The interaction between scalar particles and illocutionary force in imperatives

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1 Illocutionary restrictions on particle elements

In many languages, focus particles double as so-called discourse particles (also: modal particles), which are also focus-sensitive and often diachronically derived from focus particles (Zimmermann 2011). Discourse particles are richly attested in Germanic, Slavic, and South East Asian languages (Biberauer et al. 2014, Grosz 2016b, Zimmermann 2011). It is controversial whether discourse particles are functionally and/or lexically articulated in Romance (e.g., Cardinaletti 2015, Manzini 2015).

It is well known that the occurrence of discourse particles is restricted by the illocutionary potential of the clauses that contain them. Since the particles make a semantic contribution by codetermining the illocutionary force of an utterance, they are geared to certain clause types (declarative, polar interrogative, *wh*-interrogative, exclamative, imperative, etc.) and arise mainly in root clauses. Observe the following contrast, showing that the particle *denn* (lit. 'then') can only occur in interrogatives (1a,b) and not, for instance, in imperatives (1c):

(1) a. Wo fährt er denn hin?
   where travels he PART to
   'Where is he traveling to? (I am wondering.)'

 b. Ist er denn nach Berlin gefahren?
   is he PART to Berlin traveled
   'Did he travel to Berlin? (I am wondering.)'

 c. * Fahr denn nach Berlin!
   travel PART to Berlin
   'Travel to Berlin!'

The particle *denn* expresses an attitude of wondering and being concerned on the part of the speaker (for semantic details on *denn*, see, e.g., recent work by Csipak & Zobel 2014). According to the literature, one component of expressing this attitude is that *denn* indicates that the reason for posing the question can be found in the current discourse context. To illustrate, let us look at König's (1977) famous example ('#' indicates systematic pragmatic deviance):

(2) A weckt B und fragt ('A wakes up B and asks')

   # Wie spät ist es denn?

     how late is it PART

     'What time is it? (I am wondering.)'

The example in (2) illustrates that questions featuring *denn* are infelicitous when the addressee lacks a context in which to interpret the question; in other words, the particle *denn* is pragmatically deviant in out-of-the-blue questions. This already indicates that discourse particles are not only confined to different clause types and their general illocutionary potential. Rather, the use of discourse particles is also restricted to certain illocutionary subtypes within the same clause type.

    One illustrative case that brings out this property even more clearly and that will play a central role in this paper is the (in)compatibility of particle elements with different types of imperative speech acts. There is some work on the felicity of particle elements in imperatives in the domain of discourse particles (see Schwager 2010, Grosz 2011a on German, and Davis 2009 on Japanese). Consider the following examples featuring the German discourse particles *ruhig* (lit. 'quiet') and *bloß* (lit. 'only'); paraphrases of the particles' meaning contributions are adopted from Schwager (2010) and Grosz (2011a):

(3) a. Fahr ruhig nach Berlin! Keine Sorge!

      travel PART to   Berlin no   worries

      'Just travel to Berlin, no worries!'

   b. # Hörst Du? Fahr ruhig nach Berlin! Sonst   wirst   Du bestraft!

      hear   you travel PART to   Berlin or.else will.be you punished

      'Do you hear me? Travel to Berlin! Or else you'll be punished.'

(4)   a. # Fahr bloß nach Berlin! Keine Sorge!

     b.   Hörst Du? Fahr bloß nach Berlin! Sonst wirst Du bestraft!

While the particle *ruhig* can be used in PERMISSIONS or RECOMMENDATIONS (3a), it is infelicitous in COMMANDS or WARNINGS (3b). The reverse holds for the particle *bloß*, as illustrated in (4).

     As already mentioned at the outset of this section, many discourse particles (e.g., *bloß* above) have homophonous counterparts in the inventory of focus particles. However, focus particles, in contrast to discourse particles, do not display illocutionary restrictions like the ones we illustrated above for discourse particles (e.g., König 1991, Beck 2016). However, it is fair to say that no systematic attention has been paid so far to the occurrence of focus particles in different kinds of speech acts (Iatridou & Tatevosov 2016 is a recent exception). In what follows, I will focus on the use of focus particles in imperatives and deal with the new observation that the occurrence of scalar focus particles associated with so-called emphatic focus is subject to constraints at the level of illocutionary force. Let us first turn to the English particle *even*.

2 Imperatives and the particle *even*

The literature on *even* is one of the richest in the field of research on focus particles (for comprehensive overviews, see Crnič 2011, Giannakidou 2007). However, the following observation has not been discussed so far: the particle *even*, in contrast to other focus particles (see the examples below), seems to be pragmatically deviant in imperative speech acts like the following (capitals indicate focal stress):

(5) # Come even to the JAZZ event! I know you don't like jazz, but all concert events at
     Davies Symphony Hall are great!

But why is that the case? Note that in principle all other kinds of clause types and speech acts, respectively, are compatible with the reading of *even* intended in (5):

(6)   a.   Keith even played *Over the RAINbow*!

b. Why are you coming even to the JAZZ event? I know you don't like any sophisticated music, and Jazz can be very experimental.

c. Has Keith even played *Over the RAINbow*? He hasn't played that song for years!

d. (My,) What beautiful music Keith even composes NOwadays!

Before we look at the presuppositions of both the particle *even* and the imperative in (5) in more detail, let me already highlight at this point that the data given above suggest that the incompatibility of *even* with imperatives is not due to a general factuality/evidentiality implicature associated with *even*.

To see this, consider (6c) again. The use of *even* in this example implicates that the speaker has evidence that Keith played the song *Over the Rainbow*.[1] It is well known that factual/evidential elements cannot occur in imperatives because they express that the speaker has evidence for the prejacent proposition *p*, while, at the same time, the speaker wants *p* to come about. Observe, for example, the case of evaluative adverbs:

(7) # Come surprisingly to the JAZZ event!

However, such factual/evidential elements are claimed to be ruled out also in questions (e.g., Ernst 2007). Here is the classical example by Bellert (1977: 343):[2]

(8) # Has John surprisingly arrived?

Accordingly, there must be another reason for why *even* is pragmatically deviant only in imperatives.

To approach an explanation, let us now turn to the two presuppositions of *even* in (5). First, we can disregard the hypothesis that the oddness of (5) is due to the existential presupposition

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[1] Since I consider the following question coherent, I claim that the prejacent proposition is implicated by the use of *even* and not presupposed:
    (i) Has Keith even played *Over the RAINbow*? Or did I mishear?
[2] I am aware of the fact that there is some recent discussion on the acceptability of such examples, especially in Romance languages (Mayol & Castroviejo 2013). However, as for the languages to be discussed in this paper (English and German), I take examples such as (8) to constitute a quite robust pattern. Further cross-linguistic verification of my claims must await future research.

triggered by *even* (Karttunen & Peters 1979). This presupposition requires that at least one focus alternative in the domain of *even* that is not identical to the alternative expressed by the original sentence holds true.[3]

(9) a. Keith even played *Over the RAINbow*!

 b. $\exists x [x \neq \text{Over the Rainbow} \wedge C(x) \wedge \text{played (Keith, x)}]$

The existence of alternatives is the contribution of focus (Rooth 1985). Since the presupposition in (9b) also holds for other additive particles like *also*, we can exclude that the deviance of (5) is caused by (9b). Imperatives with particles like *also* are perfectly acceptable:

(10) Come also to the JAZZ event!

The second presupposition triggered by *even*, also mentioned in the seminal work by Karttunen & Peters (1979), distinguishes *even* from other additive focus particles:

(11) a. Keith even played *Over the RAINbow*!

 b. $\forall x [x \neq \textit{Over the Rainbow} \rightarrow \text{likelihood (Keith playing x)} > \text{likelihood (Keith}$
 playing *Over the Rainbow*)]

According to the scalar presupposition in (11b), the value of the *even* phrase is to be placed at the lowest end on a scale of likelihood. In other words, the *even* phrase picks out the least likely individual from the given set of focus alternatives. Note that other readings of *even* ([12]; 'weak' *even*) also feature a scalar presupposition (see Crnič 2011 on weak *even*). However, we observe that this reading is compatible with imperatives:

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[3] I should point out that this presupposition is not uncontroversial. For instance, Collins (2016: 7) gives the following example in a recent paper: 'A dog food company is developing a new dog food. The product is ready for testing. No dog has ever tasted it before. Now, I have a dog named Rover. I decide to feed the new product to him to see if he likes it. When I feed it to him, he gobbles it up. This is strange to me, since Rover is very picky. He doesn't like any food at all really.' Collins points out that in this situation one could say:
    (i) I predict this dog food will be very popular. Even Rover likes it.
There is no existential presupposition in this case because no dog other than Rover has ever eaten this dog food. However, since the reasoning of this paper does not hinge on this particular presupposition, I will disregard these complications.

(12)   Come even to ONE event! I know you will probably not make it to all events of the jazz festival, but it would be great if you would come at least once!

Crucially, in contrast to *even* in (5), *even* in (12) does not express that the value of the *even* phrase is to be placed at the lowest end on a scale of likelihood. The reverse is true: *even* in (12) presupposes that the prejacent is to be placed at the upper end on a scale of likelihood. That is, the proposition that the addressee comes at least to one jazz event is not the least likely, but rather the most likely proposition, given the alternatives that he would come to some or all events of the jazz festival. This meaning contribution can be summarized as in (13):

(13) $\exists n \, [n \neq one \, \wedge \, \text{Hearer goes to n events}] \, \wedge \, \forall n \, [n \neq one \rightarrow \text{likelihood (Hearer goes to one event)} > \text{likelihood (Hearer goes to n events)}]$

All in all, the felicity of other scalar readings of *even* suggests that we can disregard the hypothesis that scalarity per se excludes *even* in contexts such as (5). Rather, it is the unlikelihood presupposition that seems to be at odds with imperative speech acts like (5).

   With the presuppositions of *even* in place, let us now turn to contexts where *even* is perfectly acceptable in imperative speech acts. Look at the following case, one possible use of *even* in imperatives:

(14) A: I'll try to get a ticket at the box office tonight. I think I'll go to Davies Symphony Hall one hour before the performance.

   B: Be there even TWO hours before it starts! Keith Jarrett is famous – a lot of people will ask for remaining tickets!

In (14), Speaker B is correcting Speaker A's expectations that he has regarding purchasing a ticket.[4] In an advice use of imperatives such as (14B), the speaker is an epistemic authority on

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[4] Note that one could argue that *even* in (14B) operates on a specific scale of numbers only and is thus not a propositional operator as in our key example (5). Ever since Jacobs' (1983) discussion, this is a hotly debated issue. However, one could also come up with sequences like *Go to the FOLK event! Go to the ROCK event! Go even to the JAZZ event!* to illustrate that *even* can be used in imperatives, given the appropriate information structural conditions (to be elaborated in the next paragraphs below). The choice of example in (14) is motivated by my impression that this information structural dependence of *even* is best exemplified by narrow-focus constellations as in (14).

ways to achieve a certain goal, and, in our case, Speaker B knows perfectly well that one has to be two hours earlier at the venue to get some tickets. Accordingly, Speaker B does not rank this fact as particularly unlikely or surprising to himself (actually, the opposite is true). The reason for using *even* in advices like (14) is that the speaker updates the belief state of the addressee by providing a particular information and that this information is taken to be surprising to the addressee only.

Crucially, *even* can only be used in imperatives when the goal to be achieved by acting according to the imperative is in the interest of/is preferred by the hearer. Consider the following example:

(15) Child: OK, mom. If you really insist, I'll clean one corner of my room today.

Mother: # Clean up even {TWO/the other three} corners of your room! Your grandma is going to visit us tomorrow, and I don't want her to see this mess!

We thus see that the felicity of *even* in imperatives depends on discourse-anaphoric factors, insofar as (i) the speaker needs to correct the belief state of the addressee and (ii) the goal to be achieved by carrying out the required action is in the interest of the hearer. Note that these pragmatic restrictions are not only due to the additive semantics of the particle in examples like (14). For instance, the additive particle *also* is perfectly acceptable in imperatives even if the goal of the imperative goes against the preferences of the hearer:

(16) Child: OK, mom. If you really insist, I'll clean one corner of my room today.

Mother: Clean up also the other three corners of your room! Your grandma is going to visit us tomorrow, and I don't want her to see this mess!

This indicates that not additivity, but rather the scalar unlikelihood presupposition (which is not expressed by particles like *also*) is the reason for the pragmatic restrictions illustrated above.

To be sure, the additivity of the particle *even* is a crucial component of the felicity of examples such as (14). By means of this semantic component, the speaker adds to what is already assumed by the hearer (e.g., 'To get some tickets, it is necessary to be at Davies Symphony Hall one hour before the show'). In other words, the imperative with *even* in (14) is contradicting only the false belief about a putative upper bound, and it is not denying what Speaker A has asserted: if

it is true that one has to be at the venue two hours before the event, then it is also true that one has to be there one hour before the event. In the next section, we will turn to cases where the scalar particle lacks this additive component, but nevertheless expresses the unlikelihood presupposition.

3 Imperatives and emphatic focus

As already stated above, the aspect of *even* in our key example (5) that seems to be incompatible with imperatives is the unlikelihood presupposition. In the literature, and in a broader perspective, this presupposition has also been analyzed as association with so-called '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." 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):

(17) 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)!

(17a) exemplifies the same reading of *even* as given in (5) and explicated by the unlikelihood presupposition in (11b) above. While *even* in this sense is the lone exemplar in the inventory of English particles associated with emphatic focus, languages other than English have many more focus particles associated with the expression of unexpectedness.

German can express the meaning of constructions like *of all persons*, *of all things*, etc. (see [17b] above) by the focus particle *ausgerechnet* (*even* in [17a] would be lexically expressed by the focus particle *sogar*). There is a crucial difference between *even* in (17a) and *ausgerechnet*. While *even* (or the German equivalent *sogar*) is additive/inclusive in (17a), *ausgerechnet*, like the expression *of all persons* etc., is exclusive in (17b). In other words, inclusive *even* presupposes that all focus alternatives are true, while exclusive *ausgerechnet* presupposes that all focus alternatives are false.

Let me hasten to add that, as is the case with *even* (see FN3 above), one could come up with examples showing that not all cases of association with *ausgerechnet* are exclusive in this sense and that the exclusive component of *ausgerechnet* is in fact much weaker than that of, for example, *only*.[5] However, the seminal literature on this topic draws this distinction (e.g., König 1981), and it is certainly fair to say that the prototypical use of these particles is inclusive on the one hand (*even/sogar*) and exclusive on the other hand (*ausgerechnet*).

To formalize this distinction and, at the same time, to capture the common presuppositional core of these particles (i.e., they both express emphatic focus), Krifka (1995) has proposed an emphasis operator 'Emph.Assert', and Eckardt (2001), adopting his approach, has suggested two different emphasis operators for these different forms of association with emphatic focus ('$p <_c q$' stands for 'p is less likely than q, given the information in the common ground c'; focus alternatives are formalized according to Rooth 1985, i.e., 'o' is the ordinary semantic value and 'f' labels the focus semantic value), see Eckardt (2001: 394):

(18) **Additive.Emph.Assert** ($[\![S]\!]^o$, $[\![S]\!]^f$) in context c

Assertion: $[\![S]\!]^o$

Presupposition: (i) $\forall p \in [\![S]\!]^f \backslash [\![S]\!]^o$: $[\![S]\!]^o <_c p$

(ii) $\forall p \in [\![S]\!]^f \backslash [\![S]\!]^o$: p

(19) **Exclusive.Emph.Assert** ($[\![S]\!]^o$, $[\![S]\!]^f$) in context c

Assertion: $[\![S]\!]^o$

Presupposition: (i) $\forall p \in [\![S]\!]^f \backslash [\![S]\!]^o$: $[\![S]\!]^o <_c p$

(ii) $\forall p \in [\![S]\!]^f \backslash [\![S]\!]^o$: $\neg p$

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5   Consider the following example:
    (i) Hans   ging zu einer Party und hat   neben   vielen alten Freunden ausgerechnet (auch)
        Hans   went to a   party and has   among   many old   friends   of.all.guests (also)
        seine Exfreundin   getroffen!
        his   ex-girlfriend met
        'Hans went to a party and, among many old friends, he met his ex-girlfriend (of all
        guests)!'
While it would be impossible for exclusive *nur* ('only') to associate with the focus constituent *seine Exfreundin* ('his ex-girlfriend') in this example, *ausgerechnet* is perfectly acceptable in this context.

What is crucial in our context is that the particle *ausgerechnet*, like its additive counterpart *even* (or German *sogar*), is not compatible with imperatives:

(20) # Komm ausgerechnet zum   JAZZkonzert!

come   of.all.places   to.the   jazz.concert

'Of all places, come to the jazz concert!'

Ich weiß, Du magst keinen Jazz, aber Jazzkonzerte sind das einzige, was sich in der Davies

Symphony Hall wirklich lohnt!

'I know you don't like jazz, but jazz concerts are the only thing that's worth a visit at

Davies Symphony Hall!'

This shows again that the incompatibility of certain scalar particles with imperatives is not due to additivity (or upward and downward monotonicity as discussed by Beaver & Clark 2008: 70-79), but rather due to association with emphatic focus – the common presuppositional core of *even* and *ausgerechnet*.

Note now that *ausgerechnet* is perfect in negated imperatives. Observe the following example from Poźlewicz (2006: 180), based on a corpus of German newspapers:

(21) Nimm nicht ausgerechnet den schwarzen Pulli   mit!

take   not of.all.things. the black   pullover with

'Of all things, don't take the black pullover with you!'

The same holds for English *even*:

(22) Don't take even the black pullover with you!

However, in the case of *even* and *ausgerechnet* in negated imperatives, the prejacent proposition is not the least likely, but rather the most likely alternative:

(23) $\forall x\ [x \neq$ *black pullover* $\rightarrow$ likelihood (Hearer takes black pullover with him) > likelihood

(Hearer takes x with him)]

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Thus, according to the notion of emphatic focus introduced above, these examples do not express emphatic focus.

Given the different presuppositions of *even* and *ausgerechnet* in (18) and (19), I will now show that the advice-type use of *even* we saw in Section 2 (example [14]) is not possible with exclusive *ausgerechnet*. In other words, there is no way to use this particle in imperatives, no matter what the information structural precontext looks like. This is due to the following semantic feature: In contrast to *even*, the exclusive particle *ausgerechnet*, due to its presupposition (19/ii), does not monotonically add to what is already assumed. While the particle *even* is upward monotonic in that it allows for still stronger statements, exclusive particles like *ausgerechnet* are downward oriented in the sense that they set a limit on the upper bound that additive particles like *even* remove. This is why *ausgerechnet* cannot be used in imperatives, whatever the information structural context is (24), whereas other exclusive particles such as *nur* ('only') can be used in imperative speech acts (25):

(24) Child: I'll use a broom and the vacuum to clean my room.

     Mother: # Nein, nimm ausgerechnet einen feuchten Lappen! Auch wenn Du das nicht

                 no   use   of.all.things a   damp   cloth   even if   you that not

                 glaubst, aber das ist die beste Lösung!

                 believe but that is the best solution

                 'No, use a damp cloth (of all things)! Even if you don't believe it, it's the best solution![6]

(25) Child: I'll use a broom and the vacuum to clean my room.

     Mother: Nein, nimm nur einen feuchten Lappen! Auch wenn Du das nicht

                 no   use   only a   damp   cloth   even if   you that not

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[6] The particle *ausgerechnet* can only be used if the imperative is used insincerely as in the following example (see Section 4 below on details of such insincere uses):

   (i) Klar,   nimm   ausgerechnet einen feuchten Lappen! So   verschmierst Du

       of.course use   of.all.things a   damp   cloth   this.way smear   you

       dann den Dreck! Ganz toll!

       then the dirt   totally great

       '(Ironic:) Of course, use a damp cloth (of all things)! This way, you'll smear the dirt around! Well done!'

glaubst, aber das ist die beste Lösung!

believe   but that is the best solution

'No, use only a damp cloth! Even if you don't believe it, it's the best solution!

Since other exclusive particles like *only* are perfectly acceptable in imperatives, and since additive *even* can only be used in an advice-type use as illustrated in Section 2, we may still conclude that what restricts the occurrence of scalar particles in imperatives is association with emphatic focus – the meaning component shared by *even* and *ausgerechnet*. In the next section, we will see that this restriction is not due to the clause type of imperatives, but rather due to imperative force. In this context, we will identify which pragmatic presuppositions of imperative force are incompatible with the unlikelihood presupposition expressed by emphatic focus.

4 Scalar particles and imperative force

Let us now turn to the incompatibility of imperatives and emphatic focus in more detail. First, note that declaratives where modal verbs are used performatively are also pragmatically deviant with both *even* and the German cases of association with emphatic focus discussed above. The following examples should be understood as actual directives and not as a report of something that has previously been said:

(26) a. # You should even come to the JAZZ concert!

b. # Du   sollst   {ausgerechnet/sogar} zum   JAZZkonzert kommen!

you   should of.all.events/even   to.the jazz.concert   come

'You should (even) come to the jazz event (of all events)!'[7]

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[7] There is a felicitous reading of these configurations where the modal verb receives heavy stress, and the scalar particle takes narrow scope over the modal:

(i) A: Darf ich zum   Jazzkonzert kommen?

may   I   to.the   jazz.concert come

'May I come to the jazz concert?'

B: Nein, Du SOLLST   sogar zum   Jazzkonzert kommen!

no   you should   even to.the jazz.concert come

'No, you even should come to the jazz concert!'

These data suggest that the restriction sketched in the previous sections is not due to the clause type of imperatives, but rather due to directive force as realized by adding a modal proposition to the common ground.

Modal verbs can of course also occur in descriptive contexts. On its descriptive use, a sentence like in (26a) above conveys information about a present state of affairs. That is, the speaker informs the hearer of an already existing advice or obligation, which may or may not have come about by means of a prior speech act performed by the speaker or by someone else. In this case, the use of *even* (and also of the German cases) is felicitous:

(27)   You should even come to the JAZZ concert. [That's what your girlfriend said.]

On the performative use of modals, on the other hand, the ADVICE, COMMAND, etc. is brought about by the speaker in the act of uttering the sentence. Accordingly, imperative sentences behave in crucial ways just like performatively used declaratives with the respective modals. The main difference is that imperatives cannot be used descriptively.

The analysis of imperatives by Kaufmann (2012, 2016) builds on these connections between imperatives and modalized declaratives and aims at modeling the force of imperatives. To this end, Kaufmann suggests a set of (pragmatic) presuppositions that are uniquely associated with imperatives qua clause type. In a nutshell, these presuppositions serve as felicity conditions preventing imperatives from being used in contexts in which corresponding modalized declaratives would be used descriptively, as in example (27) above.

Since Kaufmann's account thus formulates pragmatic properties that imperatives and the performative usage of modalized declaratives have in common, and since we saw that emphatic focus is pragmatically illicit exactly in these two domains, I will refer to her approach in order to identify the presuppositions that are incompatible with emphatic focus (for overviews of other prominent approaches to imperatives, see Han 2011, Portner 2016).[8] Let us thus look at the relevant

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Again, this use can be analyzed as a (corrective) advice that is in the interest of the hearer (see our key example [14] in Section 2). Accordingly, no such use would be possible with exclusive *ausgerechnet* or in cases where the hearer does not prefer to come to the jazz concert (i.e., where the advice would be against the hearer's preferences).

[8] The choice of this particular theory is also motivated by other issues. On the one hand, Portner's (2007, 2016) account makes essential reference to the addressee and has thus been criticized for disregarding wish-type uses that have no addressee (*Please, stop raining for once!*). As far as I can tell, these cases fare no better with emphatic focus (# *Please, stop even raining for once!*), and hence they should be included in our explanation (see also example [34a] below). On the other hand, Han (1998 et seq.) does not provide an account of how the modal component and the force

presuppositions carried by imperatives in more detail (Kaufmann 2012: 155-163) and, in doing so, find out why these presuppositions and those of emphatic focus discussed in the previous sections cannot be satisfied simultaneously.

The first constraint that is relevant for our discussion is the *Epistemic Uncertainty Constraint* (EUC). Observe that issuing an imperative ϕ! is infelicitous if the speaker is sure that ϕ is going to happen or will not happen, as shown in (28); example and judgments by Kaufmann (2012: 156):

(28) # Ich weiß, dass du   das auf {jeden/keinen} Fall   tun wirst, also tu's   auch.

       I   know that you that in   any   no   case do   will so   do.it too

      'I know that you are going to do this no matter what, so do it also.'

EUC refers to the speaker's expectations prior to his use of the imperative. This constraint does not rule out that a speaker is convinced that his imperative will be obeyed, and that the epistemic uncertainty is thus removed by the use of the imperative. This state of expectations is captured by the presuppositional details of EUC (Kaufmann 2012: 157; '*Bel*' maps the speaker S and a world w to the set of worlds constituting the speaker's belief set in w; *Bel'* is a version that also takes into account a time argument T):

(29) The precontext c' of c is such that for all $w \in CS(c')$:

      $(\exists w' \in Bel'_{cS}(c'_T)(w))(\exists w'' \in Bel'_{cS}(c'_T)(w))[\neg p(t)(w') \,\&\, p(t)(w'')]$

      (= the speaker believes that both $\neg p$ and p are possible).

However, in this context Kaufmann (2012) points out felicitous uses like the following example:

(30) a. Be home at 5!

      b. Those alternatives that are *most plausible according to what I take to be the usual course of events*, are such that you are at home at 5.

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component interact in discourse, and thus her account is lacking a definition of the pragmatic properties of imperatives that are of interest to us in this paper.

In this case, it is absolutely coherent that the speaker believes that both p and $\neg p$ are possible (EUC), while, at the same time, he believes that p is a necessity with respect to what is most plausible or the usual course of events. Given examples of this kind, Kaufmann concludes that what is additionally involved when (30a) is uttered felicitously is a non-empty ordering source in the sense of Kratzer (1991, 2012), and that this ordering source is usually modeled according to preferences and goals, respectively, in imperative cases. This is captured by the second constraint, the *Ordering Source Restriction* (OSR); see Kaufmann (2012: 160):

(31) Either (i) in c there is a salient decision problem $\triangle(c) \subseteq \mathcal{P}(W)$ such that in c the imperative provides an answer to it, g is any prioritizing ordering source, and speaker and addressee consider g the relevant criteria for resolving $\triangle(c)$;
or else, (ii) in c there is no salient decision problem $\triangle(c)$ such that the imperative provides an answer to it in c, and g is speaker bouletic.

Kaufmann discusses examples demonstrating that in many cases the ordering source is mutually accepted by both the speaker and the addressee (hence the notion of a common salient decision problem). However, crucial in our context is that OSR expresses that either the ordering of preferences/goals (= g) is mutually shared by speaker and hearer, or g is only accepted on the part of the speaker (i.e., wish-type uses). Accordingly, it is never possible that the ordering of preferences is determined by the hearer only.

In the case where g is determined from the perspective of the hearer only, and the speaker thus does not share g, we observe a pragmatically deviant form in the sense that this constellation results in an insincere way of speaking, often featuring 'a confrontational flavor', as Kaufmann (2012: 161) puts it. Consider example (32):[9]

(32) Dann geh eben   auf diese verdammte Party. Ich kann   dich ja   eh   nicht
     then go PART to   this damn   party I   can   you PART PART not

---

[9] The following German example contains the discourse particles *eben*, *ja*, and *eh*. These particles all convey that the proposition is rather uncontroversial or even self-evident. In contexts like (32), the speaker can use these particles to additionally emphasize both the resignation and frustration of his utterance (i.e., he already takes it as uncontroversial and unchangeable that his and the hearer's preferences/goals diverge considerably and that he will have no real impact on the hearer's actions).

hindern.

impede

'Well, then go to that damn party. I cannot keep you from doing so anyways.'

The OSR thus ensures that a felicitous and sincere use of the imperative excludes cases where the orderings of preferences/goals of the speaker and the hearer considerably diverge, and the imperative operates on the ordering determined by the hearer only.

With both the EUC and the OSR in place, we can now return to our infelicitous cases of imperatives containing particles associated with emphatic focus. By using *even* and the German particles discussed above, the speaker expresses that he considers it very unlikely that p would come about. Only if *even* associates with a focus constituent that corrects the hearer's expectation or belief state, the unlikelihood presupposition does not refer to the speaker's belief state (as in our example *Be there even two hours in advance!*, see above). In these corrective statements, we obtain a felicitous reading of *even* in imperatives. In all other cases where the speaker expresses that he considers it very unlikely that p would come about, *even* and related German particles are infelicitous in imperatives. To explain this infelicity, we must hence look at the likelihood scale from the speaker's perspective.

As for the semantics of the imperative, we can take the perspective of the speaker concerning the ordering of preferences. That is, while the ordering of preferences need not be shared by the hearer, there is no sincere use of imperatives where the ordering is against the goals/preferences of the speaker (see the OSR above). Accordingly, both concerning the likelihood scale and regarding the preference scale, we can take the perspective of the speaker to explain the infelicity of *even* and related particles in imperatives.

To illustrate, let us assume that the speaker prefers a world where the hearer is going to a jazz concert over a world where the hearer is going to a classic concert. However, at the same time he prefers a world where the hearer is going to a classic concert over a world where the hearer is going to no concert at all. To clarify this constellation, let me adopt an illustration used by Grosz (2011b: 88) in a different context (h_c = hearer in context c):

(33) a.   *sample preference scale*

least preferred   *most preferred*

⊢————————————⊢————————————⊢———————▶
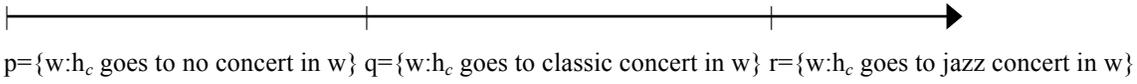
$p=\{w{:}h_c$ goes to no concert in w$\}$ $q=\{w{:}h_c$ goes to classic concert in w$\}$ $r=\{w{:}h_c$ goes to jazz concert in w$\}$

b.   *sample likelihood scale*

least likely   *most likely*

⊢————————————⊢————————————⊢———————▶
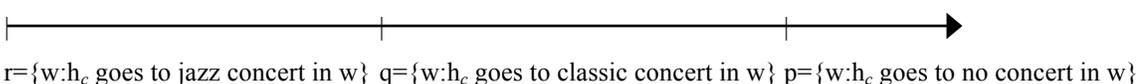
$r=\{w{:}h_c$ goes to jazz concert in w$\}$ $q=\{w{:}h_c$ goes to classic concert in w$\}$ $p=\{w{:}h_c$ goes to no concert in w$\}$

The reversal scheme expressed by the scales in (33) makes clear that uttering an imperative containing *even* means that at least the speaker prefers the proposition *r* (according to the OSR), which, at the same time, he considers most unlikely to become true. Of course, one can prefer something very unlikely to become true. This is in fact the point of many wish-type uses of imperatives (see also FN 5 above). However, by using *even*, which conventionally encodes the property of unlikelihood, a speaker explicitly states that *p* is most unlikely. The use of *even* is thus on a par with explicit statements that something is very unlikely as in the following sequence of utterances (34a), which is also pragmatically deviant. (34b), on the other hand, is perfectly acceptable if the modal is not used performatively.

(34) a. # Please, stop raining for once! Although it is most unlikely that the rain will stop.

      b.   It should stop raining, although it is most unlikely that the rain will stop.

In the previous literature, we only find the observation that "it is infelicitous to follow an imperative with a sentence that expresses the speaker's belief that the situation described by the proposition of the imperative will not be realized" (Han 1998: 168). Consider the following example from Han (1998: 168):

(35) # Eat this fish! But you won't.

Accordingly, speakers who sincerely utter imperatives seem to presuppose that *p* expresses a state of affairs that might be realized (see the EUC above). Ninan (2005: 161) puts this in Bayesian

terms. In general, it is rational for the speaker to undertake an action A in order to achieve a goal G only if the speaker's probability for G given A is non-zero. In particular, I would only ask someone to go to a jazz concert if the possibility is not categorically excluded that he is (e.g., physically) able to go.

Crucially, the case of particles associated with emphatic focus in imperatives now shows that the threshold for acting rational in the context of uttering an imperative actually lies somewhat above zero. That is, uttering an imperative can also be infelicitous if the speaker considers it most unlikely that G will be achieved. This suggests that the epistemic condition expressed by the EUC can also be violated on the basis of a likelihood threshold.

This likelihood threshold may be passed when the imperative is used insincerely – and in this case additionally violates the OSR, like in the following example:

(36) Du willst Präsident werden? Dann versuch es doch! Ich halte   es für sehr
      you want.to president become   then try   it PART I   consider it for very
      unwahrscheinlich!
      unlikely
      'You want to become president? Well, then go ahead (I don't care)! I think it's very
      unlikely!'

In (36), the speaker expresses that he does not consider the ordering source used by the hearer as the relevant criterion for resolving the decision problem $\triangle(c)$. The use of the imperative in (36) parallels the insincere use in (32) above. Again, the flavor of frustration and disinterest of such utterances can be emphasized by dedicated discourse particles (in [36] by German *doch*).[10]

In sum, we saw that the presuppositions of imperatives and emphatic focus cannot be satisfied simultaneously. A speaker cannot perform the imperative speech act felicitously without violating the presupposed preference scale of the imperative (OSR) and violating the epistemic condition of the EUC, which seems to be sensitive to a pointing to the lowest end on a scale of

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[10] Note that this use of *doch* in imperatives is not mentioned in the comprehensive analysis of *doch* in imperatives by Kaufmann & Kaufmann (2012). Like the other epistemic particles mentioned in FN 6, this particle is often used in 'defiant' discourse moves expressing the speaker's resignation and frustration. Since the investigation of this common effect of these particles would require an in-depth discussion of the individual semantics of the particles in question, I leave it at the paraphrases given above.

likelihood as expressed by association with emphatic focus. As a consequence, we saw that some particles associated with emphatic focus can only be used in a subtype of imperatives (e.g., *even*), while other particles are excluded from imperative speech acts altogether (e.g., *ausgerechnet*).

5 Conclusion

This paper presents the new observation that the occurrence of scalar focus particles associated with so-called emphatic focus is subject to constraints at the level of illocutionary force. Specifically, in the domain of imperative speech acts, these particles are either confined to a subtype of imperatives (e.g., *even* in advice uses) or cannot occur in imperative speech acts at all (e.g., German *ausgerechnet*). Given that emphatic focus is a means to signal that a proposition is a particularly unlikely one with respect to its alternatives, the data in this paper thus demonstrate that the felicity conditions of imperative speech acts are sensitive to a likelihood threshold that has not been observed in the previous literature.

As for research on particles, it is interesting to note that in languages like German, focus and discourse particles are closely related categories. Discourse particles are also focus-sensitive and often double as focus particles (e.g., Grosz 2016a). In addition, discourse particles, when they are stacked, exhibit ordering restrictions (e.g., Thurmair 1989), which is also the case for focus particles (*Peter even also only drank water* vs. **Peter only also even drank water*; see Zimmermann 2011). This paper sheds new light on the closeness of the relationship between these two categories. Specifically, the data above demonstrate that it is worth exploring to what extent discourse-anaphoric requirements of focus particles like *even* restrict the particular use of speech acts – a pattern we also observe in the domain of discourse particles, which also restrict the use of an utterance at the illocutionary level on the basis of their discourse-anaphoric semantics. Accordingly, focus and discourse particles appear even more closely related than previously thought.

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