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Abstract: Focus is cross-linguistically associated with a number of different strategies, such as fronting, clefting, markers, and prosody. In some cases, the choice between one strategy or another is determined by language-specific rules, while in others, two or more strategies seem to be optional, and thus, somehow "unpredictable". In this experimental study, we investigate the syntactic strategies employed in object focusing in Finnish and in Italian by examining the syntactic, semantic, and pragmatic features underlying the choice of a specific Focus strategy. In particular, the present experiment is aimed to investigate two strategies employed in both languages for object Focus realization, namely, Focus in situ and fronting, in order to verify whether the choice between them is influenced by a specific type of feature, a combination of Focus-related features, the verb category involved, or the interplay between these three factors. The incidence of alternative constructions, in particular clefting in Italian and the *-hAn* discourse marker in Finnish, is also taken into consideration, and relevant asymmetries are analyzed in a comprehensive, comparative account.

Keywords: Focus; exhaustivity; correction; Focus strategies; fronting; Focus operator

1. Introduction

A number of recent works have examined the composition and extent of phrasal hierarchies in the left periphery of the sentence, distinguishing between different types of discourse-related categories (cf., among others, Rizzi 1997, 2001, 2004, 2018; Haegeman 2004; Frascarelli and Hinterhölzl 2007; Cruschina 2011; Frascarelli 2017).

Furthermore, recent works on the interface properties of discourse categories have led to a distinction for different types of Topics (cf. Büring 1999; Haegeman 2004; Frascarelli 2007; Krifka 2007; Bianchi and Frascarelli 2010; Frascarelli and Hinterhölzl 2007; Jiménez-Fernández and Miyagawa 2014), Focus (cf., among others, É. Kiss 1998; Âmbar 1999; Krifka 2007; Leonetti and Escandell 2009; Cruschina 2011; Bianchi and Bocci 2012; Bianchi 2013; Jiménez-Fernández 2015a, 2015b) and Contrast, the latter often associated with either Focus or Topic, but also analyzed as an independent feature (Vallduví and Vilkuna 1998; Molnár 2006; Bianchi and Bocci 2012; Frascarelli and Ramaglia 2013b; Bianchi 2013).

With regard to Focus constructions, different types of Foci have been distinguished and proposed in the literature, based on different formal and discourse properties (cf., among others, É. Kiss 1998; Aboh et al. 2007; Frascarelli 2010; Cruschina 2011; Bianchi et al. 2015). In particular, Bianchi and Bocci (2012) argue for a syntactic and semantic distinction between Informative and Corrective Foci, whereas a crucial information-structural distinction is argued for Exhaustive Focus in É. Kiss (1998), Skopeteas and Skopeteas and Fanselow (2010, 2011), Brody and Szendrői (2011). Interestingly, both Corrective and Exhaustive Focus have often been argued to be connected with a fronting requirement (cf., among others, Skopeteas and Fanselow 2011; Bianchi 2013; Bianchi et al. 2015; Delfitto and Fiorin 2015; Cruschina 2019), even though such operation does not seem to be obligatory, neither intra- nor cross-linguistically.

Working within the Cartographic approach of Minimalism (cf. Cinque and Rizzi 2008), we assume that discourse-semantic properties are associated with formal features, merged in dedicated functional projections in the C-domain (Adger and Svenonius 2011) and that a systematic connection exists between the formal (syntax-prosody) and semantic properties of discourse-related categories (cf. Frascarelli 2017, 2018; Cinque and Rizzi 2008). Based on these premises, the present work aims to provide a feasible explanation for what represents an open issue for linguistic research in this approach, namely, fronting optionality in (specific types of) Focus constructions.

Since corrective and exhaustive information per se seem to fail to account for the occurrence of fronting in a significant way (cf. Bianchi and Bocci 2012; Skopeteas and Fanselow 2011), we hypothesize that a solution may lie in the combination of different features, which trigger the A'-movement of a single constituent to obtain interpretation at the interfaces. In this respect, Frascarelli and Ramaglia (2013a) have provided evidence that feature combination is a trigger for movement and must be postulated to account for the interpretation of different types of Topics at the interfaces.[1]

Interestingly, the importance of positing feature composition has also been argued for (specific types of) Focus interpretation in Delfitto and Fiorin (2015). In this contribution, an original analysis of Fronted Focus in Italian is proposed, based on the insight that Fronted Focus can be decomposed into Contrast (i.e., the 'Contrastive/Corrective' Focus in the terminology of Belletti 2004) and the Exhaustive Operator involved in the computation of grammaticalized implicatures. It is argued that the different varieties of alleged Contrastive Focus in Italian are amenable to an analysis according to which the trigger for movement is an attracting Q-feature in the clausal left-periphery, as with Focus-movement in Hungarian.[2]

In this line of analysis, the first factor that we intend to investigate is the role of feature-combination. In particular, we want to check whether the systematic combination of Contrast and Exhaustivity—in the absence of overt Operators—may be a significant trigger for Focus Fronting (henceforth, FF).

Furthermore, since the realization of discourse features can be 'mediated' by the presence of specific Operators, it is important to check whether Exhaustive Operators enhance FF or, rather, 'absorb' Exhaustivity, leaving relevant Foci in situ (in line with Economy principles). The second factor under investigation is therefore the role of Exhaustive Operators for FF.

Finally, the third factor to be checked is the role of argument Merge in the vP-phase. As a matter of fact, FF is a movement operation and movement implies the creation of a licensing (Agree) relation between the fronted constituent and its copy. Considering that different verb types have different External Merge positions for their arguments in the vP-phase (cf., among others, Larson 1988; Hale and Keyser 1993; Alexiadou and Anagnostopoulou 2004), this difference may be crucial for FF, since the syntactic visibility of the Goal is expected to be dependent on its location in the edge position within the hosting phase.

To sum up, our research questions are the following:

(i).   Does the trigger for FF lie in the combination of multiple features, such as [Correction] and [Exhaustivity], within the same context?
(ii). Do Exhaustive Operators, which convey an exhaustive import, thus increasing the degree of feature combination, have an impact on the realization of FF?
(iii). Can the External Merge of the focused constituents within the vP phase play a role in (dis)favoring FF?

In this respect, we predict that (i) FF can be favored by the necessity to combine two discourse features and/or activate a specific Focus-related interpretation, (ii) Exhaustive Operators 'absorb' [Exhaustivity]; they thus nullify the possibility of feature-combination, disfavoring fronting (iii) the interface visibility of the focused constituent depends on the specific thematic hierarchy of the verb. In particular, a difference in acceptability between items featuring transitive, unergative, and unaccusative verbs can be expected.

Based on data coming from an ad hoc experiment, we provide a systematic, data-based evaluation of this proposal, both in Italian and in Finnish. In detail, the present paper is organized as follows: Section 2 is dedicated to the notion of Focus and its subtypes, specifically concentrating on Corrective (Section 2.1) and Exhaustive Focus (Section 2.2). Then, the different morphosyntactic strategies applied in Finnish and in Italian for Focus (e.g., fronting, clefts, markers, Operators) will be illustrated in Section 3. Subsequently, Sections 4 and 5 will respectively describe the present experiment and illustrate its results, together with a comprehensive statistical analysis. Finally, in Section 6, we will sum up the conclusions, confront relevant results with the research questions illustrated in this section, and put forth our final proposal.

2. The Notion of Focus and Different Focus Types

Focus is a discourse category, generally defined as the part of an utterance conveying new (inactive) information, which has been given great attention by scholars from diverse theoretical frameworks. Among others, Halliday (1967, p. 205) defines Focus as what "is presented by the speaker as being new"; for Jackendoff (1972, p. 230) it represents the information "that is assumed by the speaker not to be shared by him and the hearer"; Lambrecht (1994, p. 213) considers it "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition".

Within the framework of formal semantics, the two most relevant approaches are the Structured Meaning approach (von Stechow 1981; Krifka 1992) and the Alternative Semantics (Rooth 1992, 1996). According to the Structured Meaning Approach, in Focus structures, the meaning of a proposition is partitioned into a Background part, which represents a property, and a Focus part, which identifies the element of which the property is true. In this line of analysis, the formal representation of a sentence such as 'Mary likes Sue', can be described in the following two ways, depending on which constituent is focused:

(1)　　a.　　　[Mary]F likes Sue = $\langle \lambda x\ [likes(x, s)], m \rangle$
　　　　b.　　　Mary likes [Sue]F = $\langle \lambda y\ [likes(m, y)], s \rangle$

In (1a), the Background part represents the property of 'liking Sue', while the Focus identifies *Mary* as the individual presenting that property. Conversely, in (1b), the Background part represents the property of 'being liked by Mary', and the Focus identifies *Sue* as the individual having that property.

On the other hand, according to the Alternative Semantics approach, the general function of Focus is 'evoking alternatives'. Specifically, the Focus substitutes the focused phrase with other plausible elements. Hence, the Focus value of (1a) and (1b), written $[\![.]\!]^f$, is the following:

(2)　　a.　　　$[\![[Mary]_F\ likes\ Sue]\!]^f = \{like(x, s) \mid x \epsilon E\}$, where E is the domain of individuals.
　　　　b.　　　$[\![Mary\ likes\ [Sue]_F]\!]^f = \{like(m, y) \mid y \epsilon E\}$　　　　　　(Rooth 1992, p. 76)

In other words, the Focus value of (2a) is the set of propositions of the form '*x* likes Sue', while the Focus value of (2b) is the set of propositions of the form 'Mary likes *y*'.

As is generally acknowledged, constituents of different 'sizes' can be focused within the sentence, and terms such as 'Broad Focus' (BF) and 'Narrow Focus' (NF) are used in this respect (cf. Lambrecht 1994). Specifically, the distinction between BF and NF is not categorical, but gradual in nature, with NF referring to focus on single words or constituents and BF referring to complex constituents (VP, IP, CP) in which all parts are newly introduced into the discourse at the moment of utterance.

Furthermore, NF can be in turn distinguished in several subtypes, such as Information Focus, Contrastive Focus, Corrective Focus, Exhaustive Focus, Mirative Focus, and Verum Focus (cf. Krifka 2007; Bianchi and Bocci 2012; Bianchi et al. 2015; Cruschina 2012). For the purposes of the present work, we will deal with two of them, namely Corrective Focus and Exhaustive Focus, referring to the relevant literature for details on the other subtypes.

2.1. Corrective Focus

Following Bianchi and Bocci's (2012) analysis, Corrective Focus (henceforth CF) expresses an incompatible description of one and the same event (cf. Van Leusen 2004). Specifically, the incompatibility import implies that accepting both the antecedent proposition and the corrective claim would lead to an inconsistency: this is what gives rise to the correction effect, whereby speaker A's assertion is rejected by speaker B.

Correction should not be confused with Contrast, since CF adds "an incompatibility presupposition" to mere contrast. As a matter of fact, the latter does not reject the proposition asserted in the previous sentence, but proposes to add another proposition to the Common Ground, which is identical to the previous one except for the Focus:

(3) a. A: Yesterday, Jordan bought a blue car.
B: Really? Yesterday, I bought a red$_{ContrF}$ car.
b. A: For the picnic this afternoon, John is going to bring a cold salad.
B: Really? Mary is going to bring a cold soup$_{ContrF}$.

From this perspective, CF can be defined as a complex conversational move, involving both the denial of a previously asserted proposition and the assertion of a new, 'correct', proposition. This means that the information structure (IS) of a sentence containing a CF carries an incompatibility presupposition between the sentence itself and a specific alternative, which has been explicitly mentioned in the previous discourse. Consider the following example (adapted from Bianchi and Bocci 2012):

(4) A: John invited Lucy
B: ⟦He invited [Marina]$_{CF}$⟧f = {invite(j, x) | xϵE}

In (4), B's answer corrects A's assertion by replacing the focused element 'Marina' with its alternative 'Lucy' proposed by A. Then, the corrective context conveys the presupposition that the contextually given alternative (i.e., A's assertion) is incompatible with B's corrective claim.

According to Klok et al. (2018) variation in Focus types depends on Operator scope, and propose that the representation of CF involves wide scope of Focus marking over the clausal node:

(5) For the picnic this afternoon, John is going to bring a cold salad.
A: 'No, ~[he's going to bring a cold$_{CF}$ soup].
B: 'No, ~[he's going to bring a cold soup$_{CF}$].'

As shown in (5), the alternatives involved in this type of Focus refer to the entire clausal node, or possibly to alternative speech acts, if Operators such as 'assert' are assumed to be represented as formal features in the C-domain.

Finally, it is interesting to notice that the CF feature can be somehow 'absorbed' by a 'marker', such as the Negative Polarity Item (NPI) *no* in English (cf. (5)). Indeed, Bianchi and Bocci (2012) provides evidence that the frequency of fronting is almost immaterial in the presence of a negative tag. The relevance of explicit markers for Focus interpretation is indeed one of the factors to be investigated in this work (cf. Section 1 above), to be treated in Section 3.3 below and dealt with in the experimental section (cf. Section 5 below).

2.2. Exhaustive Focus

In her seminal work, É. Kiss (1998) defines the Exhaustive Focus (henceforth, EF)—referred to as 'Identificational' Focus—as the constituent bearing the semantic-communicative function of representing a "subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold" (I É. Kiss 1998, p. 245).

According to this definition, semantically, EF represents the value of the variable bound by an abstract Operator expressing exhaustive identification, whereas syntactically, the EF is itself an Operator, moving into a scope position in the specifier of a functional projection, and binding a variable. Hence, if a constituent conveys new, non-presupposed information marked by one or more pitch accents, without expressing exhaustive identifi-

cation performed on a set of contextually or situationally given entities, it is not an EF but a mere IF.

Hence, according to É. Kiss (1998), EF and IF must not be collapsed, because EF presents semantic and syntactic properties that a mere IF does not share. Based on Hungarian data, it is therefore argued that EF moves to the Spec of a functional projection in the C-domain, taking scope, while IF does not involve any movement. Consequently, EF is always "coextensive with an XP available for Operator movement, whereas IF can be either smaller or larger" (É. Kiss 1998, p. 248).

Based on Szabolcsi's (1981) test on exhaustive identification, it is then argued that Hungarian EF corresponds to cleft constructions in languages such as English. Indeed, "a noncleft constituent with a pitch accent does not represent exhaustive identification" (É. Kiss 1998, p. 250). In other words, Foci in situ are mere IF.

However, for Finnish, the term 'exhaustivity' is rarely mentioned when dealing with Focus. Finnish displays both fronted and in situ Focus; the former is usually translated by a cleft construction (6a), while the latter by an emphatic constituent in situ (6b): [3]

(6)	a.	[CP	Anna-lle	[IP	Mikko	anto-i	kukk-i-a]]
			Anna-ADE		Mikko.NOM	give-PST.3SG	flowers-PL-PART
			'It was to ANNA that Mikko gave flowers.'				
	b.	[IP	Mikko		anto-i	[VP kukk-i-a	Anna-lle]]
			Mikko.NOM		give-PST.3SG	flowers-PL-PART	Anna-ADE
			'Mikko gave flowers to ANNA.'				

Despite this structural difference, in Vilkuna (1995), both realizations are argued to imply Operator-movement to Spec,CP for interpretation, differently from É. Kiss (1998). Specifically, in (6a) the Focus is argued to have overtly moved to Spec,CP, while in (6b) movement occurs in LF. The correspondence between EF, movement and cleft construction will be specifically addressed in the present experimental test (cf. Section 5).

3. Focus Strategies

In this section, we present the different morphosyntactic Focus strategies applied in Finnish and in Italian. Both languages allow Focus licensing in situ and through fronting, though the latter is optional and apparently limited to some Focus types. In addition, Finnish makes use of Focus markers, while in Italian, cleft sentences can be used to implement Focus-related readings.

Both languages also employ specific prosodic means of marking IS readings, namely F_0 range, pauses, word duration, intensity, voice quality, and the configuration and location of pitch accents (for a detailed account on different prosodic cues to express Focus, see Arnhold and Kyröläinen 2017 for Finnish; Frascarelli 2000a, 2004 for Italian).

In Finnish, for instance, IF in 'all-new' sentences is expressed in situ and shows a prominent rise-fall contour, while a Contrastive Focus in the same position is realized through an even more prominent rise-fall pattern with increased segmental duration (cf. rhematic vs. contrastive accent in Suomi et al. 2008, pp. 112–14). Focused constituents bear a special stress in Italian as well, and empirical evidence show that each Focus type is characterized by a different intonational pattern, though the presence of a high pitch H* seems to be a common element (Jackendoff 1972; for recent discussion, cf. Bianchi and Bocci 2012; Bianchi et al. 2015; Frascarelli and Stortini 2019). Prosodic analysis goes beyond the purpose of the present work and will not be examined further here, therefore the interested reader is invited to refer to cited works, among others, Välimaa-Blum (1993), Vainio and Järvikivi (2007), Arnhold and Kyröläinen (2017), Samek-Lodovici (2018).

3.1. Focus Fronting vs. Realization In Situ

Different views on object FF and its optionality have been discussed in the literature. According to Rizzi's (1997, 2006) cartographic approach, the object endowed with a [Focus] feature must be displaced into a specific criterial position in the left periphery of the clause to be licensed. From a Structured Meaning perspective, Krifka (2007) also argues for a

mandatory A'-movement of the focused constituent, while in Rooth's (1992) Alternative Semantics approach, the Focus is interpreted in situ. Nevertheless, fronting is no doubt an option for Focus (despite its common optional character), and recent studies have shown that this syntactic operation is cross-linguistically sensitive to the Focus type (Cruschina 2019, 2021).

3.1.1. Object Focus in Finnish: SVO vs. OSV

The unmarked word order in Finnish is SV(X), where X can be an object, a predicative, or an adverbial constituent. However, by virtue of a rich case and agreement morphology, the main function of constituent order is generally not to reflect the syntactic relations between constituents, but to convey discourse-functional information in the utterance. Hence, according to the textual corpus study of Hakulinen et al. (1980), the most common word orders observed in Finnish are SVX (49 %) and XVS (11 %).

All word order permutations are possible in a simple transitive sentence, as illustrated below in the example sentences (7a–f), where the salient information is marked in bold (adapted from Ylinärä 2021, p. 3):

(7)	a.	Liisa	rakasta-a	Martti-a.	(SVO)
		Liisa.NOM	love-3SG	Martti-PART	
		'Liisa loves Martti.'			
	b.	Martti-a	rakasta-a	**Liisa**.	(OVS)
		Martti-PART	love-3SG	Liisa	
		'**Liisa** loves Martti.'			
	c.	**Liisa**	Martti-a	rakasta-a.	(SOV)
		Liisa.NOM	Martti-PART	love-3SG	
		'It is **Liisa** who loves Martti.'			
	d.	**Martti-a**	Liisa	rakasta-a.	(OSV)
		Martti-PART	Liisa.NOM	love-3SG	
		'It is **Martti** who Liisa loves.'			
	e.	**Rakasta-a**	Liisa	Martti-a.	(VSO)
		love-3SG	Liisa.NOM	Martti-PART	
		'Liisa **does** love Martti.'			
	f.	Rakasta-a	Martti-a	Liisa.	(VOS)
		love-3SG	Martti-PART	Liisa.NOM	
		Lit. 'Loves Martti Liisa.'[4]			

The sentence in (7a) represents the canonical order, which could be uttered in 'all-new' sentences as an answer to a question such as 'What's new?', while the sentences in (7b–f) require specific discourse contexts in order to be acceptable and pragmatically appropriate; as such, they would not be felicitous in an 'all-new' context. The syntactic functions of subject and object can easily be identified through Case-morphology in each sentence: the subject *Liisa* is in the Nominative Case (the morphologically unmarked Case form) and the object *Martti* shows the Partitive Case ending -*a*.[5] The verb-final word orders, namely SOV and OSV in (7c,d), respectively, are generally translated through cleft constructions.

In the present experimental study, we focus on the realization of object Focus in finite clauses, and specifically we examine the SVO and OSV orders, as illustrated above in (7a) and (7d), respectively. As mentioned above, the canonical SVO order is generally considered most suitable in an 'all-new' context where the whole sentence is a Broad Focus, yet it can also be interpreted as contrastive if the sentence-final object receives appropriate prosodic prominence (cf., among others, Välimaa-Blum 1993; Vallduví and Vilkuna 1998; Kaiser 2006), as illustrated below.

(8)   A:
Luule-n,	että	Liisa	rakasta-a	Pekka-a.
think-1SG	that	Liisa.NOM	love-3SG	Pekka-PART

'I think Liisa loves Pekka.'

    B:
Ei,	Liisa/hän	rakasta-a	MARTTI-A.
no	Liisa/she.NOM	love-3SG	Martti-PART

'No, Liisa/she loves MARTTI.'

As for the non-canonical OSV order, the fronted constituent is traditionally associated with a contrastive import, whether it is given or new information (cf., among others, Vilkuna 1989, 1995; Vallduví and Vilkuna 1998; Holmberg and Nikanne 2002; Brody and Szendrői 2011). In the literature, the fronted Focus type in Finnish is usually referred to as 'Contrastive Focus', but as we will see in the following Section, we consider this particular type, illustrated in (9) below, as CF, which is a special type of Contrastive Focus (cf. Section 2.1 above). In her corpus-based analysis of Finnish texts, Kaiser (2000) suggests that Contrast is only a subcase of one of the discourse functions of object fronting, and specifically that of being in a "salient partially-ordered set ('POSET') relation to entities already mentioned in the discourse". In this respect, some scholars suggest that, in addition to containing an implicit negation, fronted Focus is associated with an exhaustive interpretation, in that it is the only entity that identifies the variable contained in the Comment (Sulkala and Karjalainen 1992). The Finnish fronted Focus is, indeed, often translated with a cleft sentence in languages such as Italian or English, where this strategy is often associated with exhaustive interpretation (cf. Krifka 2007; Belletti 2005, 2008; De Cesare 2017; Dal Farra 2018):

(9)
MARTTI-A	Liisa	rakasta-a.
Martti-PART	Liisa.NOM	love-3SG

'(It is) MARTTI (whom) Liisa loves.'

The association between FF and Exhaustive Correction is the first factor under examination in this work (cf. Section 1 above).

3.1.2. Object Focus in Italian: SVO vs. OVS

The constituent order permutations in Italian are relatively limited compared to Finnish, possibly due to a more restricted Case morphology. The two most frequently occurring constituent orders, and the ones relevant to the present study, are SVO and OVS (cf. Frascarelli 2000a, Frascarelli and Stortini 2019), illustrated in (10a,b) below:

(10)   a.
Alex	ha	scritto	una	MAIL.
Alex.NOM	have.3SG	write.PRT	an	email.ACC

     b.
Una	MAIL	ha	scritto	Alex.
an	email.ACC	have.3SG	write.PRT	Alex.NOM

As said above, in Italian, Foci can be realized in different syntactic positions, that is to say, in situ (10a) or fronted (10b). Traditionally, the clause-final position (10a) is considered to be associated with an informative import and could be the answer to a *wh*-question. This type would be opposed to a different reading, in which the fronted constituent is endowed with a contrastive import (10b). However, the situation is more complex than that. It has been observed in some Italian varieties and, in particular, in Sardinian (Jones 2013), and Sicilian (Cruschina 2016), as well as in other Romance languages, such as Spanish (Zubizarreta 1998) and Catalan (Vanrell and Fernández-Soriano 2013), that the movement of a focused constituent to a position in the left periphery of the sentence does not necessarily imply a contrastive interpretation.

Looking into this issue, recent works on Focus in Italian have provided evidence for a subdivision of Contrastive Foci into different types (Bianchi and Bocci 2012; Bianchi et al. 2015, 2016) and degrees (Molnár 2002; Cruschina 2021). Specifically, Bianchi and Bocci (2012) examine the optionality of FF in relation to corrective and "merely" contrastive conditions, providing experimental evidence that the fronting strategy is only applicable in a corrective context (although the highly preferred position for a CF is in situ), while Contrastive Focus cannot be licensed in the left periphery. The authors thus propose that

"corrective focus always enters a dependency with the left periphery of the clause, even when the focus constituent appears to be in situ" (Bianchi and Bocci 2012, p. 12).

CF—considered as a specific type of Contrastive Focus, as mentioned above, which features the highest degree of contrast—expresses explicit contrast against a given alternative across utterances (i.e., it corrects a previously asserted proposition and may optionally occur with a negative tag resuming the contrasted alternative, as illustrated in (11):

(11)　A:　　Alex　　　ha　　　　comprato　una　　　moto.
　　　　　　Alex.NOM　have.3SG　buy.PRT　　a　　　　motorcycle.ACC
　　　　　　'Alex bought a motorcycle.'
　　　　B:　　UNA　　　BICI　　ha　　　　comprato (,　non　una　moto).
　　　　　　a　　　　　bike.ACC　have.3SG　buy.PRT　　　not　a　　motorcycle.ACC
　　　　　　'A bike he bought (, not a motorcycle).'

Furthermore, an experimental study on Corrective and Mirative Foci[6] (Bianchi et al. 2016) provides prosodic evidence that these two Focus types also associate with different intonational properties (see also Cruschina 2012 for a syntactic analysis).

3.2. Cleft Constructions

Another Focus strategy that is relevant for our experimental analysis is clefting. Clefts in Italian are analyzed as specificational bi-clausal constructions, which consist of a copular element, a clefted phrase and a subordinate clause, as in (12).[7]

(12)　È　　　　un　　LIBRO　　　che　　Tom　　　ha　　　　letto.
　　　　be.3SG　　a　　book.ACC　REL　　Tom.NOM　have.3SG　read.PRT
　　　　'It is a BOOK that Tom read.'

Cleft constructions can be described as a syntactic format which has a wide array of discourse functions, primarily related to focusing. In fact, for the purposes of the present study, we concentrate on cleft constructions in which the clefted constituent is focused, and the relative clause conveys presuppositional information. In particular, in relevant studies, it has been argued that clefted Foci usually convey contrastive or corrective reading (É. Kiss 1999; Sleeman 2013; Belletti 2008).[8]

From a syntactic point of view, clefts have been analyzed in literature as Small Clause constructions since Den Dikken et al. (2000), in which the clefted phrase and the relative clause are observed as independent constituents merged within a Small Clause (Frascarelli 2000b; Belletti 2005). In the present study, we adopt the view proposed in Frascarelli (2000b; cf. also Heggie 1993), according to which, the relative clause is merged as the subject and the clefted phrase as the predicate of the construction.[9]

As shown in Roggia's (2008) comparative corpus study on spoken French and Italian, and widely acknowledged for different languages, the degree of positional freedom for syntactic constituents (and prosodic accents) correlates inversely with the frequency of cleft constructions in a language. In fact, in French, which displays a more rigid word order than Italian, clefts are used in a much greater degree than in Italian. In contrast to the common idea that clefts are more frequent in informal than formal contexts, Roggia's data also show that cleft sentences are actually highly frequent in formal and monologue texts, while they occur, especially in Italian, with low frequency in informal ones.

The above-mentioned correlation also applies to Finnish (Leino 1982), in fact, Finnish displays quite a limited use of cleft constructions, especially in object focusing, while they seem to occur more frequently in subject focusing.[10] Finnish clefts are considered constructions of foreign origin, probably Scandinavian (Leino 1982), and they represent a relatively rare format in Standard Finnish. They form a heterogenic group and, in fact, they implement different morphosyntactic patterns, as illustrated below for subject (13a,b) and object (14a,b) focusing (example sentences of an informal register adapted from Aller Media 2014):

(13) a. (Kyllä) se ole-n/on minä, joka määrää/määrää-n.
EMPH it.ACC/NOM[11] be-1SG/.3SG I.NOM REL.NOM command.3SG/-1SG
'It is me who commands.'

b. Minä se ole-n/on, joka määrää/määrää-n.
I.NOM it.ACC/NOM be-1SG/.3SG REL.NOM command.3SG/-1SG
'It is me who commands.'

(14) a. Kyllä se on kiusaaja jo-ta lyö-dään takaisin.
EMPH it.NOM be.3SG bully.ACC REL-PART hit-PASS back
'It is the bully who gets hit back.'

b. Kyllä se on jalostus-ta jo-ta ne siellä harrasta-a.
EMPH it.NOM be.3SG refinement-PART REL-PART they.NOM there do-3SG
'It is refinement that they do there.'

The difference in meaning between (13a) and (13b) is very subtle (if there is any) and difficult to formalize in a clear-cut way in the absence of a dedicated interpretive test. In any case, it is interesting to notice that both sentences allow agreement variation between 1SG and 3SG. As for object focusing, the variation concerns the case of the cleft constituent, here between the Accusative/unmarked Case (14a) and the Partitive Case (14b).

Considering the morphosyntactic and discourse-functional heterogeneity, the colloquial nature and the low frequency of occurrence (especially with object Focus), we will not discuss Finnish clefts in this work and leave the topic for future research.

3.3. Focus Markers and the Finnish Discourse Marker -hAn

The realization of Focus often implies the use of specific 'particles' or syntactic markers associated with the focused constituent. Such particles are usually referred to as 'Focus Markers' and different works have dealt with their semantic and syntactic properties.

Syntactically, Focus Markers (henceforth, FM) are heads and, in formal approaches dealing with these elements, they have been argued to derive from original copular forms in several languages (cf., among others, Green 1997; Coppock and Staum 2004; Frascarelli 2010).[12] In particular, Coppock and Staum (2004) deal with the "double-is constructions" in English and precisely identify the cleft construction as the proper context for a (diachronic) variation of copulas into FMs. Given the widespread consensus on this type of analysis, a cross-linguistic value can be feasibly assumed.

In this respect, it is therefore interesting to notice that a Focus particle is also present in Finnish, namely *-hAn*, an element which has been discussed in several works, without reaching a comprehensive and agreed-on analysis on its syntactic and interpretive properties (cf. Karttunen 1974, 1975; Hakulinen 1976; Nevis 1986; Välimaa-Blum 1987; Palomäki 2013, 2016 among others).

Since FMs derive from copular constructions, which have often been identified with clefts (cf. Frascarelli 2010 and references therein contained), we decided to use the Finnish FM *-hAn* as the counterpart of clefting strategy in Italian, with the aim of comparing their results with FF (cf. Section 4 infra).

The particle *-hAn* is one of the five clitic particles in Finnish, and a variety of functions has been attributed to it in the previous literature (Karttunen 1974, 1975; Hakulinen 1976; Nevis 1986; Välimaa-Blum 1987; Palomäki 2016). In particular, it has been argued to convey a nuance appealing to the listener (Penttilä 1957), mark a contradiction (Karttunen 1975), familiar information (Hakulinen 1976, VISK sct. 830; Brattico et al. 2013), or new information (Välimaa-Blum 1987). Curiously, *-hAn* is not listed within Focus particles in VISK 2004 (sct. 821), but it is considered as a *sävypartikkeli* "tone particle" which conveys familiar or known information through conventional implication and provides additional information on the speaker's attitude to the propositional meaning of the utterance. Palomäki (2016) argues that the previous analysis of *-hAn* as a particle conveying a conventional implication (as in VISK) cannot account for the polyfunctionality and multiple meanings associated with it. The author proposes that the versatile nature of *-hAn* can be explained within the Relevance Theoretic framework (cf. Sperber and Wilson 1986, and subsequent works; Blakemore 1987, and subsequent works; Ler 2006). In particular, she proposes that *-hAn* encodes procedural

meaning, that is to say, it "communicates a procedure which the hearers must perform in order to recover the interpretation of the utterance containing it" (Palomäki 2016, p. 26). She analyzes *-hAn* both as a general marker and a contrastive FM, relying on the typology of Topic and Focus proposed by Neeleman et al. (2009). In particular, with reference to its Focus function, the author claims that "either the constituent to which *-han* is attached may bear prosodic focus, or prosodic focus may occur elsewhere in the clause" (Palomäki 2016, p. 6).

In the present work, the particle *-hAn*[13] is examined as a marker that encodes discourse-related features, in particular Contrastive/Corrective Focus, in the left periphery of the sentence (in line with this analysis, cf. also Palomäki 2016, pp. 5–6). The discourse properties of the particle *-hAn* as a FM will be treated below.[14]

The particle *-hAn* is a result of a historical cliticization process from the independent 3SG pronoun *hän*, attached to a verb (VISK sct. 139). The present grammaticalized discourse particle *-hAn* no longer corresponds to a free form variant and is therefore always found attached to a host word, which can be (i) a (finite/non-finite) verb, (ii) a noun, (iii) an adverb, (iv) an adjective, (v) sentential negation or (vi) a preposition (VISK sct. 139, Brattico et al. 2013; Palomäki 2016).

Moreover, *-hAn* must be attached to the right edge of the first constituent, as illustrated in (15a–d) and therefore it is also classified as a 'second position clitic' (or a so-called 'Wackernagel clitic'):

(15) a. Matti-**han**   ost-i   PYÖRÄ-N.
       Matti.NOM-FM   buy-PST.3SG   bike-ACC
       'Matti bought a BIKE.'
   b. Tämä   kirja-**han**   on   HYVÄ.
      this.NOM   book.NOM-FM   be.3SG   good
      'This book is GOOD.'
   c. Ohjee-n   mukaan-**han**   lääke   pitä-ä   otta-a   ILLA-LLA.
      instruction-GEN   according-FM   medicine.ACC must-3SG   take-INF   evening-ADE
      'According to the instructions, the medicine must be taken in the EVENING.'
   d. Matti   ja   Liisa-**han**   ost-i-vat   MÖKI-N.
      Matti.NOM   and   Liisa.NOM-FM   buy-PST-3PL   cottage-ACC
      'Matti and Liisa bought a COTTAGE.'

As a FM, the marker *-hAn* can either license Contrastive/Corrective Focus on the hosting constituent or it can have scope over a constituent at a distance, as illustrated in the examples above (15a–d), depending on the constituent order of the sentence and relevant prosody (cf. also Palomäki 2016, pp. 5–6). To illustrate the syntactic behavior of *-hAn*, let us consider the following transitive sentences:

(16)   a.   Liisa-**han**   ost-i   PYÖRÄ-N.   (SVO)
            Liisa-FM   buy-PST.3SG   bike-ACC
            'Liisa bought a BIKE.'
       b.   Liisa-**han**   OST-I   pyörä-n.
            Liisa-FM   buy-PST.3SG   bike-ACC
            'Liisa BOUGHT a bike.'
       c.   LIISA-HAN   ost-i   pyörä-n.
            Liisa-FM   buy-PST.3SG   bike-ACC
            'It was LIISA who bought a/the bike.'

Examples (16a) and (16b) show two occurrences of Contrastive/Corrective Focus licensing. In both cases, the Focus has scope over different constituents to the right of the host, namely the object *pyörän* 'bike' in (16a) and the verb *osti* 'bought' in (16b), and the prosodic prominence is realized on these constituents. The FM may also license Focus on the hosting constituent (16c) with appropriate prosody. However, the following sentence, containing an expletive pronoun *se* 'it' between the focused constituent *Liisa* and the verb *osti* 'bought', would probably be a more suitable alternative to (16c):

(17)   LIISA-HAN   se   ost-i   pyörä-n.
       Liisa.NOM-FM   espl.3SG   buy-PST.1SG   bike-ACC
       'It was LIISA who bought a/the bike.'

As mentioned above (cf. also sentences (7b–d) for the counterpart without *-hAn*), the possible Focus functions of *-hAn* are sensitive to constituent order permutations, as illustrated in the following sentences:

(18) a. Pyörä-n-**hän** ost-i LIISA. (OVS)
bike-ACC-FM buy-PST.3SG Liisa.NOM
'(It was) LIISA (who) bought the bike.'
b. *PYÖRÄN-HÄN osti Liisa.
c. *Pyörän-hän OSTI Liisa.

(19) a. LIISA-**HAN** pyörä-n ost-i. (SOV)
Liisa.NOM-FM bike-ACC buy-PST.3SG
'(It was) LIISA (who) bought the bike.[15]
b. *Liisa-han PYÖRÄN ost-i.
c. *Liisa-han pyörän OST-I.

(20) a. PYÖRÄ-N-HÄN Liisa ost-i. (OSV)
bike-ACC-FM Liisa.NOM buy-PST.3SG
'(It was) A/THE BIKE (that) Liisa read.'
b. *Pyörän-hän LIISA osti.
c. *Pyörän-hän Liisa OSTI.

The examples (18–20) show that the constituent order is crucial for a felicitous interpretation of the FM *-hAn*. Specifically, when a constituent is in a clause-final position, that is, on the right side of the verb (OVS), it is the only possible Focus position available, as in (18a). On the other hand, when two constituents are positioned in the left periphery (i.e., before the verb as in (19a)), their discourse functions can only be interpreted in the order Focus > Topic, where the former constituent is salient information (new or given) and the latter conveys a topical reading, as in (19a)–(20a).

Verb-initial clauses show a different behavior in that they allow any of the (basic) constituents of the clause to be focused, with slightly different interpretations:

(21) a. OST-I-HAN Liisa pyörä-n. (VSO)
buy-PST.3SG-FM Liisa.NOM bike-ACC
'Liisa DID buy a/the bike.'
b. Osti-**han** LIISA pyörän.
'LIISA bought a bike.'
c. Osti-**han** Liisa PYÖRÄN.
'Liisa bought a BIKE.'

In particular, while (21a) is easily translated and interpreted as contrasting a previous utterance of the type: "Liisa did not buy a bike", (21b) and (21c) show a subtler difference. The former would be felicitous in a 'reminding' corrective context where the previous (to-be-corrected) utterance would state that nobody bought a bike, such as: "We all went to the store to buy bikes, but *nobody* bought one". The latter, instead, could be uttered to correct a claim that Liisa did not buy *anything*, or to justify that even though Liisa did not buy some other vehicle, she did buy a bike.

Finally, the FM *-hAn* can also occur with the complementizer *että* 'that', as illustrated in (22a), and can be found in the complement of a factive verb (22b), while it is excluded in a relative clause (22c) (for discourse particles in embedded clauses, cf. also Brattico et al. 2013):

(22) a. Peka-lle selvi-si että Liisa-han rakasta-a MARTTI-A.
Pekka-ALL become.clear-PST.3SG that Liisa-FM love-3SG Martti-PART
'It became clear to Pekka that Liisa loves MARTTI.'
b. Pekka taju-si, että Liisa-han rakasta-a MARTTI-A.
Pekka.NOM understand-PST.3SG that Liisa-FM love-3SG Martti-PART
'Pekka understood that Liisa loves MARTTI.'
c. *Mies, jo-ta Liisa-han rakasta-a, on Martti.
man.NOM REL-PART Liisa-FM love-3SG be.3SG Martti.ACC

This contrast provides evidence that the FM *-hAn* does not require illocutionary Force (since it can be embedded under a factive verb). However, the fact that it cannot be found

in the left periphery of a relative clause (which is a verb modifier) shows that it still requires a propositional content to operate (for a discussion on the relation between discourse categories and illocutionary Force, cf. Bianchi and Frascarelli 2010).

In the present study, we will examine the first type (SVO) of *-hAn* sentences, illustrated in (15a) and (16a) above, that is to say, long-distance object Focus licensing where the object remains in situ.

3.4. Combination of Features and Focus Operators

As said in Section 1, our prediction is that Focus movement might be triggered by the necessity to combine discourse features and/or 'enhance' a specific Focus-related interpretation, and that Operators may have a role in this fronting operation. Then, in Section 2.1 we reported Bianchi and Bocci's (2012) experiment, attesting that the strategy of FF is only applicable in a corrective context (although the preferred position for a CF is in situ). Finally, we have seen that fronting is also tightly connected to exhaustivity in languages like Hungarian and German. Hence, it can be hypothesized that, while individually correction and exhaustivity fail to account for the occurrence of FF in a significant way, their combination might provide an optimal discourse contest to favor the realization of fronting. Furthermore, in line with Cruschina (2021), we wonder how exhaustive the CF is in itself. As a matter of fact, CF necessarily requires the exclusion of the asserted alternative(s), in the sense that the assertion only holds for the element denoted by the correction and does not hold for the corrected alternative(s) (see Repp 2010). Nevertheless, correction does not necessarily exclude other potential alternatives (if a larger subset is introduced in the context). Hence, a complete overlap should be excluded.

Following Cruschina's (2021) suggestion, we assume that the exhaustive interpretation can be analyzed as the effect of a conventional implicature (but, for a conversational approach, see De Cesare and Garassino 2015). Unlike conversational implicatures (pertaining to the pragmatic level of grammar), conventional implicatures are associated with the domain of semantics (cf. Potts 2005, 2007). These implicatures are part of the meaning of a word and need a focal set of alternatives in order to be interpreted correctly. This is the reason why they are strictly related to Focus.

The association between one such implicature and the syntactic operation of fronting is then a matter of conventionalization and may differ from language to language. In this respect, Bianchi et al. (2015) propose that these implicatures are conventionally associated with the activation of a left-peripheral functional projection which is higher than the FocP (since these implicatures require the set of focal alternative propositions to be in their scope).

In line with this cartographic approach, it is feasible to hypothesize that Exclusive Operators, such as Italian *solo* and Finnish *vain* 'only', might play a role in increasing the exhaustivity of a sentence.

In brief, the notion of Focus Operator has been the subject of numerous studies as well (cf. among others, Jacobs 1983; Büring and Hartmann 2001; Beaver and Clark 2003; Beck 2016; Smeets and Wagner 2018). In particular, Beaver and Clark concentrate on 'only', defined as "Exclusive Operator", and discuss Focus sensitivity in English—the phenomenon whereby interpretation of some expressions is affected by placement of intonational Focus. Based on both natural language and ad hoc examples, they thus explore the interaction of this Operator with (i) negative polarity items, (ii) presupposition, (iii) prosodically reduced elements, and (iv) syntactic extraction, reaching the conclusion that 'only' lexically encodes a dependency on the placement of Focus (while other supposed Operators like *always* do not, depending on the context). In the same line of analysis, in Smeets and Wagner (2018) evidence is provided that the Exclusive Operator *alleen* in Dutch (and *nur* in German) can directly attach to the Focus constituent it associates with.

Since conventional implicatures are dependent on the meaning of a word, and given the attested association between Foci and Focus Operators, our prediction is that the

presence of such Operators will enhance the exhaustive interpretation per se, nullifying feature-combination and favoring a realization in situ.

Before moving to the detailed illustration of the experimental design and the discussion of relevant results, a short description of *solo* and *vain* is in order.

3.4.1. The Exhaustive Operator Solo in Italian

In Italian, the Exhaustive Operator *solo* 'only' immediately precedes the variable (i.e., the focused constituent) it is associated with (naturalistic data from Frascarelli 2004):

(23)	Va be' . . .	forse	perché	escono	solo	IN	GERMANIA!
	well	maybe	because	go out.3SG	only	in	Germany

'Well . . . . Maybe because they only come out IN GERMANY!'

(24)	Non	riuscirei	a	fare	un	intero	programma	solo	SUL
	not	can.COND.1SG	to	do	a	whole	program	only	on.DET

COMPUTER.
computer

'I would not be able to do a whole program only ON THE COMPUTER.'

In the literature, very few works have been specifically dedicated to the analysis of logical Operators such as 'only' (cf. Beaver and Clark 2003 and, for Italian *solo*, Avesani 1999; Frascarelli 2004). Mention of these Operators can be found in works dedicated to Focus and, while scholars generally agree that Focus-sensitive Operators such as 'only' interact with Focus in linguistic contexts like those illustrated in (23)–(24) (cf., among others, Rooth 1992; Schwarzschild 1997; Roberts 2012), there is no agreement about how grammaticized the relationship between 'only' and their associated Focus is (cf. Partee 1991. In particular, the question arises whether the lexical entry of such Operators necessarily triggers association with a focused constituent in their syntactic scope or, rather the interaction illustrated in (23)–(24) is not an absolute lexical requirement of the constructions and might be optional in certain contexts.

Let us then consider the contrast offered by the following examples:

(25)	a.	Va be' . . .	forse	perché	escono	solo	IN	GERMANIA! (= (23))
	b.	*Va be' . . .	forse	perché	escono	solo	IN	GERMANIA,
		well	maybe	because	go out.3SG	only	in	Germany,
		ed	escono	solo	anche	in	Francia	
		and	go out.3SG	only	also	in	France	

'*Well . . . . Maybe because they only come out IN GERMANY, and they only come out in France too'

The infelicity of (25b) illustrates the fact that *solo* triggers an exhaustive interpretation, whereby the focused item must denote the unique (or maximal) entity having the property ascribed to it by the rest of the sentence.

Herburger (2000) treats Operators such as 'only' and 'always' as event quantifiers. On the other hand, Beaver and Clark (2003) provide relevant semantic evidence that this analysis works well for 'only', but not for 'always'. In particular, it is shown that while 'only' lexically encodes a dependency on the placement of Focus, 'always' does not. Rather the Focus sensitivity of always results from its dependency on context. Beaver and Clark's analysis is therefore in line with Cruschina's (2021) proposal, which we assume, against a pragmatic approach.

Considering *solo* an event quantifier, encoding a dependency with the focused element can explain why it cannot be extraposed to the left or right periphery, differently from adverbs such as *sempre* ('always') or *forse* ('maybe'):

(26) a. Ho   visto   solo   LEO   in   biblioteca.
          Have.1SG   seen   only   Leo   in   library
          'I only saw LEO in the library.'
      b. *Solo, ho visto LEO in biblioteca.
          *Only, I saw LEO in the library.
      c. *Ho visto LEO in biblioteca, solo.
          *I saw LEO in the library, only.

(27) a. Ho   visto   sempre   LEO   in   biblioteca.
          Have.1SG   seen   always   Leo   in   library
          'I always saw LEO in the library.'
      b. Sempre, ho visto LEO in biblioteca.
          'Always, I saw LEO in the library.'
      c. Ho visto LEO in biblioteca, sempre
          'I saw LEO in the library, always.'

(28) a. Ho   visto   forse   LEO   in   biblioteca.
          Have.1SG   seen   maybe   Leo   in   library
          'I saw maybe LEO in the library.'
      b. Forse, ho visto LEO in biblioteca.
          'I maybe saw LEO in the library.'
      c. Ho visto LEO in biblioteca, forse
          'I saw LEO in the library, maybe.'

Further evidence is provided by prosodic analysis. Based on a corpus of spoken data, Frascarelli (2004) shows that, while the additive Operator *anche* 'also' is characterized by a low intonational salience (the high pitch standing on the Focus), the Exhaustive Operator *solo* is marked by a high pitch (H*) heading a scope domain whose downgrading contour has the Focus on its rightmost border. Frascarelli thus concludes that the semantic value of the Exhaustive Operator *solo* is to identify a variable to the exclusion of all other alternatives in the at-issue content. The relevant variable is thus, necessarily, a piece of information that was already present in the context, and the novelty lies in the process of identification and exclusion of all alternatives. Consequently, the new information is that "only X is involved in action Y", and not element X per se.

3.4.2. The Exhaustive Operator Vain in Finnish

In Finnish, the Exhaustive Operator *vain* 'only' is one of the 'exclusive Focus particles' (in terms of VISK sct. 839, 844), which exclude the possibility of alternatives involved in the event x, identifying y as the only possible variable. In written contexts, the particle *vain* immediately precedes the focused constituent (VISK sct. 839).

(29) a. Nä-i-n   **vain**   LEO-N   kirjasto-ssa.
          see-PST-1SG   only   Leo-ACC   library-INE
          'I only saw Leo in the library.'
      b. ***Vain** näin LEON kirjastossa.
      c. *Näin LEON **vain** kirjastossa.
      d. *Näin LEON kirjastossa **vain**.

The particle *vain* (like *solo* in Italian) can also have the function to 'disassemble' a definite set of 'elements' (rather than 'alternatives') identifying only one of them as the truth-conditional variable. The contexts of the experimental test introduce, in fact, a set of elements, X, Y, and Z, which are linked together 'inclusively' with the conjunction *ja* in Finnish (and *e* in Italian). The subsequent correction *restricts* the set of elements to one, namely Y, which is the only variable that satisfies the context given in (30B):

(30) A: Mitkä kynät Marko otti penaalista?
          'Which writing tools did Marko take out of the pencil case?'
      B: Lyijykynän, kuulakärkikynän ja tussin.
          'A pencil, a ballpoint pen and a felt pen.'
      C: Katso kuvaa! Hän otti vain kuulakärkikynän.
          'Look at the photo! He only took a ballpoint pen.'

From a prosodic point of view, VISK (sct. 839) observes that the particle *vain* is usually characterized by a weaker stress than the focused constituent. However, the examples introduced in VISK do not include restrictive correction, such as that illustrated in (30), which might implement a different pitch pattern. However, we leave the analysis of prosodic cues for future research.

4. Research Questions and the Experimental Test

As it has been put forth in Section 1, the present research aims to answer three main research questions:

(i). Does the trigger for FF lie in the combination of multiple features, such as Correction and Exhaustivity, within the same context?

(ii). Do Exclusive Operators, which convey an exhaustive import, thus increasing the degree of feature combination, have an impact on the realization of FF?

(iii). Can the External Merge of the focused constituents within the vP phase play a role in (dis)favoring FF?

In order to answer these questions, an original acceptability judgment test was designed, both for Italian and Finnish maintaining the same set up described below, and submitted online to a total of 393 informants, 274 Finnish native speakers, aged between 22 and 85 (M: 49.5, SD: 13.6), and 119 Italian native speakers aged between 18 and 78 (M: 28.3, SD: 12.3). The test, whose design is the same as the one adopted in Casentini and Stortini (this special issue), consists of a series of images representing everyday life situations and each image is associated with a short dialogue between three speakers (A, B and C) containing a target sentence with a CF (i.e., C's reply). Informants were asked to judge the acceptability of the target sentence, on a 7-point Likert scale (from 0 to 6).

All items feature a focused object in the target sentence, which has been presented in three different versions, that is (i) in situ, (ii) fronted, and (iii) with an alternative Focus strategy (i.e., sentences featuring the FM *-hAn* for Finnish and cleft constructions for Italian). The choice of the third strategy was made in order to compare the results of FF with a secondary marked Focus strategy, which is known to convey a contrastive/corrective import (cf., Sections 3.2 and 3.3, respectively).

Please consider example (31) and relevant Figure 1 below:[16]

| (31)	A:	*Mitkä hedelmät Lauri söi välipalaksi?*	(FIN)
		Quali frutti ha mangiato Leo per merenda?	(ITA)
		Which fruit(s) did Lauri/Leo eat as a snack?	
	B:	*Persikan, omenan ja luumun.*	(FIN)
		La pesca, la mela e la prugna.	(ITA)
		The/A peach, the/an apple and the/a plum.	
	C:	*Katso kuvaa! Hän söi omenan.*	(FIN)
		Guarda la foto! Ha mangiato la mela.	(ITA)
	C':	*Katso kuvaa! Omenan hän söi.*	(FIN)
		Guarda la foto! La mela ha mangiato.	(ITA)
	C'':	*Katso kuvaa! Hänhän söi omenan.*	(FIN)
		Guarda la foto! È la mela che ha mangiato.	(ITA)
		Look at the picture! He ate the/an apple.	
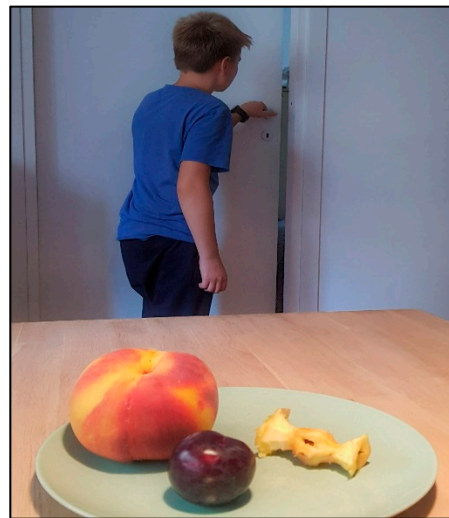
Figure 1. Picture associated with (31).

In order to answer our first research question, items have been designed so that multiple discourse features are simultaneously present in target sentences. Specifically, the dialogues, together with their relevant images, provide explicitly the set of possible Focus alternatives, which are thus part of the at-issue content and no larger subset could be contemplated. Hence, all target sentences feature an Exhaustive CF, as is shown above in (31). In this respect, we predict that the combination of features which is realized on the Focus in the reply, will favor FF, obtaining higher acceptability ratings for the items featuring this Focus strategy (namely, C'). Conversely, items featuring an in situ Focus are expected to present on average a lower acceptability. As for the alternative strategies, we expect them to be generally accepted by informants, since their contrastive/corrective import is consistent with the context provided in the dialogues.

Then, in order to address our second research question, namely the impact of Exclusive Operators on FF, all items were also presented with the addition of *vain* for Finnish and *solo* for Italian, as shown in (32) below, representing example (31)'s counterpart:

(32)	A:	*Mitkä hedelmät Lauri söi välipalaksi?*	(FIN)
		Quali frutti ha mangiato Leo per merenda?	(ITA)
		Which fruit(s) did Lauri/Leo eat as a snack?	
	B:	*Persikan, omenan ja luumun.*	(FIN)
		La pesca, la mela e la prugna.	(ITA)
		The/A peach, the/an apple and the/a plum.	
	C:	*Katso kuvaa! Hän söi vain omenan.*	(FIN)
		Guarda la foto! Ha mangiato solo la mela.	(ITA)
		Look at the picture! He only ate the/an apple.	

In this case, our prediction is that the presence of a Focus Operator will 'absorb' the relevant exhaustive feature, nullifying feature combination and thus informants will favor a realization in situ.

Finally, the experiment features three verb types, namely, transitive (as in (31) above), unergative (as in (33) below) and unaccusative (as in (34) below), so as to provide an answer to our third question on the role of the External Merge of arguments in (dis)favoring FF. Consider (33)-(34) below and relevant Figures 2 and 3, respectively:

(33)	A:	*Millä leluilla Eino leikki?*	(FIN)
		Con quali giochi ha giocato Emilio?	(ITA)
		What toys did Eino/Emilio play with?	
	B:	*Rakennuspalikoilla, pallolla ja autolla.*	(FIN)
		Con le costruzioni, con la palla e con le macchinine.	(ITA)
		With (the) building blocks, with the/a ball and with (the) car(s).	
	C:	*Katso kuvaa! Hän leikki pallolla.*	(FIN)
		Guarda la foto! Ha giocato con la palla.	(ITA)
		Look at the picture! He played with the/a ball.	
(34)	A:	*Mille huonekaluille Lauri nousi?*	(FIN)
		Su quali mobili è salito Carlo?	(ITA)
		Which pieces of furniture did Lauri/Carlo climb on?	
	B:	*Puujakkaralle, tuolille ja pöydälle.*	(FIN)
		Sullo sgabello, sulla sedia e sul tavolo.	(ITA)
		On the/a stool, (on) the/a chair and (on) the/a table.	
	C:	*Katso kuvaa! Hän nousi tuolille.*	(FIN)
		Guarda la foto! È salito sulla sedia.	(ITA)
		Look at the picture! He climbed on the/a chair.	

Figure 2. Picture associated with (33).

Figure 3. Picture associated with (34).

In this respect, we expect target sentences to show on average different acceptability ratings based on the specific verb featured in the item, since the different External Merge positions of arguments in the vP phase will have an impact on their syntactic visibility for the Agree relation with the relevant functional Probe(s), needed for Focus licensing.

To sum up, the experimental design is a 3 × 2 × 3 (3 syntactic constructions, presence vs. absence of an Exhaustive Operator and 3 verb types) for a total of 18 experimental conditions, as shown in Table 1 below:

Table 1. Experimental conditions.

Condition	Strategy	Operator	Verb
1	in situ	absence	transitive
2	in situ	presence	transitive
3	fronted	absence	transitive
4	fronted	presence	transitive
5	cleft/-hAn	absence	transitive
6	cleft/-hAn	presence	transitive
7	in situ	absence	unergative
8	in situ	presence	unergative
9	fronted	absence	unergative
10	fronted	presence	unergative
11	cleft/-hAn	absence	unergative
12	cleft/-hAn	presence	unergative
13	in situ	absence	unaccusative
14	in situ	presence	unaccusative
15	fronted	absence	unaccusative
16	fronted	presence	unaccusative
17	cleft/-hAn	absence	unaccusative
18	cleft/-hAn	presence	unaccusative

Each verb type is represented by 4 different verbs,[17] each of them associated with an image representing the event expressed by the verb. Hence, 4 items were designed for each condition, summing up to 72 target items paired and alternated with just as many fillers. Finally, all experimental items were divided into 4 lists using a Latin Square design, so that each informant saw and rated one item for each experimental condition.

Let us now turn to the analysis of the results, which will be illustrated in the following section.

5. Results and Analysis

First of all, all informants' judgments were converted into z-scores. This allows to standardize informants' ratings, giving them a 'normal distribution' with a mean value of 0 and a standard deviation of 1, in order to ensure a more accurate comparison. Then, these standardized scores were analyzed using a three-way repeated measures ANOVA (Analysis of Variance), so as to assess whether the three factors involved (cf. Section 4) have a significant effect on sentence acceptability between the different experimental conditions, and thus verify the validity of our predictions (cf. Section 1). Specifically, the three factors were selected as independent variables, while the acceptability rating expressed by informants was selected as the dependent variable. Finally, a series of Tukey's HSD Post Hoc tests was conducted, in order to investigate the significant differences between the experimental conditions in more detail.

5.1. Finnish Data

Let us start by considering the results of the ANOVA conducted on Finnish data. As shown in Figure 4 below, not all factors have a significant effect on the dependent variable (significant results are reported in red; notice that in ANOVA reports commas indicate decimal dots):[18]

As can be seen, the verb type (VERB) does not have a significant effect on the dependent variable ($p = 0.1$), indicating that the three verb types show the same behavior with respect to the acceptability of the sentence. In line with this result, the interaction between the verb type and the presence vs. absence of the Exhaustive Operator (VERB*OPERATOR)

as well as the interaction between the three factors (VERB*STRATEGY*OPERATOR) are not significant ($p = 0.3$ and $p = 0.2$, respectively).

Effect	Repeated Measures Analysis of Variance (Finnish) Sigma-restricted parameterization Effective hypothesis decomposition; Std. Error of Estimate: 1,0477				
	SS	Degr. of Freedom	MS	F	p
Intercept	137,788	1	137,7883	125,5156	0,000000
Error	299,694	273	1,0978		
VERB	2,561	2	1,2803	2,2868	0,102559
Error	305,671	546	0,5598		
STRATEGY	1655,443	2	827,7217	723,8448	0,000000
Error	624,355	546	1,1435		
OPERATOR	5,503	1	5,5032	4,9560	0,026817
Error	303,144	273	1,1104		
VERB*STRATEGY	8,335	4	2,0838	4,5333	0,001234
Error	501,944	1092	0,4597		
VERB*OPERATOR	1,176	2	0,5878	1,2190	0,296334
Error	263,293	546	0,4822		
STRATEGY*OPERATOR	206,763	2	103,3813	114,8723	0,000000
Error	491,382	546	0,9000		
VERB*STRATEGY*OPERATOR	2,807	4	0,7016	1,3915	0,234752
Error	550,603	1092	0,5042		

Figure 4. Factors' effect and their interactions (Finnish).

However, data show that the interaction between the verb type and the specific Focus strategy featured in the target sentence (VERB*STRATEGY) does show a significant effect on the dependent variable. In order to better understand this result, let us look at this interaction more closely, taking into account the results of the relevant post hoc test.

As can be seen in Figure 5 below, the three verb types show a very similar behavior with all three Focus strategies. Indeed, the results of the post hoc test confirm that there are no significant differences between them when the Focus remains in situ (cf. Figure 6, cell no. 1 vs. 4 and 7) as well as when the target sentence features the FM -*hAn* (cf. Figure 6, cell no. 3 vs. 6 and 9).
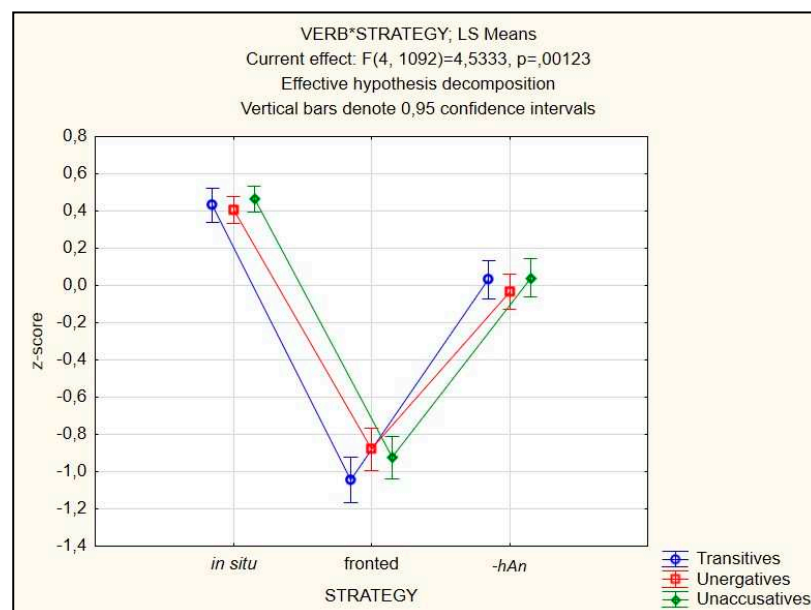

Figure 5. Verb*Strategy interaction (Finnish).

	VERB	STRATEGY	{1} ,43115	{2} -1,046	{3} ,03147	{4} ,40790	{5} -,8795	{6} -,0333	{7} ,46503	{8} -,9231	{9} ,04206
Cell											

Tukey HSD test; variable DV_1 (Finnish)
Approximate Probabilities for Post Hoc Tests
Error: Within MSE = ,45966, df = 1092,0

Cell	VERB	STRATEGY	{1} ,43115	{2} -1,046	{3} ,03147	{4} ,40790	{5} -,8795	{6} -,0333	{7} ,46503	{8} -,9231	{9} ,04206
1	Transitive	in situ		0,000010	0,000010	0,999744	0,000010	0,000010	0,996089	0,000010	0,000010
2	Transitive	fronted	0,000010		0,000010	0,000010	0,001596	0,000010	0,000010	0,067258	0,000010
3	Transitive	-hAn	0,000010	0,000010		0,000010	0,000010	0,815712	0,000010	0,000010	0,999999
4	Unergative	in situ	0,999744	0,000010	0,000010		0,000010	0,000010	0,900240	0,000010	0,000010
5	Unergative	fronted	0,000010	0,001596	0,000010	0,000010		0,000010	0,000010	0,979051	0,000010
6	Unergative	-hAn	0,000010	0,000010	0,815712	0,000010	0,000010		0,000010	0,000010	0,655857
7	Unaccusative	in situ	0,996089	0,000010	0,000010	0,900240	0,000010	0,000010		0,000010	0,000010
8	Unaccusative	fronted	0,000010	0,067258	0,000010	0,000010	0,979051	0,000010	0,000010		0,000010
9	Unaccusative	-hAn	0,000010	0,000010	0,999999	0,000010	0,000010	0,655857	0,000010	0,000010	

Tukey HSD test; variable DV_1 (Finnish) Approximate Probabilities for Post Hoc Tests Error: Within MSE = ,45966, df = 1092,0

Figure 6. Verb*Strategy post hoc results (Finnish).

However, a significant difference arises between transitive and unergative verbs in the case of FF. Specifically, the acceptability of sentences featuring a fronted transitive object is significantly lower than sentences featuring a fronted unergative object (cf. Figure 6, cell no. 2 vs. 5). On the other hand, unaccusatives are located halfway between the other two verb types, since they do not show any significant difference with either of them ($p = 0.07$ and 0.98 respectively).

This result, which explains the significance of the VERB*STRATEGY interaction, seems to suggest that the External Merge of objects plays a role in (dis)favoring FF, at least in Finnish. However, the absence of significant differences between the three verb types when the Focus remains in situ, seems to contradict our hypothesis that the syntactic visibility of in situ Foci for the Agree relation is dependent on their location in the edge position of the vP phase.

By contrast, the specific Focus strategy and the presence vs. absence of the Exhaustive Operator *vain*, as well as their interaction, show a significant effect on the acceptability of the sentence, as can be seen in Figure 4 above. Let us thus look into the data concerning these two factors.

Starting with the specific strategy featured by the target sentence, Figure 7 shows that in situ Focus is the preferred option, sentences featuring the FM are a secondary, less preferred choice (but, as predicted, they are not considered unacceptable), while FF strongly lowers the acceptability of the sentence. These observations are confirmed by the results of the relevant post hoc test, shown in Figure 8, which indicate that all differences are highly significant ($p < 0.0001$). As for the Exhaustive Operator, its presence significantly increases the acceptability of the sentence, as is shown in Figure 9 and confirmed by the post hoc test reported in Figure 10 ($p = 0.03$).
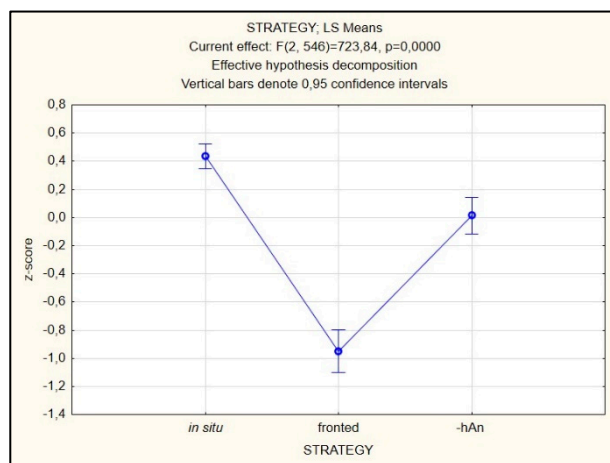

Figure 7. Strategy mean results (Finnish).

Cell No.	STRATEGY	{1} ,43469	{2} -,9495	{3} ,01342
1	in situ		0,000022	0,000022
2	fronted	0,000022		0,000022

Tukey HSD test; variable DV_1 (Finnish) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,1435, df = 546,00

Tukey HSD test; variable DV_1 (Finnish) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,1435, df = 546,00			
STRATEGY Cell No.	{1} ,43469	{2} -,9495	{3} ,01342
1	*in situ*		0,000022	0,000022
2	fronted	0,000022		0,000022
3	-hAn	0,000022	0,000022	

Figure 8. Strategy post hoc results (Finnish).
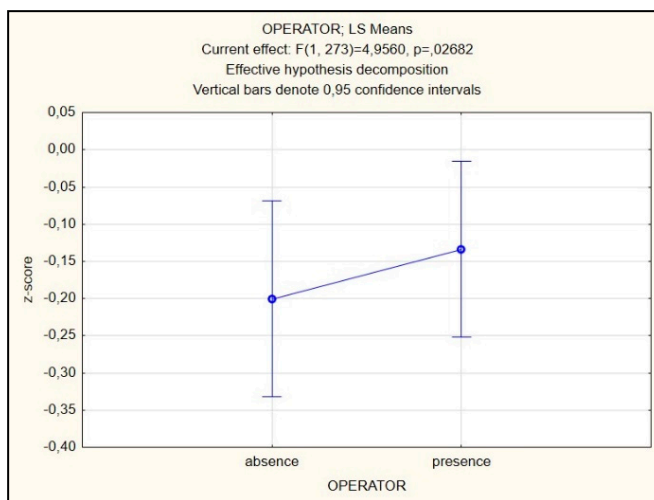
Figure 9. Operator mean results (Finnish).

Tukey HSD test; variable DV_1 (Finnish) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,1104, df = 273,00		
OPERATOR Cell No.	{1} -,2005	{2} -,1337
1	absence		0,026007
2	presence	0,026007	

Figure 10. Operator post hoc results (Finnish).

However, the interaction between these two factors (STRATEGY*OPERATOR) shows a more complex picture:

As can be seen in Figure 11, and relevant post hoc results in Figure 12 below, while the influence of the three strategies on the acceptability of the sentences remains generally unaltered, the presence of the Exhaustive Operator has a different impact depending on the specific Focus strategy featured in the target sentence. Specifically, it increases the acceptability of the sentence when the target sentence features a Focus in situ or the FM -*hAn*, while it significantly decreases it in the case of FF.

These results seem to provide a negative answer to our first research question, since the combination of exhaustive and corrective features does not favor FF in Finnish. Indeed, Finnish native speakers always prefer an in situ Focus in this context, while fronting is considered unacceptable. On the other hand, as predicted, the presence of the Exhaustive Operator *vain* further increases the acceptability of Foci in situ, while (again) lowering that of FF. This result seems to support the idea that when the exhaustive feature is 'mediated' by the presence of a dedicated Operator, it absorbs this meaning, disrupting a possible combination with the corrective feature and making FF appear as even less desirable.
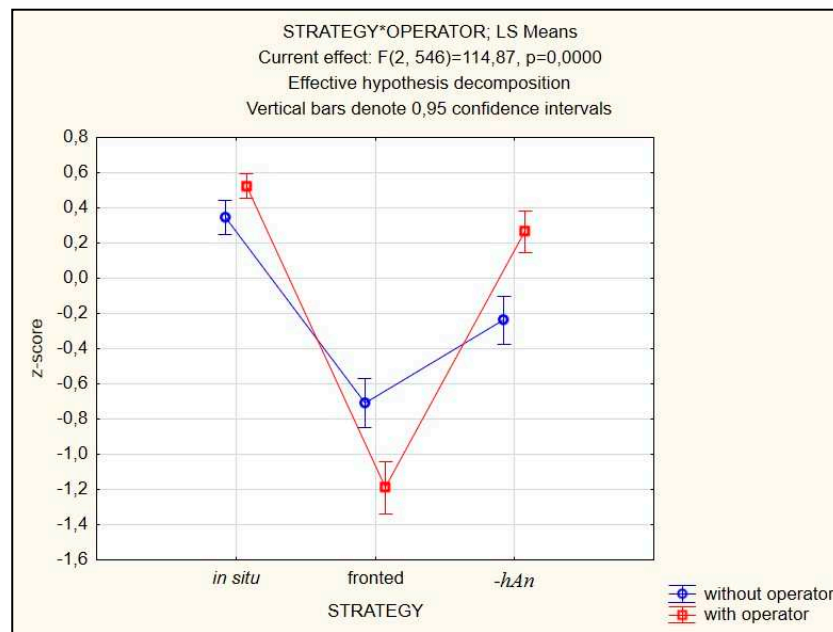
Figure 11. Strategy*Operator interaction (Finnish).

Tukey HSD test; variable DV_1 (Finnish)
Approximate Probabilities for Post Hoc Tests
Error: Within MSE = ,89997, df = 546,00

Cell No.	STRATEGY	OPERATOR	{1} ,34613	{2} ,52326	{3} -,7092	{4} -1,190	{5} -,2386	{6} ,26541
1	in situ	absence		0,002132	0,000020	0,000020	0,000020	0,515210
2	in situ	presence	0,002132		0,000020	0,000020	0,000020	0,000021
3	fronted	absence	0,000020	0,000020		0,000020	0,000020	0,000020
4	fronted	presence	0,000020	0,000020	0,000020		0,000020	0,000020
5	-hAn	absence	0,000020	0,000020	0,000020	0,000020		0,000020
6	-hAn	presence	0,515210	0,000021	0,000020	0,000020	0,000020	

Figure 12. Strategy*Operator post hoc results (Finnish).

5.2. Italian Data

Let us now turn to the analysis of Italian data. Similar to the case of Finnish, not all factors have a significant effect on the dependent variable, as shown in Figure 13 below.

As can be seen, the verb type does not have a significant effect on the dependent variable ($p = 0.1$) also in Italian, confirming that the three verb types show the same behavior with respect to the acceptability of the sentence. Furthermore, also in this case, the interaction between the verb type and the presence vs. absence of the Exhaustive Operator is not significant ($p = 0.6$). Hence, data seem to indicate that the edge position of an in situ Focus within the hosting phase is not relevant for syntactic visibility at the interfaces in Italian as well. Moreover, in contrast with Finnish, the VERB*STRATEGY interaction is also not significant ($p = 0.1$), since no significant difference can be found between the three verb types and any of the Focus strategies under examination. This result seems to suggest that in Italian the External Merge of objects does not play a role in (dis)favoring FF.

On the other hand, in Italian, the interaction between the three factors does show a significant effect ($p = 0.03$), unlike Finnish. This result is due to the fact that the VERB*STRATEGY interaction is different across the levels of the third factor (OPERATOR) as shown in Figure 14 below.

Repeated Measures Analysis of Variance (Italian)
Sigma-restricted parameterization
Effective hypothesis decomposition; Std. Error of Estimate: 1,0917

Effect	SS	Degr. of Freedom	MS	F	p
Intercept	69,7762	1	69,77621	58,54127	0,000000
Error	140,6460	118	1,19191		
VERB	2,9817	2	1,49083	2,03160	0,133412
Error	173,1816	236	0,73382		
STRATEGY	191,7678	2	95,88388	74,27128	0,000000

Effect	Repeated Measures Analysis of Variance (Italian) Sigma-restricted parameterization Effective hypothesis decomposition; Std. Error of Estimate: 1,0917				
	SS	Degr. of Freedom	MS	F	p
Intercept	69,7762	1	69,77621	58,54127	0,000000
Error	140,6460	118	1,19191		
VERB	2,9817	2	1,49083	2,03160	0,133412
Error	173,1816	236	0,73382		
STRATEGY	191,7678	2	95,88388	74,27128	0,000000
Error	304,6749	236	1,29100		
OPERATOR	17,8965	1	17,89655	11,08493	0,001162
Error	190,5103	118	1,61449		
VERB*STRATEGY	3,7233	4	0,93084	1,61241	0,169932
Error	272,4829	472	0,57729		
VERB*OPERATOR	0,5343	2	0,26714	0,50143	0,606306
Error	125,7315	236	0,53276		
STRATEGY*OPERATOR	11,3463	2	5,67314	4,73904	0,009597
Error	282,5173	236	1,19711		
VERB*STRUCTURE*ADVERB	6,1926	4	1,54814	2,54201	0,039080
Error	287,4592	472	0,60902		

Figure 13. Factors' effect and their interactions (Italian).
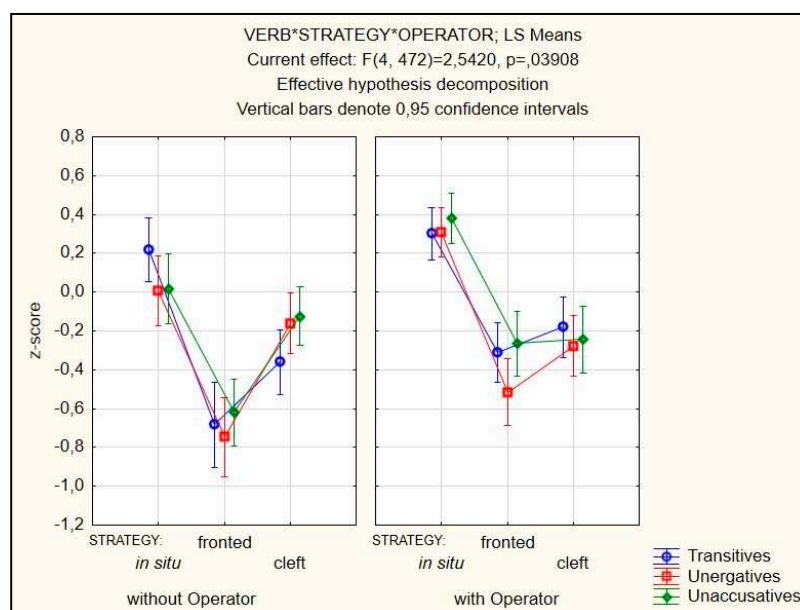

Figure 14. Three factors' interaction (Italian).

As can be seen, the interplay between the verb type and the specific Focus strategy changes based on the presence vs. absence of *solo*. In particular, the results of the post hoc test show that, in the case of transitive verbs, FF is more acceptable when the Exhaustive Operator is present (cf. Figure 15, cell no. 3 vs. 4). In addition, the presence of *solo* also increases the acceptability of sentences featuring in situ and fronted Foci when the verb is unaccusative (cf. Figure 15, cell no. 13 vs. 14 and 17 vs. 18 respectively).

Tukey HSD test; variable DV_1 (Italian)
Approximate Probabilities for Post Hoc Tests
Error: Within MSE = ,60902, df = 472,00

Cell No.	VERB	STRATEGY	OPERATOR	{1} ,21846	{2} ,30177	{3} -,6822	{4} -,3113	{5} -,3586	{6} -,1806	{7} ,00680	{8} ,30811	{9} -,7469	{10} -,5163	{11} -,1607	{12} -,2766	{13} ,01838	{14} ,38060	{15} -,6189	{16} -,2648	{17} -,1234	{18} -,2428
1	Transitive	in situ	Absence		1,000	0,000	0,000	0,000	0,010	0,821	1,000	0,000	0,000	0,021	0,000	0,880	0,982	0,000	0,000	0,071	0,001
2	Transitive	in situ	Presence	1,000		0,000	0,000	0,000	0,000	0,244	1,000	0,000	0,000	0,001	0,000	0,312	1,000	0,000	0,000	0,003	0,000
3	Transitive	fronted	Absence	0,000	0,000		0,027	0,119	0,000	0,000	0,000	1,000	0,977	0,000	0,008	0,000	0,000	1,000	0,005	0,000	0,002
4	Transitive	fronted	Presence	0,000	0,000	0,027		1,000	0,998	0,139	0,000	0,002	0,857	0,992	1,000	0,101	0,000	0,181	1,000	0,927	1,000
5	Transitive	cleft	Absence	0,000	0,000	0,119	1,000		0,955	0,033	0,000	0,015	0,986	0,890	1,000	0,022	0,000	0,474	1,000	0,665	1,000
6	Transitive	cleft	Presence	0,010	0,000	0,000	0,998	0,955		0,929	0,000	0,000	0,085	1,000	1,000	0,885	0,000	0,002	1,000	1,000	1,000
7	Unergative	in situ	Absence	0,821	0,244	0,000	0,139	0,033	0,929		0,211	0,000	0,000	0,974	0,312	1,000	0,025	0,000	0,391	0,998	0,556
8	Unergative	in situ	Presence	1,000	1,000	0,000	0,000	0,000	0,000	0,211		0,000	0,000	0,001	0,000	0,273	1,000	0,000	0,000	0,003	0,000
9	Unergative	fronted	Absence	0,000	0,000	1,000	0,002	0,015	0,000	0,000	0,000		0,699	0,000	0,000	0,000	0,000	0,999	0,000	0,000	0,000
10	Unergative	fronted	Presence	0,000	0,000	0,977	0,857	0,986	0,085	0,000	0,000	0,699		0,046	0,000	0,000	0,000	1,000	0,541	0,012	0,378
11	Unergative	cleft	Absence	0,021	0,001	0,000	0,992	0,890	1,000	0,974	0,001	0,000	0,046		1,000	0,952	0,000	0,001	1,000	1,000	1,000
12	Unergative	cleft	Presence	0,000	0,000	0,008	1,000	1,000	1,000	0,312	0,000	0,000	0,631	1,000		0,244	0,000	0,070	1,000	0,990	1,000
13	Unaccusative	in situ	Absence	0,880	0,312	0,000	0,101	0,022	0,885	1,000	0,273	0,000	0,000	0,952	0,244		0,037	0,000	0,313	0,996	0,468
14	Unaccusative	in situ	Presence	0,982	1,000	0,000	0,000	0,000	0,000	0,025	1,000	0,000	0,000	0,000	0,000	0,037		0,000	0,000	0,000	0,000
15	Unaccusative	fronted	Absence	0,000	0,000	1,000	0,181	0,474	0,002	0,000	0,000	0,999	0,000	0,070	0,000	0,000	0,000		0,048	0,000	0,023
16	Unaccusative	fronted	Presence	0,000	0,000	0,005	1,000	1,000	1,000	0,391	0,000	0,000	0,541	1,000	1,000	0,313	0,000	0,048		0,996	1,000
17	Unaccusative	cleft	Absence	0,071	0,003	0,000	0,927	0,665	1,000	0,998	0,003	0,000	0,012	1,000	0,990	0,996	0,000	0,000	0,996		0,999
18	Unaccusative	cleft	Presence	0,001	0,000	0,002	1,000	1,000	1,000	0,556	0,000	0,000	0,378	1,000	1,000	0,468	0,000	0,023	1,000	0,999	

Figure 15. Three factors' post hoc results (Italian)[19].

As for the other two factors, namely the specific Focus strategy and the presence vs. absence of the Exhaustive Operator *solo*, Italian data are in line with Finnish ones. Indeed, as can be seen in Figure 13 above, STRATEGY and OPERATOR, as well as their interaction, present a significant effect on the acceptability of the sentence. Let us thus consider the following Figures, concerning these two factors.

As can be seen in Figure 16, Italian informants also consider Focus in situ as the preferred option, while FF is rejected. As for clefts, they are found in the middle between the other two strategies, but, in contrast to Finnish *-hAn* sentences, their average acceptability score classifies them as marginal. These observations are confirmed by the results of the relevant post hoc test also in this case, as shown in Figure 17 ($p < 0.0001$). As for the Exhaustive Operator *solo*, its behavior is comparable to that of Finnish *vain*, in that its presence significantly increases the acceptability of the sentence, as shown in Figure 18 and confirmed by the post hoc test reported in Figure 19 ($p = 0.001$). Once again, if we look at the interaction between these two factors a more complex picture is revealed:
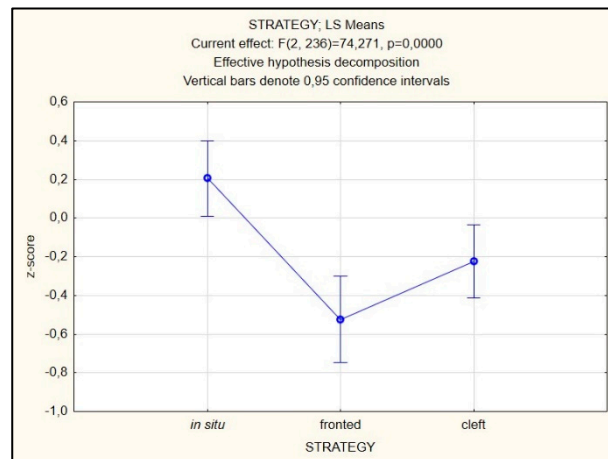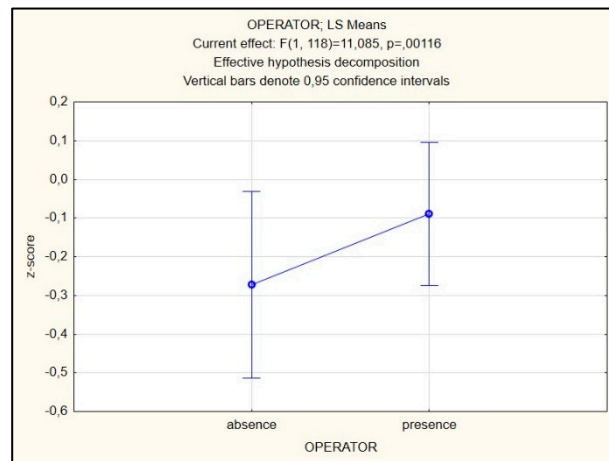

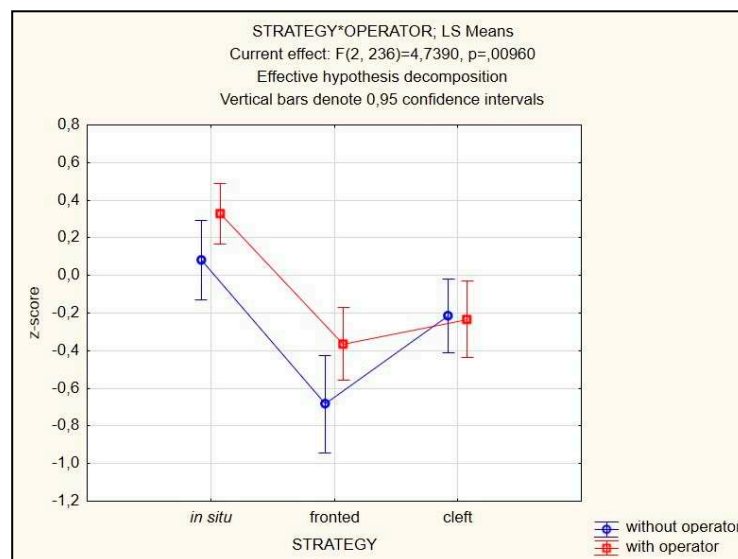**Figure 16.** Strategy mean results (Italian).

Tukey HSD test; variable DV_1 (Italian)
Approximate Probabilities for Post Hoc Tests
Error: Within MSE = 1,2910, df = 236,00

Cell No.	STRATEGY	{1} ,20569	{2} -,5234	{3} -,2238
1	in situ		0,000022	0,000022
2	fronted	0,000022		0,000023
3	cleft	0,000022	0,000023	

Figure 17. Strategy post hoc results (Italian).

	Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,2910, df = 236,00			
Cell No.	STRATEGY	{1} ,20569	{2} -,5234	{3} -,2238
1	*in situ*		0,000022	0,000022
2	fronted	0,000022		0,000023
3	cleft	0,000022	0,000023	

Figure 18. Operator mean results (Italian).

	Tukey HSD test; variable DV_1 (Italian) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,6145, df = 118,00		
Cell No.	OPERATOR	{1} -,2719	{2} -,0891
1	absence		0,001276
2	presence	0,001276	

Figure 19. Operator post hoc results (Italian).

Then, as can be seen in Figure 20 below, the influence of the three strategies on the acceptability of the sentences remains the same, similarly to Finnish, while the impact of the Exhaustive Operator varies depending on the specific Focus strategy. However, unlike Finnish, it increases the acceptability of the sentence both with an in situ ($p = 0.03$) and a fronted Focus ($p < 0.0001$), while in the case of clefts it does not have any impact on the acceptability of the sentence. It is interesting to notice that, not only does *solo* increase the acceptability of the sentence with a fronted Focus, but it also increases it so much that FF reaches the level of clefts (i.e., marginal), presenting no significant differences with them (cf., Figure 21, cell no. 4 vs. 6).

Figure 20. Strategy*Operator interaction (Italian).

		Tukey HSD test; variable DV_1 (Italian) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,1971, df = 236,00					
Cell No.	STRATEGY	OPERATOR	{1} ,08121	{2} ,33016	{3} -,6827	{4} -,3641	{5} -,2142	{6} -,2333

	Tukey HSD test; variable DV_1 (Italian) Approximate Probabilities for Post Hoc Tests Error: Within MSE = 1,1971, df = 236,00							
Cell No.	STRATEGY	OPERATOR	{1} ,08121	{2} ,33016	{3} -,6827	{4} -,3641	{5} -,2142	{6} -,2333
1	in situ	absence		0,028609	0,000020	0,000021	0,004206	0,001718
2	in situ	presence	0,028609		0,000020	0,000020	0,000020	0,000020
3	fronted	absence	0,000020	0,000020		0,001411	0,000020	0,000021
4	fronted	presence	0,000021	0,000020	0,001411		0,446094	0,600358
5	cleft	absence	0,004206	0,000020	0,000020	0,446094		0,999907
6	cleft	presence	0,001718	0,000020	0,000021	0,600358	0,999907	

Figure 21. Strategy*Operator post hoc results (Italian).

These results seem to confirm a negative answer to our first research question, since the combination of exhaustive and corrective features does not seem to favor FF in Italian (just like in Finnish). Indeed, Italian native speakers, similar to their Finnish counterparts, always prefer an in situ realization of the focused constituent in this context, while considering fronting unacceptable. Finally, the fact that the acceptability of FF is also increased with *solo* seems to suggest that this Operator does not absorb the exhaustive feature in itself and, again, that feature combination is immaterial in this respect.

6. Conclusions

As said in Section 1, the main hypothesis of the present investigation is that FF might be triggered (or, at least, favored) by the necessity to combine discourse features (in line with recent proposals, cf. Frascarelli and Ramaglia 2013a; Delfitto and Fiorin 2015), and/or activate some specific Focus-related (pragmatic) interpretation. Then, based on Bianchi and Bocci's (2012) results on CF, cross-linguistic analyses on exhaustive Focus and drawing from Cruschina (2021) the idea that the exhaustive interpretation can be analyzed as the effect of a conventional implicature (to be activated in the left periphery), we hypothesized that the features to be combined in the C-domain might be [Correction] and [Exhaustivity]. Finally, in a phase-based approach, we assumed that fronting acceptability might be affected by the Merge position of arguments in the vP shell.

Hence, in light of all the above, the present research aimed to answer three main research questions, repeated below for convenience:

(i). Does the trigger for FF lie in the combination of multiple features, such as [Correction] and [Exhaustivity], within the same context?

(ii). Do Exhaustive Operators, which convey an exhaustive import, thus increasing the degree of feature combination, have an impact on the realization of FF?

(iii). Can the External Merge of the focused constituents within the vP phase play a role in (dis)favoring FF?

The analysis was based on the results of an experimental test (specifically designed for the purposes of the present investigation), in which different Focus strategies were proposed to Italian and Finnish native speakers as a reply to exhaustive-corrective contexts featuring different verb types.

Going into detail, the answer to our first question is negative, since, contrary to expectations, the results obtained clearly show that in both languages the realization in situ is largely the preferred Focus strategy in all conditions, while fronting is always the least preferred and rated as unacceptable.

Turning to the second question, significant differences do emerge for the influence of Focus Operators on fronting. Indeed, Finnish *vain* increases the acceptability of the in situ realization while lowering that of fronting. On the other hand, the presence of *solo* in Italian increases the acceptability of the sentence in both cases. Its role as an EF feature absorber is therefore not borne out. Nevertheless, the variation attested between Finnish and Italian claims for further investigation. Indeed, it is important to emphasize that, as far as the in situ/fronted dichotomy is concerned, the presence of a Focus Operator is never

'ignored' by the system. It always has an enhancing effect, even if it seems to proceed in different directions. We can therefore maintain the hypothesis that the Exhaustive Operator is inherently endowed with the relevant feature; however, this can favor in situ Focus (hence, Agree) in some languages, while it can act as a trigger for Move in others. This parametric difference may be associated with language-specific formal properties, the definition of which requires future research in a cross-linguistic perspective.

As for our third question, the answer is, also in this case, not perfectly unequivocal. Indeed, significant differences between verb types only emerge for Finnish, in which the acceptability of sentences featuring a fronted transitive object is significantly lower than sentences featuring a fronted unergative object, suggesting that the External Merge of objects might play a role in (dis)favoring FF. However, this result is not confirmed by Italian data and this contrast thus remains as an open issue to be further investigated in future works.

Finally, it is interesting to notice that the alternative Focus strategies (i.e., the FM -*hAn* for Finnish and cleft constructions for Italian) show similar results, in that they are both considered better than FF but worse than in situ Focus. As a matter of fact, Finnish data show that the FM -*hAn* is not specifically associated with an exhaustive-corrective interpretation, also because its acceptability improves in the presence of the Focus Operator *vain*; the latter therefore seems to favor an exhaustive interpretation. Similarly, cleft constructions do not show a systematic association with the exhaustive-corrective interpretation and seem to be unaffected by the presence of an Exhaustive Operator, suggesting that the latter is completely redundant in that construction and, consequently, that clefts might be more associated with [Exhaustivity] rather than with [Correction].

Based on the evidence provided by the present research, we must conclude that the combination between [Correction] and [Exhaustivity] does not provide a key to understand FF, so its optionality remains an open question in a framework that wants discourse features to be checked in dedicated positions in the C-domain. Equally, even assuming that [Exhaustivity] is associated with a conventional implicature, the present data show that this interpretation is not conventionally associated with the activation of a left-peripheral functional projection in the left periphery, at least neither in Italian nor in Finnish. Finally, EF Operators have shown to affect the realization of relevant Foci, but with varying effects in the two languages examined—a difference that might be dependent on language-specific properties, to be investigated in future research.

In view of these results, we surmise that the phenomenon of FF might not be related to a formal constraint requiring movement to the C-domain. In other words, we propose that FF is not due to a morphosyntactic requirement to be met in a criterial position. On the other hand, taking into consideration the 'second way' of our first research question, we suggest that fronting might be triggered by the necessity to combine discourse features and/or activate some specific Focus-related interpretation.

Taking this explicative view, we therefore hypothesize that FF could represent a stylistic (PF) movement (Maling 1980) and, as such, is not connected to structural requirements. Hence, contrary to the dominant view, according to which stylistic fronting is a purely EPP (i.e., Edge-feature related) movement (Holmberg 2000, 2005; Ott 2009; Platzack 2009), we surmise that stylistic movement can be also relevant for discourse-related meanings (in line with Cardinaletti 2003; Franco 2009; Molnár 2017). In the case at issue, we hypothesize that the sentence-initial position can enhance the communicative salience of the fronted CF-EF constituent. This line of analysis seems to be supported by the fact that FF is not affected by the Merge position of arguments in the vP phase, hence it does not appear to be subject to edge restrictions.

This proposal opens new paths for future investigation. Indeed, a valid cross-linguistic analysis of FF as a stylistic movement should take into account (a) the structural and functional variation of stylistic fronting within language groups and (b) the cross-linguistic diversity of stylistic fronting (as emerged in the present confront between Italian and

Finnish). This systematic comparative study could shed some novel light on this vexed and still unresolved issue, thus representing a sound starting point for future research.

Notes

[1] In particular, Frascarelli and Ramaglia (2013a) concentrate on prosodic contours and show that the alternation between High and Low pitches in Topic constituents depends on the combination of the [givenness] feature which is assumed to be merged in the left periphery of the D-domain, with either [contrast] or [shift]. Since a Topic is [+given] by definition, to assume an 'additional' interpretation it must move to the Spec of other Topic projections, characterized by (and endowed with) a prosodic High (H*) feature. This allows a (basically low-toned) Topic to assume a marked intonation (whence the proposal that movement is triggered by "Information-Structure (IS) markedness").

[2] According to the authors, the difference between Italian and Hungarian can be derived from the fact that the Exhaustive Operator 'associates' with Focus in Hungarian and with Contrast in Italian. According to É. Kiss (1998), however, fronting in Hungarian is associated with Identification Focus (i.e., exhaustive) and not with mere Information Focus.

[3] The abbreviations used in this paper are the following: ACC (Accusative Case), ADE (Adessive Case), ALL (Allative Case), CF (Corrective Focus), EF (Exhaustive Focus), FF (Focus Fronting), FM (Focus Marker), GEN (Genitive Case), ILL (Illative Case), INE (Inessive Case), INF (Infinitive), IS (Information Structure), M (Masculine), NOM (Nominative Case), O (Object), OBJ (Objective Case (=Accusative or Partitive)), PART (Partitive Case), PL (Plural), PRT (Past Participle), PST (Past Tense), REL (Relative Pronoun), S (Subject), SG (Singular).

[4] The VOS order only occurs in artistic expressions, such as songs and poems.

[5] Partitive Case is one of the two Objective Cases in Finnish, the other one being the Accusative Case, and its use in these examples is conditioned by the aspectual character of the verb. The Partitive–Accusative Case alternation goes beyond the purpose of this work. For insight and details, the reader is referred to Kiparsky (1998); VISK (sct. 1234); Larjavaara (2019).

[6] Mirative Focus expresses contrast against expectations.

[7] Mono-clausal analyses of clefts were proposed within the generative framework in Akmajian (1970) and Emonds (1976). However, these approaches were thereafter abandoned in favor of a bi-clausal derivational analysis proposed in Chomsky (1977) and developed further in recent contributions (cf., among others, É. Kiss 1999; Frascarelli 2000b; Hedberg 2000; Belletti 2008; Frascarelli and Ramaglia 2013b, 2014).

[8] For an overview of different types of cleft constructions and their functions, see Lambrecht (2001) and De Cesare (2017), among others.

[9] Frascarelli and Ramaglia (2013b) take the analysis further and, based on a syntax-prosody interface evidence, propose that the relative clause should be analysed as a Familiar Topic.

[10] Based on corpus data of formal register (Eduskunta 2017), the frequency of occurrence of object clefting appears to be significantly lower than that of subjects, and specifically, 2 vs.49 occurrences, respectively, within a corpus of 22,458.581 words.

[11] The syntactic functions (and Cases) of the constituents can be interpreted in different ways according to the verbal agreement.

[12]   For instance, this line of analysis is substantially supported by diachronic evidence in Afro-asiatic languages. As is shown in Puglielli and Frascarelli (2005), for instance, the Somali FM *baa* is derived from a cluster composed by the proto-Cushitic copula *ak*, a 3SG subject clitic and an inflectional (tense) morpheme:(i) *ak* + *y* + *aa*be 3SGM PRES

[13]   The capital letter 'A' indicates the archigrapheme, which is realized as *a* or *ä*, according to vowel harmony.

[14]   The particle *-hAn* may convey different pragmatic information according to context, such as "a reminder of familiar information", (cf. Hakulinen 1976, p. 58; Brattico et al. 2013), but this function will not be considered in the present study.

[15]   Finnish does not have articles, but in translation, the object 'book' bears the article 'the', as the constituent is situated between the Focus and the verb, an intermediate position that is dedicated to given constituents. The definitive article clearly shows that the referent is known to the interlocutors.

[16]   In (33), the three alternative Focus strategies tested (namely, in situ, fronting and *-hAn*/cleft constructions in C, C', and C''', respectively), are shown together for clarity of exposition. In the test, items were presented with only one option at a time. For reasons of space, in the following examples only the in situ alternative is illustrated.

[17]   Specifically, (i) for transitive verbs: *ottaa/prendere* ('to take'), *kuvata/fotografare* ('to photograph'), *syödä/mangiare* ('to eat') and *silittää/stirare* ('to iron'); (ii) for unaccusative verbs: *käydä/andare* ('to go'), *mennä läpi/passare per* ('to pass through'), *kompastua/inciampare* ('to trip') and *nousta/salire* ('climb'); and (iii) for unergative verbs: *leikkiä/giocare* ('to play'), *lentää/volare* ('to fly'), *osua* ('to hit')/*sparare* ('to shoot') and *vastata/rispondere* ('to answer').

[18]   Figure 4 shows, for each factor and for their interactions, the following data:Sum of squares (SS), namely, the sum of the squared deviations, representing the sum of the squared differences from the mean;Degree of Freedom, which is the number of values that may vary in a statistic, without violating any constraint;Mean squares (MS), namely, a representation of population variance, which is obtained by dividing the SS by the degrees of freedom;F-value (F); this is the result of the F-test calculated by dividing the MS value by the MS error and helps to check whether the variance between the means of two populations is significantly different;*p*-value (*p*), namely, the probability of getting a result at least as extreme as the one that was actually observed, given that the null hypothesis is true. Specifically, if the *p*-value is less than 0.05 the effect of the relevant factor or interaction is considered significant.In addition, the first line shows the value of the 'Intercept', which is the predicted value of the response when all predictors are 0, while under each factor an 'Error' line is showed, which represents the 'unexplained random error' found in the analysis.

[19]   For reasons of legibility, *p*-values in Figure 15 have been rounded off to 3 decimals.

References

Aboh, Enoc Oladé, Katarina Hartmann, and Malte Zimmerman, eds. 2007. *Focus Strategies in African Languages. The Interaction of Focus and Grammar in Niger-Congo and Afro-Asiatic*. Berlin: Mouton de Gruyter.

Adger, David, and Peter Svenonius. 2011. Features in minimalist syntax. In *The Oxford Handbook of Linguistic Minimalism*. Edited by Cedric Boeckx. Oxford: Oxford University Press, pp. 27–51.

Akmajian, Adrian. 1970. Aspects of the Grammar of Focus in English. Ph.D. Dissertation, MIT, Cambridge.

Alexiadou, Artemis, and Elena Anagnostopoulou. 2004. Voice morphology in the causative-inchoative Alternation: Evidence for a non-unified structural analysis of unaccusatives. In *The Unaccusativity Puzzle*. Edited by Artemis Alexiadou, Elena Anagnostopoulou and Martin Everaert. Oxford: Oxford University Press, pp. 114–36.

Aller Media, Oy. 2014. Suomi 24 Virkkeet-Korpus (2016H2) [Tekstikorpus]. Kielipankki. Available online: http://urn.fi/urn:nbn:fi:lb-2017021505 (accessed on 1 September 2022).

Âmbar, Manuela. 1999. Aspects of the syntax of focus in Portuguese. In *The Grammar of Focus*. Edited by Georges Rebuschi and Laurice Tuller. Amsterdam and Philadelphia: John Benjamins, pp. 23–53.

Arnhold, Anja, and Aki-Juhani Kyröläinen. 2017. Modelling the interplay of multiple cues in prosodic focus marking. *Laboratory Phonology* 8: 4. [CrossRef]

Avesani, Cinzia. 1999. Quantificatori, negazione costituenza sintattica. Costruzioni potenzialmente ambigue e il ruolo della prosodia. In *Fonologia e morfologia dell'italiano e dei dialetti d'Italia. Atti del XXXI Congresso Internazionale di Studi della SLI*. Edited by Paola Benincà, Alberto Mioni and Laura Vanelli. Roma: Bulzoni, pp. 1–48.

Beaver, David, and Brady Clark. 2003. Always and Only: Why not all Focus-Sensitive Operators are Alike. *Natural Language Semantics* 11: 323–62. [CrossRef]

Beck, Sigfrid. 2016. Focus Sensitive Operators. In *The Oxford Handbook of Information Structure*. Edited by Caroline Féry and Shinichiro Ishihara. Oxford: Oxford University Press, pp. 227–50.

Belletti, Adriana. 2004. Aspects of the Low IP Area. In *The Structure of CP and IP. The Cartography of Syntactic Structures*. Edited by Luigi Rizzi. Oxford: Oxford University Press, pp. 16–51.

Belletti, Adriana. 2005. Answering with a cleft: The role of the Null-subject parameter and the vP periphery. In *Contributions to the thirtieth "Incontro di Grammatica Generativa"*. Edited by Laura Brugè, Giuliana Giusti, Nicola Munaro, Walter Schweikert and Giuseppina Turano. Venezia: Editrice Cafoscarina, pp. 63–82.

Belletti, Adriana. 2008. Answering strategies: New information subjects and the nature of clefts. In *Structures and Strategies*. Edited by Adriana Belletti. London: Routledge, chp. 10.

Bianchi, Valentina, and Giuliano Bocci. 2012. Should I Stay or Should I Go? Optional Focus Movement in Italian. *Empirical Issues in Syntax and Semantics* 9: 1–16.

Bianchi, Valentina, and Mara Frascarelli. 2010. Is topic a root phenomenon? *Iberia* 2: 43–88.

Bianchi, Valentina, Giuliano Bocci, and Silvio Cruschina. 2015. Focus Fronting and its implicatures. In *Romance Languages and Linguistic Theory 2013*. Edited by Enoch Aboh, Jeannette Schaeffer and Petra Sleeman. Amsterdam and Philadelphia: John Benjamins, pp. 3–20.

Bianchi, Valentina, Giuliano Bocci, and Silvio Cruschina. 2016. Focus fronting, unexpectedness, and evaluative im-plicatures. *Semantics and Pragmatics* 9: 1–54.

Bianchi, Valentina. 2013. On Focus movement in Italian. In *Information Structure and Agreement*. Edited by Victoria Camacho-Taboada, Ángel L. Jiménez-Fernández, Javier Martín-González and Mariano Reyes-Tejedor. Amsterdam and Philadelphia: John Benjamins, pp. 194–215.

Blakemore, Diane. 1987. *Semantic Constraints on Relevance*. Oxford: Blackwell.

Brattico, Pauli, Saara Huhmarniemi, Jukka Purma, and Anne Vainikka. 2013. The Structure of Finnish CP and Feature Inheritance. *Finno-Ugric Languages and Linguistics* 2: 66–109.

Brody, Michael, and Kriszta Szendrői. 2011. A kimerítő felsorolás értemezésűfókusz válasz. [Exhaustive focus is an answer]. In *Új irányok Éseredmények a Mondattani Kutatásban Kiefer Ferenc 80. Születésnapja al-Kalmából*. Edited by Huba Bartos. Budapest: Akadémiai Kiadó/Academic Press, vol. 23, Available online: http://www.ucl.ac.uk/~{}uczaksz/ (accessed on 1 September 2022).

Büring, Daniel, and Katharina Hartmann. 2001. The syntax and semantics of focus sensitive particles in German. *Natural Language and Linguistic Theory* 19: 229–81. [CrossRef]

Büring, Daniel. 1999. Topic. In *Focus, Linguistic Cognitive and Computational Perspectives*. Edited by Peter Bosch and Rob van der Sandt. Cambridge: Cambridge University Press, pp. 142–65.

Cardinaletti, Anna. 2003. Stylistic Fronting in Italian. In *Grammar in Focus. Festschrift for Christer Platzack*. Edited by Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson and Halldór Á. Sigurðsson. Lund: Wallin and Dalholm, pp. 47–55.

Chomsky, Noam. 1977. On WH-movement. In *Formal Syntax*. Edited by Peter W. Culicover, Thomas Wasow and Adrian Akmajian. New York: Academic Press, pp. 71–132.

Cinque, Guglielmo, and Luigi Rizzi. 2008. The cartography of syntactic structures. Studies. *Linguistics* 2: 42–58.

Coppock, Elizabeth, and Laura Staum. 2004. Origin of the English Double-Is Construction. Available online: https://bibbase.org/network/publication/coppock-staum-originoftheenglishdoubleisconstruction-2004. (accessed on 1 September 2022).

Cruschina, Silvio. 2011. Fronting, dislocation and the syntactic role of discourse-related features. *Linguistic Variation* 11: 1–34. [CrossRef]

Cruschina, Silvio. 2012. *Discourse-Related Features and Functional Projections*. New York /Oxford: Oxford University Press.

Cruschina, Silvio. 2016. Information and discourse structure. In *The Oxford Guide to the Romance languages*. Edited by Adam Ledgeway and Martin Maiden. Oxford: Oxford University Press, pp. 596–608.

Cruschina, Silvio. 2019. L'anteposizione focale: Contrasto e i tipi di focus. In *Per una prospettiva funzionale sulle costruzioni sintatticamente marcate. Special issue of Neuphilologische Mittei-lungen.*. Edited by Anna Maria De Cesare and Mervi Helkkula. Helsinki: Neuphilologischer Verein, pp. 247–267.

Cruschina, Silvio. 2021. The greater the contrast, the greater the potential. On the effect of Focus in syntax. *Glossa: A journal of general linguistics* 6: 3. [CrossRef]

Dal Farra, Chiara. 2018. Towards a Fine-Grained Theory of Focus. *Annali di Ca' Foscari. Serie Occidentale* 52: 39–63.

De Cesare, Anna-Maria, and Davide Garassino. 2015. On the status of exhaustiveness in cleft sentences: An empirical and cross-linguistic study of English also-/only-clefts and Italian anche-/solo-clefts. *Folia Linguistica* 49: 1–56. [CrossRef]

De Cesare, Anna-Maria. 2017. Cleft constructions. In *Manual of Romance Morphosyntax and Syntax*. Edited by Andreas Dufter and Elisabeth Stark. Berlin: Mouton de Gruyter, pp. 536–68.

Delfitto, Denis, and Gaetano Fiorin. 2015. Exhaustivity Operators and Fronted Focus in Italian. In *Structures, Strategies and Beyond. Studies in Honour of Adriana Belletti*. Edited by Elsa Di Domenico, Cornelia Hamann and Simona Matteini. Amsterdam and Philadelphia: John Benjamins, pp. 163–80.

Dikken, Marcel Den, André Meinunger, and Chris Wilder. 2000. Pseudoclefts and ellipsis. *Studia Linguistica* 54: 41–89. [CrossRef]

É. Kiss, Katalin. 1998. Identificational Focus versus Information Focus. *Language* 74: 245–73. [CrossRef]

É. Kiss, Katalin. 1999. The English cleft construction as a focus phrase. In *Boundaries of Morphology and Syntax*. Edited by Lunella Mereu. Amsterdam and Philadelphia: John Benjamins, pp. 217–30.

Eduskunta. 2017. Eduskunnan Täysistunnot, Korp-Version of Kielipankki 1.5 [Text Corpus]. Kielipankki. Available online: http://urn.fi/urn:nbn:fi:lb-2019101621 (accessed on 1 September 2022).

Emonds, John. 1976. *A Transformational Approach to English Syntax: Root, Structure-Preserving, and Local Transformations*. New York: Academic Press.

Franco, Irene. 2009. Verbs, Subjects and Stylistic Fronting. Ph.D. thesis, University of Siena, Siena, Italy.

Frascarelli, Mara, and Francesca Ramaglia. 2013a. Phasing contrast at the interfaces. In *Information Structure and Agreement*. Edited by Victoria Camacho-Taboada, Ángel L. Jiménez-Fernández, Javier Martín-González and Mariano Reyes-Tejedor. Amsterdam and Philadelphia: John Benjamins, pp. 55–82.

Frascarelli, Mara, and Francesca Ramaglia. 2013b. Pseudoclefts at the Syntax-Prosody-Discourse Interface. In *The Structure of Clefts*. Edited by Katherina Hartmann and Tonjes Veenstra. Amsterdam and Philadelphia: John Benjamins, pp. 97–138.

Frascarelli, Mara, and Francesca Ramaglia. 2014. The interpretation of clefting (a)symmetries between Italian and German. In *Romance Languages and Linguistic Theory 2012. Selected Papers from 'Going Romance' Leuven 2012 [RLLT 6]*. Edited by Karen Lahousse and Stefania Marzo. Amsterdam and Philadelphia: John Benjamins, pp. 65–89.

Frascarelli, Mara, and Roland Hinterhölzl. 2007. Types of topics in German and Italian. In *On Information Structure, Meaning and Form*. Edited by Kerstin Schwabe and Susanne Winkler. Amsterdam and Philadelphia: John Benjamins, pp. 87–116.

Frascarelli, Mara, and Tania Stortini. 2019. Focus constructions, verb types and the SV/VS order in Italian: An ac-quisitional study from a syntax-prosody perspective. *Lingua* 227: 102690. [CrossRef]

Frascarelli, Mara. 2000a. *The Syntax-Phonology Interface in Focus and Topic Constructions in Italian*. Studies in Natural Language and Linguistic Theory Series Nr. 50. Dordrecht: Kluwer.

Frascarelli, Mara. 2000b. Frasi Scisse e 'Small Clauses': Un'Analisi dell'Inglese. *Lingua e Stile* XXXV: 417–46.

Frascarelli, Mara. 2004. L'interpretazione del Focus e la portata degli operatori sintattici. In *Il Parlato Italiano. Atti del Convegno Nazionale*. Edited by Federico Albano Leoni, Franco Cutugno, Massimo Pettorino and Renata Savy. Naples: M. D'Auria Editore–CIRASS, p. B06.

Frascarelli, Mara. 2007. Subjects, Topics and the Interpretation of Referential pro. An interface approach to the linking of (null) pronouns. *Natural Language and Linguistic Theory* 25: 691–734. [CrossRef]

Frascarelli, Mara. 2010. Narrow Focus, Clefting and Predicate Inversion. *Lingua* 120: 2121–47. [CrossRef]

Frascarelli, Mara. 2017. Dislocations and Framings. In *Manual of Romance Morphosyntax and Syntax*. Edited by Andreas Dufter and Elisabeth Stark. Berlin: Mouton de Gruyter, pp. 472–510.

Frascarelli, Mara. 2018. The interpretation of pro in consistent and partial NS languages: A comparative interface analysis. In *Null-Subjects in Generative Grammar. A Synchronic and Diachronic Perspective*. Edited by Federica Cognola and Joan Casalicchio. Oxford and New York: Oxford University Press, pp. 211–39, Part IIB, chp. 9.

Green, Melanie. 1997. Focus and Copular Constructions in Hausa. Ph.D. thesis, SOAS, London, UK.

Haegeman, Liliane. 2004. Topicalization, CLLD and the left periphery. *ZAS Working Papers in Linguistics* 35: 157–92. [CrossRef]

Hakulinen, Auli, Fred Karlsson, and Maria Vilkuna. 1980. *Suomen Tekstilauseiden Piirteitä: Kvantitatiivinen Tutkimus*. Helsinki: University of Helsinki.

Hakulinen, Auli. 1976. *Reports on Text Linguistics: Suomen Kielen Generatiivista Lauseoppia 2*. Turku: Åbo Akademi.

Hale, Samuel, and Jay Keyser. 1993. Prolegomenon to a Theory of Argument Structure. *Language* 81: 248–51.

Halliday, Michael A. K. 1967. Notes on Transitivity and Theme in English: Part II. *Journal of Linguistics* 3: 199–244. [CrossRef]

Hedberg, Nancy. 2000. The referential status of clefts. *Language* 76: 891–920. [CrossRef]

Heggie, Lorie. 1993. The range of null operators: Evidence from clefting. *Natural Language and Linguistic Theory* 11: 45–84. [CrossRef]

Herburger, Elena. 2000. *What Counts: Focus and Quantification*. Linguistic Inquiry Monograph. Cambridge: MIT Press.

Holmberg, Anders, and Urpo Nikanne. 2002. Expletives, Subjects and Topics in Finnish. In *Subjects, Expletives, and the EPP*. Edited by Peter Svenonius. Oxford: Oxford University Press, pp. 71–105.

Holmberg, Anders. 2000. Scandinavian Stylistic Fronting. How any category can become an expletive. *Linguistic Inquiry* 31: 445–83. [CrossRef]

Holmberg, Anders. 2005. Stylistic fronting. In *The Blackwell Companion to Syntax*. Edited by Martin Everaert, Henk van Riemsdijk, Rob Goedemans and Bart Hollebrandse. Oxford: Blackwell, pp. 530–63.

Jackendoff, Ray. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jacobs, Joachim. 1983. *Fokus und Skalen: Zur Syntax und Semantik der Gradpartikeln im Deutschen*. Linguistische Arbeiten Band 138. Berlin: Mouton de Gruyter.

Jiménez-Fernández, Ángel L. 2015a. When focus goes wild: An empirical study of two syntactic positions for infor-mation Focus. *Linguistics Beyond and Within* 1: 119–33. [CrossRef]

Jiménez-Fernández, Ángel L. 2015b. Towards a typology of focus: Subject position and microvariation at the dis-course-syntax interface. *Ampersand: An International Journal of General and Applied Linguistics* 2: 49–60. [CrossRef]

Jiménez-Fernández, Ángel L., and Shigeru Miyagawa. 2014. A feature-inheritance approach to root phenomena and parametric variation. *Lingua* 145: 276–302. [CrossRef]

Jones, Michael A. 2013. Fronting, focus and illocutionary force in Sardinian. *Lingua* 134: 75–101. [CrossRef]

Kaiser, Elsi. 2000. The discourse functions and syntax of OSV word order in Finnish. In *The Proceedings from the Main Session of the Chicago Linguistic Society's Thirty-Sixth Meeting*. Edited by Arika Okrent and John Boyle. Chicago, IL: Chicago Linguistic Society, vol. 36.1, pp. 179–94.

Kaiser, Elsi. 2006. Negation and the left periphery in Finnish. *Lingua* 116: 314–35. [CrossRef]

Karttunen, Frances. 1974. *More Finnish Clitics: Syntax and Pragmatics*. Mimeo: University of Texas Press.

Karttunen, Frances. 1975. The syntax and pragmatics of the Finnish clitic-han. *Texas Linguistic Forum* 1: 41–50.

Kiparsky, Paul. 1998. Partitive case and aspect. In *Projecting from the Lexicon*. Edited by Miriam Butt and Wilhelm Geuder. Stanford: CSLI, pp. 265–307.

Klok, Vander, Heather Goad Jozina, and Michael Wagner. 2018. Prosodic focus in English vs. French: A scope account. *Glossa: A Journal of General Linguistics* 3: 71.

Krifka, Manfred. 1992. A compositional semantics for multiple focus. In *Informationsstruktur und Grammatik*. Edited by Joachim Jacobs. Opladen: Westdeutscher Verlag, pp. 127–58.

Krifka, Manfred. 2007. Basic Notions of Information Structure. In *Interdisciplinary Studies on Information Structure*. Edited by Caroline Féry and Manfred Krifka. Potsdam: ISIS, Universitätverlag Potsdam, pp. 13–55.

Lambrecht, Knud. 1994. *Informaction Structure and Sentence Form: Topic, Focus and the Mental Representation of Dis-Course Elements*. Cambridge: Cambridge University Press.

Lambrecht, Knud. 2001. A Framework for the Analysis of Cleft Constructions. *Linguistics* 39: 463–516. [CrossRef]

Larjavaara, Matti. 2019. *Partitiivin Valinta*. Helsinki: Suomalaisen Kirjallisuuden Seura.

Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19: 335–91.

Leino, Pentti. 1982. *Suomen Kielen Lohkolause*. Helsinki: Suomalaisen Kirjallisuuden Seura.

Leonetti, Manuel, and Victoria Escandell. 2009. Fronting and verum-focus in Spanish. In *Focus and Background in Romance Languages*. Edited by Andreas Dufter and Daniel Jacob. Amsterdam and Philadelphia: John Benjamins, pp. 155–204.

Ler, Vivien. 2006. A relevance-theoretic approach to discourse particles in Singapore English. In *Approaches to Discourse Particles*. Edited by Kerstin Fischer. Amsterdam and Oxford: Elsevier, pp. 149–66.

Maling, Joan. 1980. Inversion in embedded clauses in Modern Icelandic. In *Modern Icelandic Syntax*. Edited by Joan Maling and Annie Zaenen. Leiden: Brill, pp. 71–91.

Molnár, Valeria. 2002. Contrast in a contrastive perspective. In *Information Structure in a Cross-Linguistic Perspective*. Edited by Hilde Hasselgård, Stig Johansson, Bergljot Behrens and Cathrine Fabricius-Hansen. Amsterdam and New York: Rodopi, pp. 147–61.

Molnár, Valeria. 2006. On different kinds of contrast. In *The Architecture of Focus*. Edited by Valeria Molnár and Susanne Winkler. Berlin: Mouton de Gruyter, pp. 197–233.

Molnár, Valeria. 2017. Stylistic Fronting and Discourse. *Florida Linguistics Papers* 4: 1.

Neeleman, Ad, Elena Titov, Hans van de Koot, and Reiko Vermeulen. 2009. A syntactic typology of topic, focus and contrast. In *Alternatives to Cartography*. Edited by Joan van Craenenbroeck. Berlin: Mouton del Gruyter, pp. 15–51.

Nevis, Joel Ashmore. 1986. *Finnish Particle Clitics and General Clitic Theory*. Columbus: Ohio State University, Department of Linguistics.

Ott, Dennis. 2009. Stylistic Fronting as remnant movement. *Working Papers in Scandinavian Syntax* 83: 141–78. [CrossRef]

Palomäki, Jennimaria. 2013. Exploring possibilities for a syntactic account for the Finnish -han enclitic. In *UGA Working Papers in Linguistics*. Athens: The Linguistics Society at UGA.

Palomäki, Jennimaria. 2016. The Pragmatics and Syntax of the Finnish -han Particle Clitic. Ph.D. thesis, University of Georgia, Athens, GA, USA.

Partee, Barbara H. 1991. Topic, focus and quantification. In *SALT I: Proceedings of the First Annual Conference on Semantics and Linguistic Theory 1991*. Edited by Steven Moore and Adam Zachary Wyner. Ithaca: CLC Publications, Department of Linguistics, Cornell University, pp. 159–187.

Penttilä, Aarni. 1957. *Suomen Kielioppi*. Helsinki: WSOY.

Platzack, Christer. 2009. Old wine in new barrels. The edge feature in C, topicalization and Stylistic Fronting. Paper given at the "Maling Seminar. Ráðstefna til heiðurs Joan Maling 30" at the University Iceland.

Potts, Christopher. 2005. *The Logic of Conventional Implicatures*. Oxford: Oxford University Press.

Potts, Christopher. 2007. Conventional implicatures, a distinguished class of meanings. In *The Oxford Handbook of Linguistic Interfaces*. Edited by Gillian Ramchand and Charles Reiss. New York and Oxford: Oxford University Press, pp. 475–501.

Puglielli, Annarita, and Mara Frascarelli. 2005. The Focus System in Cushitic Languages. In *Proceedings of the 10th Hamito-Semitic Congress. Afroasiatic Linguistics (Quaderni di Semitistica 23)*. Edited by Pelio Fronzaroli and Paolo Marrassini. Florence: University of Florence Press, pp. 333–58.

Repp, Sophie. 2010. Defining 'contrast' as an information-structural notion in grammar. *Lingua* 120: 1333–45. [CrossRef]

Rizzi, Luigi. 1997. The fine structure of the Left Periphery. In *Elements of Grammar. Handbook in Generative Syntax*. Edited by Liliane Haegeman. Dordrecht: Kluwer, pp. 281–337.

Rizzi, Luigi. 2001. On the position Int(errogative) in the left periphery of the clause. In *Current Studies in Italian Syntax. Essays offered to Lorenzo Renzi*. Edited by Guglielmo Cinque and Giampaolo Salvi. Amsterdam: Elsevier, pp. 287–96.

Rizzi, Luigi. 2004. Locality and Left Periphery. In *Structures and Beyond. The Cartography of Syntactic Structures*. Edited by Adriana Belletti. Oxford and New York: Oxford University Press, pp. 223–51.

Rizzi, Luigi. 2006. On the form of chains: Criterial positions and ECP effects. In *Wh-Movement: Moving on*. Edited by Lisa Lai-Shen Cheng and Norbert Corver. Cambridge: MIT Press, pp. 97–134.

Rizzi, Luigi. 2018. Intervention effects in grammar and language acquisition. *Probus* 30: 339–36. [CrossRef]

Roberts, Craig. 2012. Information Structure in Discourse: Towards an Integrated Formal Theory of Pragmatics. *Semantics and Pragmatics* 5: 1–69. [CrossRef]

Roggia, Carlo Enrico. 2008. Frasi Scisse in italiano e in francese orale: Evidenze dal C-ORAL-ROM. *Cuadernos de Filología Italiana* 15: 9–29.

Rooth, Mats. 1992. A Theory of Focus Interpretation. *Natural Language Semantics* 1: 75–116. [CrossRef]

Rooth, Mats. 1996. Focus. In *The Handbook of Contemporary Semantic Theory*. Edited by Shalom Lappim. Cambridge: Blackwell Reference, pp. 271–297.

Samek-Lodovici, Vieri. 2018. Contrast, Contrastive Focus, and Focus Fronting. *UCL Working Papers in Linguistics*, 57–77. [CrossRef]

Schwarzschild, Roger. 1997. Why Some Foci Must Associate. Ms. Available online: https://www.academia.edu/62286570/Why_Some_Foci_Must_Associate_1 (accessed on 1 September 2022).

Skopeteas, Stavros, and Gisbert Fanselow. 2010. Focus types and argument asymmetries. A cross-linguistic study in language production. In *Comparative and Contrastive Studies of Information Structure*. Edited by Carsten Breul and Edvard Göbbel. Amsterdam and Philadelphia: John Benjamins, pp. 169–98.

Skopeteas, Stavros, and Gisbert Fanselow. 2011. Focus and the exclusion of alternatives: On the interaction of syntactic structure with pragmatic inference. *Lingua* 121: 1693–706. [CrossRef]

Sleeman, Petra. 2013. Italian clefts and the licensing of infinitival subject relatives. In *The Structure of Clefts*. Edited by Katherina Hartmann and Tonjes Veenstra. Amsterdam and Philadelphia: John Benjamins, pp. 319–42.

Smeets, Liz, and Michael Wagner. 2018. Reconstructing the syntax of focus operators. *Semantics and Pragmatics* 11: 6. [CrossRef]

Sperber, Dan, and Deirdre Wilson. 1986. *Relevance: Communication and Cognition*. Oxford and Cambridge: Blackwell.

Sulkala, Helena, and Merja Karjalainen. 1992. *Finnish*. London: Routledge.

Suomi, Kari, Juhani H. Toivanen, and Riikka Ylitalo. 2008. *Finnish Sound Structure Phonetics, Phonology, Phonotactics and Prosody*. Oulu: University of Oulu.

Szabolcsi, Anna. 1981. Compositionality in Focus. *Acta Linguistica Societatis Linguistice Europaeae* 15: 141–62. [CrossRef]

Vainio, Martti, and Juhani Järvikivi. 2007. Focus in production: Tonal shape, intensity and word order. *Journal of the Acoustical Society of America* 121: EL55–EL61. [CrossRef]

Välimaa-Blum, Riitta. 1987. The discourse function of the Finnish clitic -han: Another look. *The Nordic Languages and Modern Linguistics* 6: 471–81.

Välimaa-Blum, Riitta. 1993. A pitch accent analysis of intonation in Finnish. *Ural-Altaische Jahrbucher* 12: 82–89.

Vallduví, Enric, and Maria Vilkuna. 1998. On rheme and contrast. In *The Limits of Syntax*. Edited by Peter W. Culicover and Louise McNally. San Diego: Academic Press, pp. 79–108.

Van Leusen, Noor. 2004. Incompatibility in context. A diagnosis of correction. *Journal of Semantics* 21: 415–42. [CrossRef]

Vanrell, Maria del Mar, and Olga Fernández-Soriano. 2013. Variation at the interfaces in Ibero-Romance. Catalan and Spanish prosody and word order. *Catalan Journal of Linguistics* 12: 253–82. [CrossRef]

Vilkuna, Maria. 1989. *Free Word Order in Finnish: Its Syntax and Discourse Functions*. Helsinki: Suomalaisen Kir-jallisuuden Seura.

Vilkuna, Maria. 1995. Discourse configurationality in Finnish. In *Discourse Configurational Languages*. Edited by Katalin É Kiss. Oxford: Oxford University Press, pp. 244–68.

VISK = Hakulinen, Auli, Maria Vilkuna, Riitta Korhonen, Vesa Koivisto, Tarja Riitta Heinonen, and Irja Alho. 2004. *ISO Suomen Kielioppi*. Helsinki: Suomalaisen Kirjallisuuden Seura. Available online: http://scripta.kotus.fi/visk (accessed on 1 September 2022).

von Stechow, Arnim. 1981. Topic, Focus, and Local Relevance. In *Crossing the Boundaries in Linguistics*. Edited by Wolfgang Klein and Willem Levelt. Dordrecht: Reidel, pp. 95–130.

Ylinärä, Elina. 2021. Word Order and Focus in Finnish Finite Clauses. An Overview of Syntactic Theories from a Formal Perspective. *Studi Finno-Ugrici* 1: 1–23.

Zubizarreta, María Luisa. 1998. *Prosody, Focus and Word Order*. Cambridge: MIT Press.