

## CHAPTER 31

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# EXPRESSIVITY AND INFORMATION STRUCTURE

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### 31.1 INTRODUCTION

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This chapter explores the similarities, differences, and interactions between the domain of expressivity and a variety of discourse meanings commonly summarized in the literature as the domain of information structure. Both empirical domains are rather broad, and they have been investigated from very different perspectives. As for information structure, [Krifka \(2008: 243\)](#) has noted in a seminal paper that “[t]he basic notions of Information Structure [...], such as Focus, Topic and Givenness, are not simple observational terms. As scientific notions, they are rooted in theory, in this case, in theories of how communication works.” Given that there are so many different theories of how communication works and thus also of information structure, the present handbook article cannot do justice to every conceivable aspect of information structure that might concern the expressivity of an utterance. Rather, I will only discuss those theories and observations where the literature has explicitly mentioned a connection between information structure and expressivity. I should also mention that the article will focus on how

information structural means convey expressivity, but it will not deal with the question whether information structural means (e.g., contrastive focus) can be applied to expressive items. This would require an in-depth discussion of the typology of expressive items, including arguments for and against so-called ‘mixed expressives’ (↔ *Expressivity and multidimensional semantics* by DANIEL GUTZMANN, Chapter 11 of this volume).

When we now turn to the concept of expressivity, we observe that this term too has quite different readings in the literature (↔ *Expressivity in modern philosophy of language* by THORSTEN SANDER, Chapter 3 of this volume; ↔ *Expressivity and multidimensional semantics* by DANIEL GUTZMANN, Chapter 11 of this volume). In order to review the connections between expressivity and information structure, I will therefore propose a distinction in this chapter between ‘expressivity – broad sense (B-expressivity)’ and ‘expressivity – narrow sense (N-expressivity)’. According to this distinction, N-expressivity covers a range of so-called use-conditional phenomena (more on this below) that also convey emotive meanings. By contrast, B-expressivity includes N-expressivity plus use-conditional meanings in general (i.e., without any emotive interpretation). Crucially, the distinction between B-expressivity and N-expressivity will allow me to claim the following: While B-expressivity in the domain of information structure is always conveyed via phonology in European languages, only N-expressivity additionally triggers marked word order – a domain traditionally explored in non-emotive and classical terms of information structure. I will focus on marked word order involving the clausal periphery in this article because this syntactic domain might be most relevant for the interface with emotive interpretations. The overall goal of this chapter will be to show that what is commonly known as the field of information structure can actually be reconceptualized as the study of expressivity across grammar.

The article is organized as follows. In Section 31.2, I will first introduce the distinction between B-expressivity and N-expressivity by both highlighting the different research traditions associated with those different concepts of expressivity and indicating where they might even overlap. Given the distinction between B-expressivity and N-expressivity, Section 31.3 will then discuss to what extent common information structural notions can be accounted for in terms of B-expressivity. In particular, we will have a look at recent proposals according to which there is no such thing as information structure proper because the most common concepts in this domain are in fact expressive meanings. In Section 31.4, I will turn to the concept of N-expressivity and how it connects to what has traditionally been accounted for in information structural terms. I will argue that N-expressivity, in contrast to B-expressivity, is not only conveyed via prosodic means, but typically via marked word order choices involving the clausal left periphery. My discussion will suggest that N-expressivity (and thus emotivity) in fact motivates many of the marked constructions that are commonly accounted for in information structural terms. Section 31.5 summarizes and concludes this chapter.

## 31.2 TWO NOTIONS OF EXPRESSIVITY

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### 31.2.1 Expressivity – broad sense (B-expressivity)

In a seminal paper, Kaplan (1999/2004) discusses the differences between the English interjections *ouch* and *oops* and their descriptive counterparts *I am in pain* and *I just observed a minor mishap*, respectively. His main point was to distinguish between two types of information, descriptive information and expressive information, and how to account for them by means of formal semantics. In a nutshell, the descriptive statements *I am in pain* and *I just observed a minor mishap* can be accounted for in terms of their truth-conditional contributions, whereas interjections like *ouch* and *oops* can only be analyzed by looking at the felicity conditions of these linguistic expressions (i.e., how they can be used). For Kaplan (1999/2004), *ouch* and *oops* thus convey expressive rather than descriptive information. While Kaplan in his discussion focused on interjections and items such as *damn* or *bastard*, Kratzer (1999) suggested that we can go ‘beyond *ouch* and *oops*’ and extend this notion of expressive meaning to further phenomena such as modal particles in German. It is important to note that in this type of work, expressive meaning is thus equal to use-conditional meaning, and over the last twenty years or so a whole strand of research on the ‘expressive dimension’ of meaning has developed semantic analyses for empirical phenomena that require a use-conditional level of analysis (Potts 2005, 2007a,b, Gutzmann 2015). In what follows, I will call this reading of expressivity ‘expressivity – broad sense (B-expressivity)’. This chapter is not the place to discuss those analyses in depth – not least because this is done in much more detail in many of the other chapters of the present volume. However, let me briefly illustrate what is meant by saying that elements like modal particles are use-conditional items and thus belong to B-expressivity.<sup>1</sup> Building on Kratzer’s (1999) work, I use the famous example of the German particle *ja* (lit. ‘yes’) here because the meaning contribution of this particular particle will also play a role later in Section 3 of this chapter when we turn to the connection between B-expressivity and information structure. Look at the following example:<sup>2</sup>

- (1) A asks B: Which race did Eliud win?  
 B: #*Eliud hat ja den olympischen Marathon gewonnen.*  
 Eliud has PART the Olympic marathon won  
 ‘Eliud has won the Olympic marathon.’

The ‘#’ symbol indicates that B’s utterance is infelicitous in the context given in (1). Crucially, this infelicity is only due to the use of the particle *ja*; the utterance would be perfectly felicitous without the particle. This is because the version of the utterance contain-

- 1 An alternative theoretical approach would be to analyze modal particles as truth-conditionally vacuous presupposition triggers (e.g., Grosz 2014). There is a more general debate in the literature whether expressive meanings should better be analyzed as presuppositions (Schlenker 2007), but this debate would go far beyond the scope of this article.
- 2 At the time when this article was written, the Kenyan Eliud Kipchoge was the world record holder in marathon running.

ing the particle features an expressive meaning that the utterance without the particle lacks. Accordingly, the utterance contains two levels of meaning, and one of them – the expressive level – does not match the context given in (1). The two levels of B's utterance in (1) can be illustrated as follows, slightly modifying a representation used by Gutzmann (2019: 25):

- (2) You and I already know that Eliud has won the Olympic marathon. *expressive meaning*  
 Eliud has won the Olympic marathon. *descriptive meaning*

On the other hand, the use of the particle *ja* would be felicitous in a context where it can be assumed that both speaker and addressee already know that Eliud has won the Olympic marathon. A felicitous scenario would be the following:

- (3) A says to B: Have you heard that Eliud will take some time off in the next few weeks?  
 B: *Eliud hat ja den olympischen Marathon gewonnen.*  
 Eliud has PART the Olympic marathon won  
 'Eliud has won the Olympic marathon. (So it's clear that he will need a break.)'

This brief illustration should suffice to see that the concept of expressivity I refer to as 'B-expressivity' distinguishes between truth-conditional contributions (aka descriptive meaning) and use-conditional contributions (aka expressive meaning). Crucially, the notion of expressive meaning, according to B-expressivity, does not only capture non-truth-conditional items such as interjections (*ouch* and *oops*; see above); rather, this concept of expressivity accounts for all items (e.g., also modal particles) whose meaning must be analyzed by referring to their use conditions (a level of meaning distinguished from the truth-conditional level; → *Expressivity and multidimensional semantics* by DANIEL GUTZMANN, Chapter 11 of this volume). After having clarified the broad notion of B-expressivity, let me now turn to the second concept of expressivity that can be found in the literature.

### 31.2.2 Expressivity – narrow sense (N-expressivity)

When we look outside the formal semantics/pragmatics literature, the term expressivity is often used to refer to aspects of language that interface with emotions. That also corresponds to our use of language in everyday life: Situations where someone uses 'expressive' language, for instance, are quite likely contexts where emotions play a key role. Although the formal literature on B-expressivity cited above often uses emotive phenomena to illustrate expressivity (like interjections, expressions like *damn* and *bastard*, etc.), the expression of emotions via language, according to B-expressivity, is just a prime example of non-truth-conditional (here: use-conditional) meaning; the class of expressive items, however, is much bigger. I have illustrated that point above in the context of the German modal particle *ja*, which does not convey any emotion whatsoever in the examples above.

Crucially, the reading of the term expressivity is strikingly different in the non-formal literature, as indicated by the following programmatic statement from a handbook article:

Human beings often have feelings about what they say, about what others

say, or about what happens in the here-and-now environment. These feelings are typically expressed in non-verbal ways (facial expression, gesture, posture, etc.), but, as it turns out, language itself also provides means for expressing such feelings. Language not only has a referential, but also an expressive function. (Foolen 2016: 473)

Expressivity in this reading is thus about the expression of feelings, and it is distinguished from the referential function of language.<sup>3</sup> In what follows, I will call this concept of expressivity ‘expressivity – narrow sense (N-expressivity)’. What this concept shares with the broader concept of B-expressivity is the performative character of expressivity. To see this, let us look at Foolen’s (2012, 2016) useful distinction between the conceptualization of emotions and the expression of emotions. While the former focuses on the referential function of emotion words (*joy, enjoy, happy*) and more complex expressions (figurative speech etc.), the latter explores which linguistic elements convey emotional meaning by their linguistic form. In other words (and as already pointed out in Section 2.1 above), we can of course speak about emotions such as happiness and anger in descriptive terms (*I’m enjoying my time with you vs. I’m angry at you*). However, the expression of emotions, according to Foolen’s (2012, 2016) distinction, is not about what we say, but rather about how we say things. Expressivity, in this interpretation, thus refers to linguistic elements and strategies that convey emotions by their very linguistic form and not by their referential content.

Again, it is not the topic of this article to discuss all the empirical phenomena that would be relevant in this context (this is done in a much more comprehensive way in Foolen’s 2016 handbook article, for instance). However, it is worth noting that this narrow concept of expressivity can also be found in classical speech act theory where the speech act class of expressives is associated with emotive meanings; this is indicated by the following quote (see also Searle 1976):

The *expressive* point is to express feelings and attitudes. In utterances with the expressive point the speaker expresses some psychological attitude about the state of affairs represented by the propositional content. (Searle & Vanderveken 1985: 38; emphasis in the original)

Accordingly, for many scholars working in non-formalist frameworks, expressivity refers to meanings that are somewhat emotive, and expressive items thus do not form a class with other use-conditional phenomena that have nothing to do with emotivity.

Crucially, this notion of N-expressivity can be found in the more recent formal literature as well. For instance, Rett (2021) proposes that expressives like *damn* form one class with emotive markers such as English *alas*, to the exclusion of other use-conditional

3 I hasten to add that in psychology the terms ‘emotion’ and ‘feeling’ are not interchangeable concepts because, according to this branch of research, “[f]eelings differ from emotions in being purely mental, whereas emotions are designed to engage with the world.” (<https://dictionary.apa.org/feeling>). When Foolen (2016) speaks about ‘feelings’ in his linguistic discussion, he does not distinguish between the two concepts. In what follows, I won’t work with this distinction either because I don’t see any relevance for the linguistic phenomena discussed in this chapter.

elements (e.g., appositives) that are often referred to as expressive items in the formal semantics literature. To my mind, this indicates that using the term ‘expressivity’ requires a clarification not only across different linguistic frameworks, but also more and more so within formal linguistics. Over the last twenty years or so, the term expressivity and ‘the expressive dimension’ have become catch-all phrases in theoretical linguistics, and this is why we need to distinguish between the different readings (i.e., B-expressivity and N-expressivity) before we start to explore to what extent expressivity connects to other aspects of human language. With all this in mind, let us now first turn to the connection between information structure and B-expressivity.

### 31.3 INFORMATION STRUCTURE AND B-EXPRESSIVITY

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Similarly to what we have seen in the context of expressivity in Sections 31.2.1 and 31.2.2 above, the notion of ‘information structure’ also heavily depends on empirical orientation and theoretical goals (see Erteschik-Shir 2007, Féry & Ishihara 2016 and Leino 2013 for overviews of different fields and research traditions). Given this situation, I will not attempt to survey the various approaches to this complex issue and mention all relevant empirical observations. Nevertheless, we have to introduce some core notions that can serve as a basis for our discussion about the connections between information structure and B-expressivity. Consider the following sentences, where capital letters indicate main stress:

- (4) a. [The RUNNER]<sub>F</sub> won the marathon.  
 b. The runner won [the MARATHON]<sub>F</sub>.  
 c. The runner [WON]<sub>F</sub> the marathon.

As (4) illustrates, in addition to the level of propositional structure, which, roughly speaking, encodes the information of ‘who did what to whom’, there is also the level of information structure, encoding the fact that, as Halliday (1967: 242) defines it,

the speaker maps on to the clause, as defined in sentence structure, a structure of a different kind in terms of information units, by which he organizes the discourse into message blocks and specifies the status of the components of the message as new information or otherwise.

At the level of meaning, while the propositional structures in (4a)–(4c) are identical, the element interpreted as providing new information (the ‘focus’/‘F’) is different: in (4a), the element interpreted in this way is *the runner*, in (4b) it is *the marathon*, and in (4c) it is the verb *won*.

The distinction between these two meaning components is well established in linguistics, regardless of theoretical orientation and framework. In particular, the grammar of natural languages expresses two domains of semantic interpretation: the broad component of argumental and event-related semantics and a variety of phenomena that can

be subsumed under the notion of discourse-related meaning. The notion of information structure and interpretations like ‘focus’ clearly belong to the domain of discourse-related semantics. The question addressed by the present chapter now is what this domain of meaning has to do with expressivity. In this section, we address this question by looking at the relevance for B-expressivity.

Intuitively, it is clear that discourse meanings such as old/given or new information yield matches in a concrete context and thus have a use-conditional component (see Section 31.2.1 above). This has been spelled out most notably by Kratzer (2004) and, more recently, by Kratzer & Selkirk (2020). The general idea of this line of research is that core notions of information structure (such as ‘focusing/backgrounding’ and ‘givenness’) are in fact expressive meanings in the sense of B-expressivity. Let us look at the details of this approach.

In a short response paper to Geurts & van der Sandt’s (2004) programmatic article on focus interpretation, Kratzer (2004) has suggested that basic information structural features resemble the behavior of modal particles like German *ja* (see examples above). Kratzer’s (2004) paper is often cited in the context of how to model the readings of (German) modal particles, but less so in the context of the main claim of her piece, which is: When we look at information structure, we are essentially looking at expressive meanings. Observe the following example (see Kratzer 2004: 124–126):

(5) [ELIUD]<sub>F</sub> won the Olympic marathon.

The utterance in (5) would be odd in a context such as (6a), where an utterance containing a focused constituent [ELIUD]<sub>F</sub> would not match the context. However, the same utterance with the same focusing of *Eliud* would be perfectly fine if the context is slightly changed as in (6b):

- (6) a. A: Which race did Eliud win?  
       B: #[ELIUD]<sub>F</sub> won the Olympic marathon.  
       b. A: When did Mo win the Olympic Marathon?  
       B: [ELIUD]<sub>F</sub> won the Olympic Marathon!

Kratzer’s (2004) point is that the discourse (mis)matches we observe in (6) are very similar to what we see in the context of modal particles like German *ja*, *doch*, etc. Observe the following patterns:

- (7) a. A: Which race did Eliud win?  
       B: #*Eliud hat ja den olympischen Marathon gewonnen.*  
           Eliud has PART the Olympic marathon won  
           ‘Eliud has won the Olympic marathon.’  
       b. A: Which race did Eliud win?  
       B: *Eliud hat doch den olympischen Marathon gewonnen!*  
           Eliud has PART the Olympic marathon won  
           ‘Eliud has won the Olympic marathon.’

In (7a), B’s utterance is infelicitous because *ja* in that utterance indicates that both A and

B are already be aware of the fact that Eliud has won the Olympic marathon – but this does not match the current context in which A is expressing their ignorance about this fact by explicitly asking about which race Eliud has won. The situation is different in (7b). Here, B uses the modal particle *doch*, which has a different meaning than *ja* insofar as this particle indicates that A should already know that Eliud has won the Olympic marathon, and speaker B is reminding A of this fact. In such a context, B's reaction to A's question matches the current context and is a felicitous use of a German modal particle. We thus see that the use of particular modal particles has to match the respective contexts, and this is exactly what we also observe for different focusing/backgrounding configurations in (6).

If we take the parallel between focusing/backgrounding in the domain of information structure and the use of different modal particles seriously, so Kratzer's (2004) argument goes, common notions of information structure such as focus and givenness are in fact use-conditional items and thus, according to the notion of B-expressivity, expressive meanings. We can illustrate this by using our two-level representation again and postulating that the use-conditional meaning of the focus in (5) and (6) can be paraphrased as a corrective discourse relation (see Repp 2016: 278–279 for a detailed account and Kratzer & Selkirk 2020: 33–34 for a different proposal):

- |     |   |                            |
|-----|---|----------------------------|
| (8) | You wrongly presuppose that someone other<br>than Eliud won the Olympic marathon. | <i>expressive meaning</i>  |
|     | Eliud has won the Olympic marathon.   | <i>descriptive meaning</i> |

The claim that information structure and use-conditional items such as modal particles operate at the same level of meaning (namely the expressive level) is further supported by cross-linguistic considerations. For instance, it has been argued that Romance languages such as Italian can use marked word order to express the same meanings that modal particles convey in languages like German (Cardinaletti 2015, Trotzke, Bidese & Moroni 2020).<sup>4</sup> Look at the following examples from Cardinaletti (2015: 17):<sup>5</sup>

- (9) [Speaker and hearer are both well aware that the hearer has been to Paris before, and the speaker wants to make this fact salient in order to follow up on it:]
- Du warst ja/doch schon in Paris.*  
 YOU WERE PART/PART already in Paris  
 'You've (ja/doch) already been to Paris.'

4 Note, however, that both linguistic strategies (modal particles and marked word order) are nevertheless optional (i.e., not obligatory) for expressing the relevant B-expressivity interpretations. That is, both strategies can be replaced by phonological means only. We have seen that in examples (5)–(7) above for modal particles, and we will now observe that for Italian marked word order as well.

5 I present the examples exactly as they are presented in Cardinaletti's (2015) paper. However, Ingo Feldhausen (p.c.) pointed out to me that there are other ways to present analogous examples in the literature. For instance, the comma in (9'c), indicating prosodic detachment of the prepositional phrase, is not used by Samek-Lodovici (2015: 26) in similar cases, suggesting no prosodic detachment from the preceding syntactic configuration. Since my argumentation does not hinge on this difference, I maintain Cardinaletti's (2015) presentation.

- (9') a. *A Parigi, ci sei già stato.* Left Dislocation  
in Paris, there you.have already been  
'You've already been to Paris.'
- b. *Ci sei già stato, a Parigi.* Right Dislocation  
there you.have already been, in Paris
- c. *Sei già STA::to, a Parigi.* Marginalization
- d. *#Sei già stato a Parigi.* SVO

Cardinaletti (2015) argues that in a context like (9), the Italian counterparts of the German particles *ja* and *doch* would probably involve marked word orders like in (9'a,b), or the locative constituent [*a Parigi*] would at least be prosodically marginalized by pronouncing the preceding element of the clause emphatically (i.e., adding extra-length on the stressed syllable). Crucially, a completely unmarked construction such as (9'd) would not match the given context in (9). Cardinaletti's (2015) data contain two interesting facts for our discussion. First, the relevant use-conditional meanings in some languages are conveyed by lexical means (German), while in other languages the very same interpretations can be expressed via syntactic and/or phonological marking (Italian). This supports the general claim by Kratzer (2004) that not only items like modal particles, but also core information structural notions are expressive meanings in the sense of B-expressivity. Second, the syntactic strategies in Italian exemplified above seem to be optional in the context of yielding a reading that matches the context; the same reading can also be achieved via phonology only (9'c). This latter point will be of interest in the next section, where we will ask whether there are also cases where marked word order is not really optional, but actually strongly preferred for conveying particular meaning effects.

### 3.1.4 INFORMATION STRUCTURE AND N-EXPRESSIVITY

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In the last section, we have seen that if we adopt the notion of B-expressivity, then the most common concepts of information structure (i.e., focusing/backgrounding and givenness) can in fact be considered expressive meanings. The question addressed by the following discussion now is whether we also find phenomena of N-expressivity among those more general types of use-conditional meaning.

In what follows, I would like to focus on the most prominent and obvious example in this domain: so-called 'mirative' or 'emphatic' focus. Krifka (1995: 227) has argued that "[t]he function of emphatic focus is to indicate that the proposition that is actually asserted is *prima facie* a particularly unlikely one with respect to the alternatives."<sup>6</sup> Put succinctly, he argues that this meaning effect represents a general type of focus that is made explicit with particles like *even* or idiomatic constructions like *of all persons* (examples by Krifka 1995: 227; see also Zeevat 2013 on mirative particles):

6 This quote by Krifka (1995) is in line with other subsequent discussions of emphatic focus in the literature because it mentions both the discourse-unexpectedness and the fact that focushood (i.e., the role of the alternatives) still is a necessary condition for this type of highlighting (see, e.g., Hartmann & Zimmermann 2007).

- (10) a. Mary knows every place on earth. She has (even) been to BORneo!  
 b. People expected that John would win the election, followed by Bill, with Mary as a distant third. But then the election was won by MARY (of all persons)!

But why should such a scalar focus type be relevant to N-expressivity (i.e., to the use-conditional expression of emotions)? The reason for why the scalar reading of unlikelihood in (10) could be relevant in the context of expressing emotions is extensively addressed in the literature on so-called mirative focus (Cruschina 2012, 2019, 2021 and more literature below). Building on typological work by DeLancey (1997), mirativity is often defined in the literature by referring to the emotion surprise by highlighting “that the primary meaning of mirativity is to register the surprise of the speaker, and that the other meanings commonly associated with mirativity, such as unexpectedness, new information etc., are entailed by surprise” (Peterson 2013: 3–4).<sup>7</sup>

Krifka’s (1995) examples in (10) express the surprise component via phonological means only (see also Bocci 2013, Rett & Sturman 2021 on mirative prosody). However, the discussion about mirative focus in the literature centers on word order changes that involve the left periphery of the clause (i.e., mirative fronting). Observe the following Italian example by Bianchi, Bocci & Cruschina (2015: 6):

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

Concerning marked word order choices like (11a), the literature claims that they convey a mirative effect and thus express the surprise of the speaker. This type of focus fronting has also been proposed for many other languages. For example, Authier & Haegeman (2019: 7–9) have proposed it for French (12), and Trotzke (2017a), building on Frey’s (2010) work, for German (13):<sup>8</sup>

- (12) a. *Même ses caleçons on lui a volé.*  
 even his underwear they him have stolen  
 ‘Even his underwear they stole from him.’  
 b. *Trois heures (qu’)elle a passé chez son avocat.*  
 three hours (that)-she had spent at her lawyer  
 ‘Three hours she spent at her lawyer’s office.’<sup>9</sup>

7 Recent proposals in favor of mirativity as a linguistic category abound in the literature (Aikhenvald 2012, DeLancey 2012, Peterson 2013, Cruschina & Bianchi 2021).

8 Other examples are Spanish (Cruschina 2019) and, using a different terminology, Bangla (Bayer & Dasgupta 2016), Bavarian (Bayer 2001), Hausa (Hartmann & Zimmermann 2007), and Latin (Danckaert 2012). Let me also add that Destruel, Beaver & Coppock (2019), based on their experimental work, have recently speculated that English clefts are preferably used in mirative contexts as well.

9 This French example additionally contains a special occurrence of the complementizer element *que*, and

- (13) A: How did Eliud do in the race?  
 B: a. *ABGEBROCHEN hat er das Rennen!*  
       dropped-out     has he the race  
    b. *Er hat das Rennen ABGEBROCHEN!*  
       he has the race     dropped-out  
       ‘He has dropped out of the race.’

Let us briefly discuss the German example in (13). Both the marked (13a) and unmarked word order (13b) can emphasize the fact that Eliud dropped out of the race as remarkable and unexpected, provided the common ground of speaker and hearer that Eliud Kipchoge, at the time of utterance, is the most steady and confident marathon runner of all time.

However, only the syntactic configuration in (13a) obligatory features the relevant phonology. In other words, it is not possible in German to front the predicate *abgebrochen* without putting non-structural stress on that constituent (i.e., a stress that is different from the default structural accent/phrase stress in the sense of Selkirk 1995 and many others). By contrast, the syntax given in (13b) could also appear with structural accent on the predicate, in which case it would ‘only’ be a regular answer to the question posed by A (i.e., without conveying any emotion such as surprise). In a broader cognitive perspective, one could say that the marked word order plus the obligatory marked phonology in (13a) indicates to the addressee that a non-default interpretation of the utterance is needed (Skopeteas & Fanselow 2011, Bergen, Goodman & Levy 2012). More specifically, since a neutral answer in the context given in (13) could also be realized by the in-situ word order (13b), the addressee expects that there is an additional non-default meaning conveyed by (13a).

Crucially, it is important to note that this non-default meaning does not have to be mirativity, and this is why ‘mirative fronting’ might be a misnomer. That is, the effect of those frontings has to be conceptualized much broader. Look at the following pattern:

- (14) [Everyone knows that Eliud is by far the world’s most successful marathon runner.]  
 A: How did Eliud do in the race?  
 B: a. *GEWONNEN hat er!*  
       won             has he  
    b. *Er hat GEWONNEN!*  
       he has won  
       ‘He has won. (What else?)’

(14) illustrates that a similar fronting of a predicate as in (13) could also occur in a context where the proposition is not the least likely alternative and thus surprising, but rather the most likely alternative. Specifically, the marked word order in (14a) could fit smoothly in a context where the speaker continues by saying: ‘What else?’ or ‘Why are you asking so stupidly?’ In this use, the marked word order would be chosen to express that the answer

this strategy is known to occur in exclamative contexts in Romance (Trotzke & Villalba 2021).

could be expected (that Eliud won the race is what should be most expected). Since in this case A's question forces B to state the obvious, this use often has a reprimand character. Again, this interpretive effect could also be achieved by placing heavy and non-structural stress on the predicate in the unmarked word order in (14b). However, as soon as the predicate is fronted, this phonological cue for a non-standard interpretation obligatorily follows, while it is not obligatory in the in-situ version in (14b).

Given the examples above, we can conclude that not only surprise, but also negative emotions such as disapproval and reprimand can be conveyed by marked word order options.<sup>10</sup> Given this more general character of those marked configurations, in my work I refer to such meaning effects as 'emphasis for intensity' (Trotzke 2017b), where intensification refers to the component that alternatives in the readings above are always ordered on a scale in a way that the intensified element points to an (extreme) end of that scale. Like in many other linguistic domains, intensification goes along with adding emotivity to the relevant linguistic configuration (see Beltrama & Trotzke 2019 and → *Expressivity and intensification* by ULRIKE STANGE-HUNSDÖRFER, Chapter 26 of this volume).

Crucially now, all the interpretive effects of marked word order indicated above are N-expressivity phenomena, but at the same time (because N-expressivity is a subtype of B-expressivity) they pass some general tests for B-expressivity content and can thus be analyzed as operating at a use-conditional level of meaning. There are many ways to show this (see Potts 2007a for some general tests and Frey 2010, Trotzke 2017b for the application to emphatic frontings). In the context of this article, let me only point out that in those configurations the descriptive and the expressive level of the utterance can be targeted separately in a discourse, and also that the expressive content, in contrast to the descriptive content, cannot be denied:

- (13') A: How did Eliud do in the race?  
 B: *ABGEBROCHEN* hat er das Rennen!  
 dropped-out has he the race  
 'He has dropped out of the race.'  
 A: No, he has finished the race first! *descriptive meaning*  
 A': Ok, but why are you surprised?/  
 # No, you are not surprised! *expressive meaning*

The discussion above indicates that we also find phenomena of N-expressivity (surprise, disapproval, reprimand, etc.) among the more general connections between information structure and B-expressivity sketched in Section 31.3. One possible hypothesis would now be that all kinds of information structural meanings (incl. emotive ones such as mirative focus) in accent-marking intonation languages can potentially be triggered by marked phonology only,<sup>11</sup> but if a marked word order is chosen, then the meaning effect

10 This is also supported by Krifka's (2008: 259) notion of emphatic focus, which not only covers cases where marked word order and/or marked phonology conveys an ordering on a scale of likelihood, but also cases such as strong polarity items (his example: [*Wild HORses*]<sub>F</sub> wouldn't drag me there), which are certainly not typical cases of mirativity either.

11 I'm aware that this assumption is not uncontroversial even for the restricted set of European languages the present chapter focuses on. For instance, some have argued for (varieties of) European Spanish that

is certainly one that interfaces with emotions.

Such a hypothesis suggests itself in the context of German. Experimental work by [Trotzke \(2017a\)](#) shows that German native speakers clearly prefer the in-situ word order options in a variety of different information structural contexts – except for mirative contexts. Those emotional contexts are the only ones where the fronting is judged as good as the in-situ versions. The reason for this might be one that has already been indicated in Section 3.1.3 above: German has lexical means (i.e., modal particles) which can express a variety of information structural B-expressivity meanings that would involve marked word order choices in other languages (like Italian, see above). In German, marked word order is thus not really needed for expressing most of the common information structural meanings, and if fronting is used at all, it is preferably used for N-expressivity interpretations like mirativity. This seems to hold for further Germanic languages like English (modulo syntactic differences in this particular language of course). On the basis of their experiments, [Destrueel, Beaver & Coppock \(2019\)](#) have recently hypothesized that English clefts are preferably used in N-expressivity contexts (following the literature, they restrict their discussion to mirativity).

Needless to say, the hypothesis that fronting patterns always involve N-expressivity readings faces some problems when we look beyond Germanic languages. Let us stick with Italian because this language is famous for its various fronting strategies, and we have already introduced some basics in Section 3.1.3 above. Look at the fronting pattern by [Bianchi et al. \(2015: 6\)](#) again, repeated here for convenience:

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

While the context in this example makes clear that a mirative interpretation is intended, [Bianchi, Bocci & Cruschina \(2016\)](#) have elaborated on this in more recent work and speak of 'evaluative implicatures', which are basically conventional implicatures (in the sense of [Potts 2007a](#)) conveying a broader interpretation. Crucially, however, part of their research agenda has also been experimental work in which they were able to show that in addition to mirative contexts, corrective focus contexts are the preferred contexts such focus frontings can occur in. Coming back to the hypothesis that frontings always involve

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marked word order such as focus fronting is preferred for realizing information focus (e.g., [Feldhausen & del Mar Vanrell 2015](#), [Jiménez-Fernández 2015](#)). However, note that information foci are commonly presented (and tested) in terms of answers to information-seeking *wh*-questions (A: *What did you buy?* B: *I bought [BANANAS]<sub>F</sub>*). Regarding those patterns and studies on Spanish, [Cruschina \(2019\)](#) has recently pointed out the general methodological concern that "[i]t is difficult to accurately detect or control for the presence or absence of mirative nuances in an answer to a *wh*-question that involves F[ocus]F[ronting]" ([Cruschina 2019: 133](#)) – and I concur because unexpected information is also always new information, and in the end it is an empirical question whether both can be teased apart accurately in experimental studies. In other words, one can look at previous patterns presented in the literature differently, once we hypothesize something along the lines suggested in the present chapter.

N-expressivity readings, it is hard to see why a corrective focus such as (16) should involve emotivity (example from Bianchi, Bocci & Cruschina 2015: 5):

- (16) A: *Hanno invitato Marina.*  
 have.3PL invited Marina  
 ‘They invited Marina.’  
 B: *Giulia hanno invitato (, non Marina).*  
 Giulia have.3PL invited not Marina  
 ‘They invited Giulia (, not Marina).’  
 B’: *Hanno invitato Giulia (, non Marina).*  
 have.3PL invited Giulia not Marina

While correction could also be expressed by the in-situ option (B’), the empirical work by Bianchi, Bocci & Cruschina (2015) shows that the fronting is clearly preferred in such contexts (just as it is preferred in mirative contexts) – and this differs from the results obtained by Trotzke (2017a) in a similar study on German. Let us thus assume that in Italian (and possibly further Romance languages), mirative and corrective contexts prefer focus fronting over the in-situ realization by mirative or corrective prosody only. Although the prosody (and further properties) of mirative and corrective focus may be quite different (see Bianchi, Bocci & Cruschina 2016 for experimental evidence), the two categories seem to form one class when we only consider their potential to trigger focus fronting. Why is that so?

While Bianchi, Bocci & Cruschina (2016) argue that the two focus categories are grammatically distinct phenomena, Zimmermann (2008) provides a framework for a unified analysis in terms of Common Ground update and a notion of contrastive focus where contrastive foci do not mark a contrast between focus alternatives, but rather mark a contrast between the asserted content and the (assumed) expectations of the addressee (see also Hartmann & Zimmermann 2007). In particular, the speaker uses both mirative and corrective focus strategies to mark some propositional content as unlikely to be expected by the addressee – and those strategies are “preparing the scene for a swifter update of the common ground” (Zimmermann 2008: 358) between speaker and addressee.

Given the central role of unexpectedness in the account by Zimmermann (2008) in his discussion of contrastive focus, let me add another aspect that is based on a very intuitive and quite superficial observation and that focuses on speaker expectation and not, as in Zimmermann’s (2008) account, on the expectations of the addressee. In many overview articles of different types of information structural meanings, the examples illustrating corrective focus are presented as exclamation statements (see, e.g., Krifka 2008, Repp 2016). Look at the two following examples by Repp (2016), illustrating two different discourse types with corrective focus:

- (17) a. A: When did Pete clean up?  
 B: [JOHN]<sub>F</sub> cleaned up!  
 b. A: It’s raining outside.  
 B: [The sun is shining!]<sub>F</sub> Look out of the window!

If we take exclamations to be expressions of an attitude of emotion (Trotzke & Gianakidou 2024), or at the very least expressive speech acts in the sense of Searle (1976), then we can hypothesize that corrective statements like the ones given in (17) are indeed not just about substituting a discourse segment with an alternative and conveying that a proposition expressed in the preceding discourse is false. Rather, the speaker typically also expresses that this falsehood is shocking (because highly unexpected) to him, or at least that they cannot understand and is puzzled by the background assumptions of the preceding statement – and indeed many of the examples of corrective focus in the literature feature an emotive flavor that could be characterized as indignation on the part of the speaker (see also examples (17) above). In other words, corrective focus is not in the first place expressing that the addressee is wrong, but rather *how* wrong the addressee is (and how the speakers feel about that).

In this context, it is interesting that Repp (2016) uses the category of ‘degree of contrastiveness’ for defining a variety of information structural notions, and she claims that corrective focus expresses the highest degree of contrast. It might be this intensification component that corrective statements share with the scalar component of mirativity readings and that often produces emotivity of corrective statements. One hypothesis would be that in languages where corrective focus can as well be expressed without fronting (like in German, but also in Italian, with different preferences as discussed above), the fronting is not due to the mere substitution of an alternative (as also observed by Zimmermann 2008 above), but rather is motivated by N-expressivity and thus the speaker’s expression of an emotion towards the current discourse and the relevant background assumptions. If this is on the right track, then we would also have to rethink prominent cases like Hungarian in this context (e.g., Horvath 2010). Repp (2016) has argued that in Hungarian too, the discourse relation of corrective focus may be relevant because it often goes along with exhaustiveness. To my mind, rethinking the role that N-expressivity might play for all those syntactic processes is a very promising and still underresearched path for future work interested in the interface between language and emotion.

### 3.1.5 CONCLUDING REMARKS

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This chapter has explored various connections that exist between expressivity and a set of discourse meanings commonly summarized in the literature as the domain of information structure. Since both empirical domains are rather broad, in Section 3.1.2 I have first tried to organize the discussion by proposing a distinction between ‘expressivity – broad sense (B-expressivity)’ and ‘expressivity – narrow sense (N-expressivity)’. According to this distinction, N-expressivity covers all use-conditional phenomena that also convey emotive meanings. B-expressivity, on the other hand, includes N-expressivity plus use-conditional meanings in general, probably the more common reading of ‘expressivity’ in the formal semantics/pragmatics literature.

Basen on the distinction between B-expressivity and N-expressivity, Section 3.1.3 has discussed to what extent general information structural notions (such as focusing/back-

grounding and givenness) can be accounted for in terms of B-expressivity. In this context, I have sketched a proposal that postulates that there is no such thing as information structure proper, and the most common information structural concepts are in fact expressive meanings. In Section 31.4, I then turned to the concept of N-expressivity and how it connects to what has traditionally been accounted for in information structural terms. In this domain, I have focused on marked word order involving the clausal periphery in European languages, and I have argued that N-expressivity, in contrast to B-expressivity, is not merely conveyed via prosodic means, but typically via marked word order choices. My discussion suggested that N-expressivity (and thus emotivity) in fact motivates many of the marked fronting constructions that are commonly accounted for in information structural terms, including *prima facie* emotionally unsuspecting cases like corrective focus. Since emotive concepts such as mirativity pattern together with corrective focus in many respects (at least for the limited set of languages sketched in this article), this expressive perspective on marked word order seems worth further exploring.

Overall, this article has shown – both for B-expressivity and for N-expressivity– that large parts of what is commonly known as the field of information structure can actually be reconceptualized as the study of expressivity across grammar. In other words, our understanding of the domain of information structure is only partial as long as the connections and overlaps with the expressive dimension of language are not taken into account. Theoretical linguistics has forged excellent tools to approach this dimension of human languages. The examples of marked and therefore also unexpected word order are surely violating processing expectations that vast experience with unmarked word order has created in speakers. Therefore, a promising perspective for future cross-fertilization is to connect theoretical insights to the psycholinguistic literature modeling discourse and processing expectations, which is already a vibrant field of research in the domain of information structure – but less so in the domain of expressive language. Last but not least, new digital ways to communicate with each other using emoji items once again strengthen the starting hypothesis of this chapter, namely that information structural and emotive cues are closely intertwined categories (Kaiser 2024; → *Expressivity and emojis* by PATRICK G. GROSZ, Chapter 29 of this volume).

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