Honda, M. (2018) Particle fronting and expressivity: A reconsideration from the perspective of emphatic information focus fronting. In Y. Ono & M. Shimada (Eds.) *Data Science in Collaboration, Volume 2* (pp. 50–60). Tsukuba: General Affairs Supporting Center.

# Particle Fronting and Expressivity: A Reconsideration from the Perspective of Emphatic Information Focus Fronting

#### Masatoshi HONDA

Doctoral Program in Literature and Linguistics, University of Tsukuba, Japan honda.masatoshi.84@gmail.com

Abstract: Since the early stage of generative grammar, it has been argued that certain fronting operations grammatically specify focus. Within the cartographic framework, Rizzi (1997) assumes that focus fronting targets a unique functional projection dedicated to focus in the CP domain. In contrast, observing non-contrastive focus fronting phenomena in Romance languages (e.g., Sicilian), Cruschina (2011) proposed his original split CP hypothesis, according to which the CP domain includes two functional projections for focus: Contrastive Focus and emphatic Information Focus (i.e., new information and emphasis). The assumption of the latter focus projection provides new theoretical tools for scholars to examine focus-related phenomena cross-linguistically. For example, the presence of emphatic IFoc fronting is empirically supported by Trotzke and Quaglia's (2016) observation that the verb-second phenomena with fronted non-contrastive verb particles function to name emotionally-evaluated situations in German; they further argued that the source of emphasis in particle fronting is associated with expressive, extreme-degree particle verbs. Extending their approach to particle fronting in English (e.g., Round and round spins the fateful wheel! (Emonds, 1976, p. 29)), this preliminary study demonstrates that particle fronting in English also functions to name emotionally-evaluated situations. This fact implies that the presence of IFoc fronting is substantiated from English.

Keywords: Emphasis, expressivity, extreme degree, focus fronting, particle fronting,

## 1. Introduction

It has been observed in the literature that certain root transformations result in emphasis (e.g., Hooper & Thompson, 1973; Emonds, 1976).<sup>[1]</sup> For example, let us consider the following sentences with directional adverb preposing:

- (1) a. Down the street rolled the baby carriage!
  - b. Up trotted the dog!
  - c. Round and round spins the fateful wheel!

(Emonds, 1976, p. 29)

According to Hooper & Thompson (1973), Gary (1976), and Fukuchi (1985), the sentence-final NP in each example receives emphasis, or emphatic intonation. At that time, the primary concern was to identify and formulate constraints on grammatical transformations, but the concept of emphasis has been explored in generative grammar by addressing the following two general issues: first, what the nature of emphasis is, and second where it originates from.

The term emphasis has been used rather loosely with different definitions in various research contexts. Among such contexts is focus. Since Chomsky (1970), the research on focus has been developed by exploring how grammar specifies focus. Cross-linguistic investigations in the cartographic project proposed by Rizzi (1997) have shown that focus fronting operations, in general, contribute to the Focus-Presupposition articulation (cf. (2b)); the fronted focus element carries new information, and the rest of the propositional content denotes the old information (i.e., presupposition). Within the cartographic framework, the source of emphasis in focus fronting is

identified with the fronted focus element which creates a sense of contrast. Therefore, it is generally viewed that focus fronting is restricted to contrastive emphasis.

In contrast, observing non-contrastive focus fronting in Romance languages such as Sicilian, Cruschina (2011) proposed that focus fronting is divided into two types: Contrastive Focus [CFoc] fronting and emphatic Information Focus [IFoc] fronting. Unlike CFoc fronting, emphatic IFoc fronting creates syntactic configurations without information-structural partitions. It serves to keep the propositional content assertive and therefore is compatible with sentence focus. Cruschina's proposal implies that the source of emphasis is not always the contrastive meaning yielded by CFoc fronting. The assumption of emphatic IFoc fronting has provided new theoretical tools for scholars to explore focus-related linguistic phenomena cross-linguistically. In support of the presence of emphatic IFoc fronting in German function to name emotionally-evaluated situations; in this case, the particle fronting operation applies to those expressive particle verbs which allow extreme-degree modification (Morzycki, 2012). Thus, at the frontier of the research on emphasis is the empirical exploration of focus-related linguistic phenomena in terms of emphasis is the empirical exploration of focus-related linguistic phenomena in terms of emphasis.

Based on the above background, the present study aims to explore the emphasis involved in the examples in (1b and c) with (directional) particle fronting.<sup>[2]</sup> On the basis of Trotzke and Quagia's (2016) analysis of particle fronting in German, it shows that particle fronting in English occurs in sentence-focus contexts; furthermore, the expressivity of certain particle verbs constrain particle fronting. On the basis of these observations, this study proposes that particle fronting in English is derived by IFoc fronting. This proposal has two contributions to the research on focus fronting. First, the assumption of IFoc fronting is empirically supported by particle fronting in English. Second, the expressivity of certain particle verbs is tied to the emphasis involved in particle fronting in English.

This paper is organized as follows. Section 2 introduces Cruschina's (2011) dichotomy of focus fronting as the theoretical background of this study and reviews Trotzke and Quaglia's (2016) analysis of expressive patterns of particle fronting in German. Section 3 provides arguments for the claim that particle fronting in English is derived by IFoc fronting. Section 4 draws conclusions.

#### 2. Emphatic IFoc Fronting and Its Extension to Particle Fronting in German

#### 2.1 Cruschina (2011): Two Types of Focus Fronting

The cartographic framework proposed by Rizzi (1997) follows the traditional generative guideline in exploring focus at the interface between syntax, semantics, and phonology (cf. Jackendoff (1972)). In this framework, discourse-related features such as topic and focus are stored in the lexicon, and they trigger fronting of constituents to dedicated functional projections such as Topic and Focus in the CP domain. According to Rizzi's original split CP hypothesis, there is a unique functional projection dedicated to focus. In contrast, Cruschina (2011) hypothesizes that there are two independent functional projections for focus: CFoc and emphatic IFoc. Starting from the notion of the Focus-Presupposition articulation, this subsection introduces Cruschina's dichotomy of focus fronting.

The notion of the Focus-Presupposition articulation has a long tradition in generative grammar (Chomsky, 1970). Jackendoff (1972) defines the notion of focus as "the information in the sentence that is assumed by the speaker not to be shared by him and the hearer" (p. 230); presupposition denotes "the information that is assumed by the speaker to be shared by him and the hearer" (p. 230). Furthermore, recent studies have proposed that the notion of focus comes in at least two types: Contrastive Focus [CFoc] and Information Focus [IFoc] (e.g., Lambrecht, 1994; Cruschina, 2011). According to Cruschina (2011), IFoc "indicates that the assertive part of the sentence, that is the focus of the sentence, must be interpreted as innovative and the most informative, in the sense that it contributes new and relevant information to the universe of the discourse ..." (p. 14); CFoc "instead indicates that the assertion corresponds to denying or correcting a previous innovative assertion or presupposition that the speaker does not share:" (p. 14). With these definitions in mind, let us consider the following examples:

| (2) | a. | (Context: What car did John buy?)              |                          |
|-----|----|--|--------------------------|
|     |    | John bought [a Ferrari] <sub>IFoc</sub>        | (Cruschina, 2011, p. 14) |
|     | b. | YOUR BOOK you should give t to Paul (not mine) | (Rizzi, 1997, p. 285)    |

In (2a), the object DP carries IFoc, satisfying the unknown variable of the *wh*-question. In (2b), the fronted DP conveys CFoc and provides the new piece of information which functions to correct the wrong piece of information indicated by the negative tag. By virtue of the corrective function, a sentence with CFoc fronting could not be felicitously used as conveying non-contrastive new information (i.e., as an answer to the *wh*-question "What should I give to Paul?") (Rizzi, 1997, sec. 3).

Having seen the fundamental distinction between IFoc and CFoc, let us turn to the difference between neutral IFoc and emphatic IFoc. The relevant difference is illustrated in the following example from Sicilian, an Italian dialect which takes the SVO word order:

| (3) | A.                    | Chi scrivisti?<br>what write.PAST.2 |             |    |               |                         |
|-----|-----------------------|-------------------------------------|-------------|----|---------------|-------------------------|
|     |                       | 'What did you wr                    | ite?'       |    |               |                         |
|     | В. а.                 | Scrissi                             | n'articulu. | b. | N'articulu    | scrissi!                |
|     |                       | write.PAST_1SG                      | an article  |    | an article    | write.PAST.1SG          |
|     | 'I wrote an article.' |                                     |             |    | 'I wrote an a | rticle.'                |
|     |                       |                                     |             |    | (0            | Cruschina, 2011, p. 58) |

In (3Ba), the post-verbal DP at the object position simply conveys IFoc and functions to satisfy the unknown value of the *wh*-phrase. In (3Bb), the fronted IFoc DP serves to satisfy the unknown value of the *wh*-phrase and is always associated with "emphasis," or the special contextual effects created by the interplay of the new information provided with the old information already available. Cruschina described the emphatic/contextual effects by making reference to Relevance Theory (Sperber and Wilson, 1995); this means that the emphasis in question is ascribed to contextual/pragmatic factors, or relevance. On the basis of these observations, Cruschina calls the post-verbal IFoc in (3Ba) neutral IFoc and the fronted IFoc in (3Bb) emphatic IFoc.

One of the defining characteristics of emphatic IFoc fronting is that it is compatible with sentence-focus contexts. This property is indicated by the following example:

| (4) | Gianni   | è innamorato       | pazzo         | di     | Maria.  | Pensa     | un po'            | [Italian]        |
|-----|----------|--------------------|---------------|--------|---------|-----------|-------------------|------------------|
|     | John     | is in-love         | mad           | with   | Maria.  | think     | a little          |                  |
|     | Un       | anello di diama    | <i>nti</i> le |        | ha      | regalato! |                   |                  |
|     | А        | ring of diamo      | nds to-h      | ner.CL | has     | given     |                   |                  |
|     | 'John is | s madly in love wi | th Mary.      | Guess  | what! H | e gave he | er a diamond ring | g!'              |
|     |          |                    |               |        | (Bia    | nchi, Boo | cci, and Cruschir | na, 2016, p. 14) |

In this event-reporting context, the speaker is using the sentence with emphatic IFoc fronting as a self-answer to the sentence-focus *wh*-question (*Pensa un po'* 'Guess what!'). It should be noted here that since CFoc fronting requires a wrong piece of information in the preceding discourse, it is incompatible with sentence focus.

In order to account for the empirical difference in information structure between CFoc fronting and emphatic IFoc fronting, Cruschina (2011) assumes that the CP domain involves two functional projections for focus, CFoc and Emphatic IFoc, as shown in (5b).<sup>[3]</sup>

(5) a. ... Force ... Topic\* ... Focus ... Topic\* ... Finite (IP ...)
b. ... Force ... Topic\* ... CFoc ... Topic\* ... IFoc ... Finite (IP ...)

The CFoc projection in (5b) corresponds to the Focus projection in Rizzi's (1997) original split CP hypothesis in (5a); CFoc fronting contributes to the bipartite Focus-Presupposition articulation. By contrast, emphatic IFoc fronting targets [Spec, IFocP] and yields syntactic configurations without information-structural partitions. In other words, emphatic IFoc fronting results in the unified IFoc-Assertion unit. It should be noted here that since emphatic IFoc fronting does not dissect a sentence into different information units, it is compatible with sentence-focus contexts (cf. (4)).<sup>[4]</sup>

This section has introduced the difference between CFoc fronting and emphatic IFoc fronting. Cruschina's (2011) dichotomy of focus fronting paves the way for a more detailed exploration into focus-fronting phenomena cross-linguistically. In connection with this, the next section reviews Trotzke and Quaglia (2016), who argued that emphatic IFoc fronting is substantiated from certain instances of particle fronting in German.

## 2.2 Trotzke and Quaglia (2016): Expressive Patterns of Particle Fronting in German

According to Cruschina (2011), IFoc fronting is characterized by the following two semantic properties: new information and emphasis. Cruschina ascribed the latter to contextual factors, or "relevance" (Sperber and Wilson, 1995). On the other hand, Trotzke and Quaglia (2016) argued that the emphatic meaning of particle fronting in German is associated with the expressivity of certain particle verbs. Their argument is based on Morzycki's (2012) study on extreme adjectives such as *gigantic*. Extreme adjectives are lexically expressive and allow extreme-degree modification (e.g., *absolutely gigantic* vs. \* *absolutely big*). By adopting Morzycki's extreme-degree modification as a diagnostic for identifying expressive particle verbs in German, Trotzke and Quaglia revealed the correlation between expressive patterns of particle fronting (i.e., emphatic IFoc fronting) and extreme particle verbs. Their argument implies that in certain cases, the notion of expressivity constrains emphatic IFoc fronting.

Trotzke and Quaglia's (2016) study is of theoretical importance in identifying expressive patterns of particle fronting in German. Furthermore, their study also leads us to a better understanding of the taxonomy of particle verbs: Expressive particle verbs exist as a natural class in the lexicon and affect the acceptability of emphatic IFoc fronting. What follows reviews their proposal in detail.

## 2.2.1 Taxonomy of Particle Verbs: [± autonomous, ± contrastive]

It has been argued in the literature that particle fronting phenomena in Germanic languages are subject to certain semantic transparency conditions. For example, Jackendoff (2002) argues that particle fronting in English can be applied to those verb particles which shows semantic transparency (i.e., compositionality). According to his argument, the directional up is part of a non-idiomatic, transparent particle verb configuration and therefore is licit in particle fronting. In contrast, the idiomatic particle up (as in *blow up*) lacks the directional meaning and hence cannot be fronted.

- (6) a. Up marched the sergeant.
  - b. \* Up blew the building.

(Jackendoff, 2002, p. 75)

Furthermore, some previous studies point out that a similar restriction is imposed on particle fronting in German, which is an instance of the verb-second phenomenon (e.g., Wurmbrand, 2000).

| (7) | a.   | Auf         | hat    | er c    | lie Ti   | ir ge | macht | (und | l nicht zu). | (= transparent)       |
|-----|------|-------------|--------|---------|----------|-------|-------|------|--------------|-----------------------|
|     |      | PART(open)  | ) has  | he t    | he do    | or ma | ade   | and  | not PART(cl  | osed)                 |
|     |      | 'He opene   | d (not | closed  | ) the do | or.'  |       |      |              |                       |
|     | b. * | Auf         | hat    | Peter   | mit      | dem   | Trink | ten  | gehört.      | (= non-transparent)   |
|     |      | part(up)    | has    | Peter   | with     | the   | drink | ing  | heard        |                       |
|     |      | 'Peter stop | ped d  | rinking | · '      |       |       |      |              |                       |
|     |      | _           | -      | -       |          |       |       | (Tro | oztke and Q  | uaglia, 2016, p. 111) |

In order to make clear the notion of semantic transparency, Trotzke and Quaglia (2016) proposed that what determines semantic transparency is decomposed into two binary features: [ $\pm$ autonomous] and [ $\pm$ contrast]. The former is proposed to measure the relation of dependency between the verb and the particle, as shown in (8).

(8) Particle entailment test

If [X V NP Pt] entails [NP PredV Pt], then assign Pti. If not, assign Ptd. PredV = predication verb (BE, BECOME, COME, GO, STAY)

(Lohse, Hawkins and Wasow, 2004, p. 245)

Roughly speaking, this test amounts to saying that a particle verb is [+autonomous] if the particle can function as a predicate in copula sentences (cf. Wurmbrand (2000)). For example, a sentence like "she went out" entails "she is/was out," and hence the particle *out* is seen as [+autonomous].

The other test is the particle contrastivity test, which is formulated as in (9).

(9) Particle contrastability test Assign a particle Prt (in a particle verb [Prt V]) the feature [+contrast] iff Prt triggers a set of alternatives different from the empty set.

(Trotzke and Quaglia, 2016, p. 114))

This test identifies whether a given particle verb is contrastive or not. For example, the particle *auf* 'lit. open' in (10a) is a member of a set of alternatives where the meaning of V (*machen* 'make') is constant; accordingly, *auf* bears the contrastive feature. In contrast, the same particle *auf* in (10b) is not a member of a set of alternatives where the meaning of V (*hören* 'listen') is constant because *hören* in *aufhören* does not keep the meaning 'to hear.' If the meaning of V (*hören* 'listen') is kept, the particle *zu* can form a set of alternatives and hence bears the contrastive feature, as shown in (10c).

| (10) | a. | (auf, zu)-machen | 'to open/to shut'         |
|------|----|------------------|---------------------------|
|      | b. | (auf, #zu)-hören | 'to stop/to listen'       |
|      | c. | (zu, weg)-hören  | 'to listen/to not listen' |

(Trotzke and Quaglia, 2016, p. 115)

If the contrastive particle in (10a) undergoes fronting, then the particle fronting sentence receives a contrastive reading (cf. (7a)).

On the basis of the typology of particle verbs, Trotzke and Quaglia (2016) further observes that expressive patterns of particle fronting are restricted to the case in which the fronting operation applies to expressive, non-contrastive verb particles.

## 2.2.2 Expressive Particle Verbs

The first point to be mentioned is that expressive patterns of particle fronting are observed when particle fronting is applied to [-contrastive] particle verbs. Let us take for example the following two [+autonomous, -contrast] particle verbs

| (11) | raus | <i>schmeiβen</i> 'kick out'                      |                                     |
|------|------|--|-------------------------------------|
|      | a.   | Die Engländer sind raus. 'The English Team is ou | it.' [+autonomous]                  |
|      | b.   | (raus, #rein)-schmeißen                          | [-contrast]                         |
| (12) | raus | bringen 'publish'                                |                                     |
|      | a.   | Das neue Album ist raus. 'The new album is out." | [+autonomous]                       |
|      | b.   | (raus, #rein)-bringen                            | [-contrast]                         |
|      |      |  | (Trotcke and Quaglia, 2016, p. 120) |

In the following event-reporting context, the speaker is trying to introduce an exclamatory statement sentence with particle fronting after making the sentence-focus *wh*-question (cf. (4)):

(13) Stell Dir vor! ('Guess what!'):

| a. |   | RAUS      | hat     | Costa Rica     | die       | Engländer      | geschmissen | ! |
|----|---|-----------|---------|----------------|-----------|----------------|-------------|---|
|    |   | PART(out) | has     | C. R.          | the       | English.pl     | thrown      |   |
|    |   | 'The team | of Cost | ta Rica kickeo | d out the | e English team | ı.'         |   |
| 1  | 0 | DATIC     | 1 /     | 1' D 1         | •1        | - A 11         | 1 1/1       |   |

gebracht! b. ? RAUS hat die Band ihr neues Album brought has the band their new album PART(out) 'The band published their new album.

(Trotzke and Quaglia, 2016, p. 119)

According to Trotzke and Quaglia (2016), fronting non-contrastable particles basically result in sentence-focus statements that can have the flavor of a sentence exclamation. The above examples show that particle verbs must entail remarkability components which make them acceptable in the context that is associated with the interpretation of unexpectedness on the part of the speaker. They observe that the remarkability meaning components come in two flavors. The particle verb rausschmeißen 'kick out' in (13a) is an expressive particle verb in the sense that it functions to name strongly emotionally evaluated situations (i.e., to get rid of someone/something in a harsh way.), while the particle verb rausbringen 'publish' in (13b) is a non-expressive particle verb. While rausschmeißen entails that a team has eliminated a competitor in a stunning way, rausbringen does not denote any such remarkability scale that could serve as the basis for expressing the speaker's evaluation: Either the band published or did not publish their album. According to Trotzke and Quaglia, there is a possible context in which (13b) is not so bad; if a band is known to spend many years in the studio before releasing a new album, the speaker might express her or his surprise about the situation that the publishing process has been completed faster than she or he expected. In this case, the speaker's expectation will be violated on the basis of a likelihood ranking with respect to the speed of publishing of that particular band. In other words, the binary option of publication (either publish or not) is enriched by a degree-dimension related to the factor 'speed.' As is clear from this scenario, however, the degree component in question is yielded by the contextual factor, not from the lexical meaning of the particle verb itself.

Trotzke and Quaglia (2016) adopt Morzycki's (2012) extreme-degree modification as a diagnostic for identifying the distinction between the expressive particle verb *rausschmeißen* 'kick out' and the particle verb *rausbringen* 'publish.' For example, extreme adjectives such as *gigantic* resist an additional modification by *very* (as in \* *very gorgeous*) and restrict their degree modifiers to those which also encode extreme degree (cf. (15)).

- (14) Your shoes are downright (<sup>OK</sup> gigantic, <sup>??</sup> big).
- (15) simply, just, positively, absolutely, flat-out, full-on, out-and-out, downright, outright, straight-up, balls-out (Morzycki, 2012, p. 569)

According to Morzycki, an adjective like *gigantic* is lexically extreme (i.e., an item which involves an expressive, extreme-degree meaning as part of its lexical entry) and combines with an extreme degree intensifier such as *downright*. In his words (Morzycki, 2012), "[e]xtreme adjectives are those that relate an individual to a point on a scale on beyond [some] contextual limits" (p. 606). Thus, extreme adjectives are often said to be implicit superlatives (Cruse, 1986). These facts suggest that extreme adjectives constitute a distinct natural class specialized for expressing extremeness. Adopting this extreme-degree modification as a test, Trotzke and Quaglia identify expressive, non-contrastive particle verbs by examining whether a particle verb co-occurs with the extreme degree modifier *regelrecht* 'downright.' They argue that those particle verbs which allow the co-occurrence with it also naturally license expressive patterns of particle fronting:

- (16) a. Costa Rica hat die Englander regelrecht rausgeschmissen. C. R. has the English.PL downright PART(out).thrown 'The team of Costa Rica downright kicked out the English team.'
  - b. ?? Die Band hat ihr neues Album regelrecht rausgebracht. the band has their new album downright PART(out).brought 'The band downright published their new album.'

(Troztke and Quaglia, 2016, p. 121)

The natural co-occurrence of the particle verb *rausschmeißen* 'kick out' with the extreme degree modifier *regelrecht* 'downright' indicates that the particle verb in question allows extreme-degree modification, which further licenses expressive patterns of particle fronting. Taken together with the contrast in (13), the one in (16) indicates the correlation between the availability of extreme-degree modification and the acceptability of expressive patterns of particle fronting.

To summarize, the expressive type of particle fronting in German is licensed by applying the particle fronting operation to expressive, non-contrastive verb particles. In order to account for this fact, following Cruschina (2011) and Bianchi, Bocci, and Cruschina (2016), Trotzke and Quaglia (2016) propose that particle fronting targets [Spec, IFocP] (i.e., [Spec, EmpP] in their term).

(17) [ForceP [EmpP raus [Emp0[contrast]/[intensity] ... [VP... raus...]]]] (Troztke and Quaglia, 2016, p. 134)

Trotzke and Quaglia's proposal seems to indicate the following two possibilities: First, IFoc fronting is triggered by a grammatical feature which is responsible for expressivity (i.e., extreme degree); second, particle fronting phenomena in Germanic languages including English are derived by applying emphatic IFoc fronting to expressive particle verbs. The next section explores these possibilities.

## 3. Extension of Emphatic IFoc Fronting to Particle Fronting in English

Extending Trotzke and Quaglia's (2016) approach to particle fronting in English, this section provides arguments for the following two-fold claim: First, the presence of IFoc fronting is substantiated from particle fronting in English; second, the acceptability of particle fronting in English depends on the expressive meaning component of certain particle verbs.

Before proceeding, a word is in order about the difference between particle fronting in German and that in English. The previous section has briefly mentioned that particle fronting in German is an instance of the verb-second phenomenon; in this case, particle verbs can be intransitive or transitive (cf. (13)). In contrast, directional adverb preposing in English is restricted to unaccusative verbs (Coopmans (1989); Bresnan (1994)).

- (18) a. Toward me {lurched/\*looked} a drunk.
  - b. Into the hole {jumped/\*excreted} the rabbit.

(Bresnan, 1994, p. 78)

Throughout this section, the unaccusative-verb restriction illustrated above is seen as an independent, language-specific factor which affects the grammaticality of particle fronting in English.

#### 3.1 The Dual Status of the Sentence-Initial Particle

By examining (i) the grammatical status of the fronted particle and (ii) the semantic property of the particle verb, this subsection shows that the fronted particle in particle fronting in English has the dual status: subjecthood and focus.

First, the preposed particle shows the subjecthood property. Cappelle (2002, p. 65, fn. 4) illustrates the former property by the following example (He attributes the original observation to Ray Jackendoff):

(19) ... and in 5, 10, or 15 seconds ..., out'll come your answer.

(www.brigada.org/today/bt950825.tml)

This example shows that the auxiliary *will* can be contracted and attached to the fronted particle. This fact shows that the sentence-initial particle behaves as the subject (cf. Bresnan (1994) for the treatment of the fronted locative PP in locative inversion as the subject and a topic).

Second, the sentence-initial particle has a (non-contrastive) focal property. According to Trotzke and Quaglia (2016), expressive patterns of particle fronting are limited to non-contrastive

particle verbs. With this point in mind, let us consider the following [+autonomous, -contrastive] unaccusative particle verbs.

| (20) | a. | The secrets gushed out. |                |
|------|----|-------------------------|----------------|
|      | b. | The secrets were out.   | [+autonomous]  |
|      | c. | gush (out, #in)         | [-contrastive] |
| (21) | a. | A new movie came out.   |                |
|      | b. | A new movie was out.    | [+autonomous]  |
|      | c. | come (out, #in)         | [-contrastive] |
|      |    |                         |                |

The particle *out* in the particle verb *gush out* is [+autonomous, -contrastive] because the particle functions as the predicate of the subject (with the meaning of "the secrets are known to the public") and does not have any other particle as its alternative while keeping the meaning of the verb. The same is true of the particle *out* in the particle verb *come out*. One crucial difference between these two particle verbs concerns expressivity (i.e., extreme degree). In the case of *gush out*, the particle verb means that a large number of secrets are (unintentionally) known to the public quite suddenly. In the case of *come out*, on the other hand, the option is binary, whether a new movie is published or not. According to my informants, this difference in extreme degree is correlated with whether they co-occur with the extreme-degree modifier *just* (cf. (15)).

- (22) a. The secrets just gushed out.
  - b. ?? A new movie just came out.

The contrast above shows that *gush out*, unlike *come out*, is an expressive particle verb; in this case, the sentence implies that a large number of secrets (that the speaker wants to keep) are known to the public so suddenly. Furthermore, my informants reported that the expressive status of the particle verb *gush out* is indicated by the fact that the extreme-degree meaning can be intensified by repeating the particle; no such intensification pattern is possible in case of the non-expressive particle verb *come out*.

- (23) a. The secrets gushed out and out.
  - b. ?? {A new movie / new movies} came out and out.

My informants also reported that the difference in extreme degree connotation between the two particle verbs crucially affects the acceptability of particle fronting in sentence-focus contexts.

- (24) [Context] The speaker A, as a narrator, is trying to introduce an exclamatory statement after making the sentence-focus *wh*-question.
  - A: Guess what?
  - a. Out gushed the secrets!
  - b. ?? Out came a new movie!

According to my informants, the particle fronting sentence in (24a) is acceptable as a self-answer to the sentence-focus *wh*-question, while the one in (24b) is marginal in the same event-reporting context. In (24a), the speaker's utterance is interpreted as conveying that she or he is emphasizing that the secrets are known to the public so suddenly. The suddenness value (the extreme connotation) is ascribed to the lexical meaning of the particle verb *gush out*, and that value is emphasized by fronting the particle in question to the sentence-initial position.<sup>[5]</sup> In (24b), on the other hand, the particle verb *come out* lexically means "something is published," without any additional extreme-degree connotation. For this reason, *come out* simply provides the binary option (e.g., be published or not), which can be enriched by certain contextual information indicating that the publication of some movie is delayed for some particular reason, and after a certain period, the movie is finally published. The lack of an extreme degree connotation renders the sentence-focus *wh*-question. These facts suggest that the acceptability of particle fronting in English depends on the presence of the expressive meaning of a particle verb.

Finally, let us consider the set of particle verbs with [+ autonomous, +contrastive].

| (25) | a.   | The shares went up/down = The shares were up/down.   | [+autonomous]           |
|------|------|--|-------------------------|
|      | b.   | go (up, down)  | [+contrastive]          |
| (26) | a.   | Up went the shares, not down.                        | (Cappelle, 2001, p. 53) |
|      | b. ? | ? On the wall hung canvasses, but not on the easels. | (Bresnan, 1994, p. 86)  |

The particle *up* in the particle verb *go up* is [+autonomous, +contrastive] because the particle functions as the predicate of the subject and has the alternative particle (i.e., *down*) while keeping the verbal meaning unchanged. If the particle *up* undergoes particle fronting, the resulting sentence requires a contrastive context. For example, the sentence in (26a) is acceptable only if the speaker's previous expectation (e.g., the shares should go down) is violated. In this case, the negative tag indicates the speaker's previous expectation. According to my informants, (26a) is marginal as CFoc (i.e., corrective focus) on the fronted particle. A similar observation is reported concerning locative inversion by Bresnan (1994), who states that CFoc on the preposed locative PP is marginal (cf. (26b)). These facts suggest that (26a) carries a (non-contrastive) counter-expectation interpretation.

In summary, this section has argued that the sentence-initial particle plays a dual role in particle fronting in English: subjecthood and focus. Furthermore, the focal property of the sentence-initial particle indicates its relation to the expressivity (i.e., extreme degree) of certain unaccusative particle verbs (e.g., *gush out*). The next section proposes an analysis of particle fronting in English on the basis of Cruschina's (2011) IFoc fronting approach.

## 3.2 Proposal

Let us outline the derivation of particle fronting in English. As far as [+ autonomous] particle verbs are concerned, the subject and the particle establish a predication relationship. On the theoretical side, it is assumed that this type of predication relation reflects a small clause (Stowell, 1981). Under this assumption, an unaccusative verb like *gush* takes a small clause as its complement, as shown below:<sup>[6]</sup>

- (27) a. The secrets gushed out.
  - b.  $[_{\nu P} \text{ gush} [_{SC} [_{DP} \text{ the secrets}] [_{Prt} \text{ out}] ]]$
  - c. ...  $[_{IFocP} [_{Prt} out]_i [_{Fin'} [_{IP} t_i [_{\nu P} gushed [_{SC} [_{DP} the secrets] t_i ]]]]]$

Given that the sentence-initial particle in particle fronting plays a dual role, subjecthood and (non-contrastive) focus, it is assumed that the particle must satisfy both the EPP (Extended Projection Principle) requirement and the IFoc fronting requirement. More concretely, after satisfying the EPP requirement at [Spec, IP], the particle is forced to move to [Spec, IFocP] for some grammatical reason. In connection with this, the present study proposes that the particle at [Spec, IP] must front to [Spec, IFocP] due to the Thematic Resistance Principle proposed by Koopman (1984).

| (28) | Thematic Resistance Principle                 |                         |
|------|---|-------------------------|
|      | Only [-V] categories may be $\theta$ -marked. | (Koopman, 1984, p. 111) |

Intuitively, this principle states that predicative constituents cannot occupy the subject position. More precisely, the thematic subject position can be occupied by a [-V] constituent (e.g., a DP and a PP); no [+V] constituent can remain at the subject position. In the context of particle fronting, the thematic resistance principle prevents the [+V] verb particle from remaining at the subject position, and hence it obligatorily fronts to [Spec, IFocP].

## 4. Concluding Remarks

Starting from Cruschina's (2011) dichotomy of focus fronting, this paper reviewed Trotzke and Quaglia's (2016) IFoc fronting approach to particle fronting in German. Particle fronting in German has the following two crucial properties: its compatibility with sentence-focus contexts and its correlation with those particle verbs which allow (expressive) extreme-degree modification. Following this line of research, this study argued that particle fronting in English behaves similarly to

that in German, except that the unaccusative verb restriction is imposed on the former as an independent, language-specific factor. Based on this argument, this study proposed that English has recourse to IFoc fronting as a grammatical means to introduce an exclamatory statement.

The present proposal has several empirical and conceptual consequences for the research on the notion of emphasis. On the empirical side, this study showed that the presence of emphatic IFoc fronting is supported by particle fronting in English. Furthermore, the source of the emphasis involved in particle fronting in English was identified with the fronted particle. In the literature, the source of the emphasis has been associated with the post-verbal DP (e.g., Hooper & Thompson, 1973; Gary, 1976; Fukuchi, 1985). In contrast, this study argued that the fronted particle encodes emphasis, or the speaker-oriented extreme-degree meaning. This finding was obtained by integrating the IFoc fronting approach with expressive particle verbs. On the conceptual side, this study provided arguments for the claim that the emphatic meaning in IFoc fronting is not attributed solely to contextual factors, or relevance (cf. Section 2.1). The extension of Trotzke and Quaglia's (2016) approach to particle fronting in English speaks for the possibility that a certain grammatical feature related to the notion of expressivity (i.e., extreme-degree) may trigger IFoc fronting.

#### Acknowledgements

I would like to express my deepest gratitude to the organizers and audience of Tsukuba Global Science Week 2018 for their invaluable comments. My special thanks go to Rachel Ballew and Julio Pereira, who kindly acted as informants. All remaining errors and inadequacies are my own.

#### Notes

- [1] This study uses the term *directional adverb preposing* in a more restricted sense to refer to examples like (1a-c).
- [2] The example in (1a) with the fronted locative PP is often referred to as locative inversion. According to Bresnan (1994), the locative PP in locative inversion functions as a topic at the pragmatic level. On the other hand, the present study claims later that the fronted particle in directional particle fronting has a (non-contrastive) focal property. For this reason, this study tentatively differentiates locative inversion from directional particle fronting.
- [3] The Force layer is responsible for clause typing, and the Finite layer encodes the finiteness of a sentence either as finite or non-finite. The asterisk on the right side of "Topic" means that Topic projections allow adjunction (i.e., the occurrence of multiple topics).
- [4] Cruschina (2011) assumes that the fronted IFoc element and the fronted verbal element must establish a Spec-Head agreement relation in the IFoc projection. This assumption accounts for the fact that IFoc fronting, unlike CFoc fronting, must meet the focus-verb adjacency requirement. On the semantic side, the fronted verbal element serves to connect the IFoc element with the rest of the propositional content.
- [5] Other candidates for expressive unaccusative particle verbs include *rush out* and *burst out*.
- [6] The proposed analysis further needs a mechanism to account for the auxiliary reduction process involved in (19). Interested readers are referred to Kaisse (1984).

## References

Bianchi, V., Bocci, G., & Cruschina, S. (2016) Focus fronting, unexpectedness, and the evaluative implicatures. *Semantics and Pragmatics*, 9, 1–54.

Bresnan, J. (1994) Information status and word order: An analysis of English inversion. Language, 70, 72-13.

- Cappelle, B. (2002) And up it rises: Particle preposing in English. In N. Dehé, R. Jackendoff, A. McIntyre, & S. Urban (eds.), *Verb-particle explorations* (pp. 43–66). Berlin and New York: Mouton de Gruyter.
- Chomsky, N. (1970) Deep structure, surface structure and semantic interpretation. In R. Jakobson & S. Kawamoto (eds.), *Studies in general and oriental linguistics presented to Shirô Hattori on the occasion of his sixtieth birthday* (pp. 52–91). Tokyo: TEC Company.
- Coopmans, P. (1989) Where stylistic and syntactic processes meet: Locative inversion in English. *Language*, 65, 728–751.

Cruschina, S. (2011) Discourse-related features and functional projections. Oxford: Oxford University Press.

Cruse, A. (1986) Lexical semantics. Cambridge: Cambridge University Press.

- Emonds, J. (1976) A transformational approach to English syntax: Root, structure-preserving, and local transformations. New York: Academic Press.
- Fukuchi, H. (1985) Danwa-no koozoo (The structure of discourse). Tokyo: Taishukan.
- Gary, N. (1976) A discourse analysis of certain root transformations in English. Bloomington: Indiana University Club.
- Hooper, J., & Thompson, S. (1973) On the applicability of root transformations. Linguistic Inquiry, 4, 465-497.

Jackendoff, R. (1972) Semantic interpretation in generative grammar. Cambridge: MIT Press.

- Jackendoff, R. (2002) English particle constructions, the lexicon, and the autonomy of syntax. In N. Dehé, R. Jackendoff, A. McIntyre, & S. Urban (eds.), *Verb-particle explorations* (pp. 67–94). Berlin and New York: Mouton de Gruyter.
- Kaisse, E. M. (1983) The syntax of auxiliary reduction in English. Language, 59, 93–122.
- Koopman, H. (1984) *The syntax of verbs: From verb movement rules in the Kru languages to universal grammar.* Dordrecht: Foris.
- Lambrecht, K. (1994) Information structure and sentence form: Topic, focus, and the mental representation of discourse referents. Cambridge: Cambridge University Press.
- Lohse, B., Howkins, J. A., & Wasow, T. (2004) Domain minimization in English verb particle constructions. *Language*, 80, 238-261.
- Morzycki, M. (2012) Adjectival extremeness: Degree modification and contextually restricted scales. *Natural Language and Linguistic Theory*, *30*, 567–609.
- Rizzi, L. (1997) The fine structure of the left periphery. In L. Haegeman (ed.), *Elements of grammar: A handbook of generative syntax* (pp. 281–337). Dordrecht: Kluwer.
- Sperber, D. & Wilson, D. (1995) *Relevance: Communication and cognition* (2nd ed.). Oxford: Blackwell Publishing.
- Stowell, T. (1981) Origins of phrase structure (Unpublished doctoral dissertation). MIT, Cambridge.
- Trotzke, A., & Quaglia, S. (2016) Particle topicalization and German clause structure. *Journal of Comparative German Linguistics*, 19, 109–141.
- Wurmbrand, S. (2000) The structure(s) of particle verbs. Unpublished manuscript.