatives and mirativity points to the same conclusion. However, I indicate some data concerning the left periphery of the clause that so far remain unaccounted for in Wiltschko's framework and potentially might pose a challenge.

Keywords: assertion, emotive speech, exclamation, exclamative, German, mirativity

Martina Wiltschko's focus paper "Emotions do not enter grammar because they are constructed (by grammar)" proposes a very interesting and new way to look at the age-old topic of the language-emotion interface and at the more recent question whether emotive a.k.a. 'expressive' meaning should be part of our syntactic representations. The part in her paper that was most interesting to me is the passage where she talks about the concept of 'surprise', and how that concept is related to the grammatical categories of exclamatives and mirativity (Wiltschko 2024: subsection 3.3.1).

Her take on surprise as expressed by grammatical categories is that surprise is not an emotion in the first place, but rather an epistemic state. Wiltschko (2024: 19) mentions Trotzke and Giannakidou (2019, 2025a) in the context of surprise and exclamatives.¹ She is right when she says that in our work, we adopt the idea that surprise is an emotion (and not an epistemic state, as she points out). However, our claim is much more in line with Wiltschko's proposal than suggested in her paper. In particular, we argue that exclamatives, such as (1), are emotive asser-

¹ Wiltschko refers to the first-manuscript version of this work, published on the *LingBuzz* platform (i.e., Trotzke and Giannakidou 2019).



tions akin to assertions containing the predicates *be amazed*, *be surprised* in present tense and overtly in (2):

- (1) How fast Eliud Kipchoge was!
- (2) I am amazed at how fast Eliud Kipchoge was!

We claim that these sentences are identical in terms of what they assert and what they presuppose, and we therefore group them together under the label ‘emotive assertions’. The structure in (1) is essentially an elliptical version of the structure in (2). Note that (1) is unspecified regarding [\pm origo] features, and in our work we demonstrate how the [+origo] interpretation (i.e., *I, here, now*) can be derived from pragmatic inferencing, similarly to first person doxastics in examples such as *John is a good student*, which is equivalent to *I think/believe John is a good student*. In the context of the parallelism between (1) and (2), we also only look at declaratives that Rett (2011) and others have called ‘sentence exclamations’, meaning that they perform exclamations as well and thus necessarily come with a [+origo] specification. Given this background, both (1) and (2) perform the following speech act, according to Trotzke and Giannakidou (2025a):

- (3) Speech act paraphrase/emotive assertions [...]:
‘*S wants from A that it be common ground that S is surprised/amazed that Kipchoge ran so fast; and that S is surprised at a time t ’ immediately preceding t_u and extending to t_u (where t_u is the utterance time).*’

(Trotzke & Giannakidou 2025a: 28)

For more technical details, I refer the reader to the full article. What is important in the context of this discussion note is that a corollary of this analysis is that there is also no grammatical category of exclamatives (see also Trotzke & Giannakidou 2025b on this point). All there is can be accounted for by saying that the speaker in the exclamative cases asserts to be amazed/surprised. On the one hand, this is in accordance with Wiltschko’s (2024) proposal that there are no grammatical categories dedicated to emotions—because in our work we deny the existence of exclamatives as a grammatical category. On the other hand, we are proposing that once you assert being surprised, you are asserting an emotion (regardless of whether you use the configuration in (1) or (2) for doing so). But nothing in our proposal hinges on that latter claim, and our analysis works just fine if we say that surprise is rather an epistemic state than an emotion (you would then be asserting an epistemic state).

In fact, reading Wiltschko’s (2024) paper, the reconceptualization in terms of epistemic states would also make a lot of sense for the second—but closely related—grammatical category I would like to mention in this discussion note, namely the category of mirativity. In this context, let us focus on a phenomenon that has not been mentioned by Wiltschko in her paper, but that has gained some prominence in the syntactic literature over the last ten years or so: so-called ‘mirative fronting’ or ‘mirative focus’ (Authier & Haegeman 2019; Cruschina 2012, 2019; Trotzke 2017a). The basic idea is that mirativity can also be conveyed (or strengthened) through particular marked word orders. Such mirative frontings were initially explored by Cruschina (2012) in his research on Romance languages. Consider the following Italian example provided by Bianchi

et al. (2015: 6), where (4a), according to the authors, represents a marked word order associated with a strong(er) effect of mirativity:

- (4) [Context: Anna tells about a customer who complained for nothing]
- a. Pensa te! **Col direttore** voleva parlare!
 think you with-the manager wanted speak.INF
 ‘Guess what! He wanted to speak with the manager!’
 - b. Pensa te! Voleva parlare **col direttore**!
 think you wanted speak.INF with-the manager
 ‘Guess what! He wanted to speak with the manager!’

In my own work, I have analyzed these cases and similar examples in German as expressing ‘emphasis for intensity’ (Trotzke 2017b), and not necessarily mirativity (see also Beltrama & Trotzke 2019 for the broad semantic concept). The idea is that we are looking at a scalar type of focus in those cases, but the scale is not necessarily unexpectedness or surprise; rather, the specific application domain of the scalar interpretation is determined by pragmatic inferencing and not part of the grammar. Crucially, what could be called ‘emotional’ then (e.g., surprise, but also disapproval, annoyance, etc.) is outside grammar—just as predicted by Wiltschko’s (2024) account. For instance, the fronting to the left periphery illustrated in (4a) for Italian can have many more emotional interpretations, which, however, are derived from the specific context and not from the grammar of the relevant configuration. Observe the following German case where fronting (most likely) expresses disapproval and annoyance (Frey 2010: 1426; paraphrases by Trotzke 2017b: 34):

- (5) Was hast Du heute Nacht gemacht?
 ‘What did you do last night?’
- a. Ich habe geschlafen.
 I have slept
 - b. Geschlafen hab ich! [Was denn sonst? (‘What else?’)]
 slept have I

The more emphatic version in (5b) would be fine in a context where Speaker B is annoyed with being forced to state the obvious to answer Speaker A’s question. The concept of emphasis argued for in Trotzke (2017b) is broad enough to capture those different varieties of scalar interpretations as well as traditional information-structural notions (mostly epistemic states) under a single grammatical category represented in the left periphery of the clause.² This brings epistemic states conceptually much closer to *prima facie* emotional interpretations such as surprise and disapproval.

While I could thus provide much more empirical support for the plausibility of Wiltschko’s (2024) account from my previous work, I also see a potential challenge once we are factoring in the interface of the clausal left periphery with prosody. In what follows, I hypothesize that prosody is the primary means of language for the expression of emotions (e.g., Schwartz & Pell 2012).

² I hasten to add that many types of non-canonical questions that are often accounted for by referring to emotions or expressivity can be accounted for in the emphasis framework as well (Trotzke 2023).

According to this view, this would also explain why humans are emotionally most affected by hearing songs and music (Perlovsky 2009). Crucially now, there are dedicated phonetic profiles for expressing emotional meaning. One of these characteristics might be a universal which Jakobson (1960: 354) has called ‘emphatic prolongation’ (e.g., *John is big!* vs. *John is biiiiiig!*). More recently, lengthening strategies have been identified as a core—and distinct—characteristic of emotive speech. In a corpus-based study, Niebuhr (2010) found that emotional intensity in German was typically expressed either by longer onset duration (followed by a more pressed and barked vowel) or by lengthening of the accented vowel (characterized by a breathier quality); see also Niebuhr et al. (2015) on speech and emotion more generally.

All of this would not challenge Wiltschko’s (2024) approach because these phonological means can be assigned freely (in the case of stress, we thus call it ‘non-structural stress’, such as exclamative intonation), and thus they fall outside of grammar—in line with Wiltschko’s (2024) account. However, there are interactions between left peripheral syntax and the type of phonetic features that are characterized as emotive speech. For instance, we have found this for so-called left peripheral occurrences of discourse particles in German (see Bayer & Trotzke 2015 for syntactic details). Consider the following minimal pair. In both (6a) and (6b), the particle *nur* (lit. ‘only’) is not used as a focus particle, but rather as a discourse particle expressing a *how-on-earth* interpretation in *wh*-questions:

- (6) a. Wie hat er **nur** den Rekord brechen können?
 how has he PART the record break could
 b. Wie **nur** hat er den Rekord brechen können?
 how PART has he the record break could
 ‘How on earth did he break the record?’

Crucially, the *how-on-earth* interpretation can be expressed not only via the unmarked position of the particle in (6a), but also in a configuration where the particle is fronted together with the *wh*-element to the left periphery of the clause (6b). However, in a production study Trotzke and Turco (2015) found that only in the left peripheral configuration in (6b) both the fricative [v] and the respective vowel of various *wh*-words are significantly lengthened. They tested this for several German *wh*+particle combinations, and they could also show that other forms of constituency in the left periphery involving *wh*-elements do not exhibit these core characteristics of emotive speech. If we assume, in accordance with the phonetics literature, that these lengthening strategies express emotional involvement (rather than epistemic categories such as focus, for instance), then we see here a phonetic effect of word order (a.k.a. syntax) that falls into the domain of expressing emotions. In other words, once we factor in the syntax-phonology interface as part of our grammar, the question whether there is a direct interface between grammar and emotions emerges again.

References

- Authier, J.-M. & L. Haegeman (2019). The syntax of mirative focus fronting: Evidence from French, in D. L. Arteaga (ed.), *Contributions of Romance Languages to Current Linguistic Theory*. Cham: Springer, 39–63.

- Bayer, J. & A. Trotzke (2015). The derivation and interpretation of left peripheral discourse particles, in J. Bayer, R. Hinterhölzl & A. Trotzke (eds), *Discourse-Oriented Syntax*. Amsterdam: John Benjamins, 13–40.
- Beltrama, A. & A. Trotzke (2019). Conveying emphasis for intensity: Lexical and syntactic strategies, *Language and Linguistics Compass* 13, e12343.
- Bianchi, V., G. Bocci & S. Cruschina (2015). Focus fronting and its implicatures', in E. O. Aboh, J. C. Schaeffer & P. Sleeman (eds), *Romance Languages and Linguistic Theory 2013: Selected Papers from 'Going Romance'*. Amsterdam: John Benjamins, 1–20.
- Cruschina, S. (2012). *Discourse-Related Features and Functional Projections*. Oxford: Oxford University Press.
- Cruschina, S. (2019). Focus fronting in Spanish: Mirative implicature and information structure, *Probus* 31, 119–146.
- Frey, W. (2010). \bar{A} -movement and conventional implicatures: About the grammatical encoding of emphasis in German, *Lingua* 120, 1416–1435.
- Jakobson, R. (1960). Closing statements: Linguistics and poetics, in T. A. Sebeok (ed.), *Style in Language*. Cambridge, MA: MIT Press, 350–377.
- Niebuhr, O. 2010. On the phonetics of intensifying emphasis in German, *Phonetica* 67, 170–198.
- Niebuhr, O., B. Peters, R. Landgraf & G. Schmidt. (2015). The Kiel Corpora of “Speech & Emotion”: A Summary, in 41. *Deutsche Jahrestagung für Akustik* [German Acoustical Society, DEGA], 1–4.
- Perlovsky, L. (2009). Language and emotions: Emotional Sapir-Whorf hypothesis, *Neural Networks* 22, 518–526.
- Rett, J. (2011). Exclamatives, degrees and speech acts, *Linguistics and Philosophy* 34, 411–442.
- Schwartz, R. & M. D. Pell (2012). Emotional speech processing at the intersection of prosody and semantics. *PLOS ONE* 7, e47279.
- Trotzke, A. (2017a). Mirative fronting in German: Experimental evidence, *Review of Cognitive Linguistics* 15, 460–488.
- Trotzke, A. (2017b). *The Grammar of Emphasis: From Information Structure to the Expressive Dimension*. Berlin: Mouton de Gruyter.
- Trotzke, A. (2023). *Non-Canonical Questions*. Oxford: Oxford University Press.
- Trotzke, A. & A. Giannakidou (2019). Exclamatives as emotive assertions of intensity, Ms. University of Konstanz and University of Chicago: <https://ling.auf.net/lingbuzz/004838>
- Trotzke, A. & A. Giannakidou (2025a). Exclamation, intensity, and emotive assertion, *Theoretical Linguistics* 51, 1–51.
- Trotzke, A. & A. Giannakidou (2025b). The landscape of exclamations: Brief musings on emotive language, *Theoretical Linguistics* 51, 153–165.
- Trotzke, A. & G. Turco (2015). The grammatical reflexes of emphasis: Evidence from German *wh*-questions, *Lingua* 168, 37–56.
- Wiltschko, M. (2024). Emotions do not enter grammar because they are constructed (by grammar), *Language Under Discussion* 7, 1–62.