Mental State Verbs in Dialogic Constructions

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Abstract
In line with recent work on discourse constructions (e.g. Fried & Östman 2005, Östman, 2005, Linell, 2009, Nikiforidou et al, 2014), the present paper aims to provide an analysis of a lexically-related family of constructions featuring a mental state verb in the imperative, namely, believe me, believe you me, and believe it or not. The research questions to be addressed are the following: (a) What are the identifying features of the constructions? (b) What do the constructions contribute to the discourse in which they occur? It will be argued that, while inheriting the semantics of the mental state verb in question, i.e. the verb believe, as well as the directive speech act force typically associated with the imperative, these expressions also manifest idiosyncratic features pertaining to internal and outer syntax (Linell 2009), lexicalization of Speaker (S) and Addressee (A), and discourse pragmatics.
Adopting a corpus-based methodology, this paper attempts to show that these constructions contribute a dialogic perspective to monologic text types of expository discourse, such as articles from periodicals, brochures, and novels, while marking new and unexpected information. More specifically, following Traugott (2008), it will be claimed that these constructions are dialogic in the sense of perspectivising preceding or following propositions to imaginary/assumed interlocutors, expressive in presenting a subjective point of view, and prompted by particular evaluative contextual features. This systematic co-occurrence and their discourse pragmatics also suggest that these constructions have developed an intensifying discourse function that merits further investigation.

Key words: Construction Grammar, dialogism, monologism, mental state verbs, imperative, dialogic constructions, discourse pragmatics

1. *Introduction*

In line with recent constructionally-oriented work (Fried and Östman 2005, Östman 2005, Linell 2009, Fischer 2010, Nikiforidou et al, 2014, Nikiforidou 2016, etc.), and the current research interest in identifying formal and semantic-pragmatic features of supra-clause patterns, the present paper focuses on a lexically-related family of constructions, namely, *believe me*, *believe you me* and *believe it or not*. Their analysis is based on a constructional, corpus-based methodological framework, whereby these constructions are traced in authentic, corpus-attested examples of monologic texts. The research questions to be addressed are: (a) What are the identifying features of the constructions? (b) What do the constructions contribute to the discourse in which they occur?

In particular, the present paper forwards the hypothesis that the constructions identified seem to function dialogically in the sense of imposing a dialogic construal on monologic text types of expository discourse (e.g. articles, brochures, narrative parts of novels etc.), and by extension in perspectivising preceding or following utterances (see Traugott 2008). This perspectivisation establishes a sense of (non-) alignment between the Speaker and the assumed Addressee, and more often than not, an implicit expression of challenge by this imaginary/assumed Addressee, which is rebutted pre-emptively by the Speaker.

The methodological framework adopted draws on Construction Grammar (CxG) and its fundamental principles. CxG defines itself as a non-derivational, non-modular and unification-based theory of grammar that seeks to find the most effective, all-encompassing and representation-wise economical way of capturing the relationship between structure, meaning and use (Goldberg 2006, Fried and Östman 2005). In this context, a construction is best defined as a "learned pairing (unit) of form and semantic or discourse meaning (function) which may differ in terms of size, complexity and meaning" (Goldberg 2006:5), which licenses particular constructs in any given language. Constructions may thus be said to operate as "conglomerates of phonological, syntactical, semantic and pragmatic information" occupying the functional space of 'gestalts' licensing discourse-specific constructs (Nikiforidou et al, 2014).

In this model, all language forms are considered to be equally important and central. No language phenomena are privileged by being assigned a 'core' status and no language phenomena, such as multi-word expressions, are dismissed as 'peripheral'. In this respect, CxG views language as a system of intricate but principled, taxonomic networks organised on the basis of the principle of inheritance. Inheritance, as a mechanism-concept, "provides a coherent way of capturing which properties individual constructions have in common and what sets them apart as related but distinct grammatical patterns."(Fried & Östman, 2004:12). It, therefore, accounts for the relation between more productive, compositional and predictable patterns of language with more formal/substantive ones (see Fillmore et al. 1988). In this sense, the imperative of mental state verbs, such as *believe*, a fully productive and relatively unconstrained construction, is naturally associated with the idiomatic constructions under investigation. Non-inherited features that systematically characterize a construction can therefore be said to be particular to it.

As it transpires from the above, CxG is a theoretical framework that is par excellence capable of accommodating not just word- and phrase-level analyses, but also idiomatic language patterns and discourse phenomena with distinct conventional and pragmatic properties (Fillmore et al, 1988).

Understandably, discourse-level analysis, which is one of the main desiderata of constructionally-oriented work, poses certain methodological problems that have to be addressed. As Nikiforidou et al (2014) observe, these problems are mainly related to the fact that there is significant variation in naturally-occurring discourse that permeates all formal, semantic and pragmatic levels, coupled with the difficulty of identifying the appropriate features that can account for all the conventional (and hence grammaticalized) aspects of dialogic patterns (Diewald 2015). An additional aim of this paper, therefore, is to support the view that CxG is capable of addressing issues such as those arising in the analysis of the lexically-related family of *believe* constructions, which occupies a general, functional space that licenses the specific *believe me*, *believe you me*, and *believe it or not* constructs.

2. Methodology

2.1 The overall methodological framework

The discourse patterns under investigation were examined on the basis of corpus-attested examples. All the concordances analysed were extracted from the Sketch Engine (SkE) corpus query system and in particular from the British National Corpus (BNC) available therein.

Following the principle of the Central Limit Theorem[1], and as evidenced in a number of research papers on statistical significance requirements, robustness of statistical models and normal distribution of sample means (e.g. Johnson, 2004, Mordkoff 2000, 2011, 2016 etc.,), any sample of N≥30 approaches normal distribution in its main statistical parameters. Therefore, the data collected from the corpus of BNC formed a pool of 35 concordances per construction since such a sample is considered statistically capable of yielding valid generalisations for the semantic, pragmatic and discourse features of the constructions under investigation. The criterion for the formation of the specific pool of data was the occurrence of the constructions: *believe me, believe you me* and *believe it or not* in expository monologic discourse, namely articles from periodicals, brochures, biographies, novels etc.

The initial electronic, system-based categorization of the data was then followed by a systematic, manual tagging for the following features of each construction:

a) its morphosyntax,
b) its semantics,
c) its pragmatics,
d) the lexicalization of the Speaker and the Addressee,
e) its internal and outer syntax &
f) its discourse positioning.

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[1]The Central Limit Theorem is calculated through the formula: $\sigma_{\bar{X}} = \dfrac{\sigma_X}{\sqrt{n}}$

This manual tagging was followed by a systematic counting of the frequencies involved in the collocational behaviour of the constructions (e.g. their collocation with connectors, with intensifiers or other evaluative items and negative polarity items in the surrounding context) and in their discourse positioning (i.e. sentence-initial /-medial (i.e. parenthetical)/ or -final position).

2.2 Believe me

More specifically, as far as the construction *believe me* is concerned, the frequency count in terms of its collocating items (i.e. connectors, intensifiers[2] and negative polarity items) as well as its discourse positioning reveal the following:
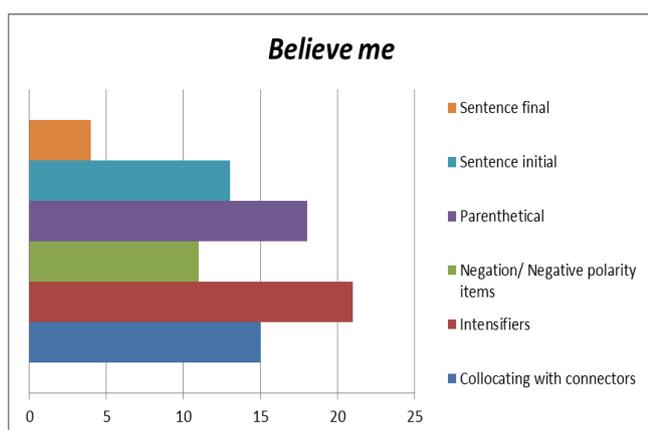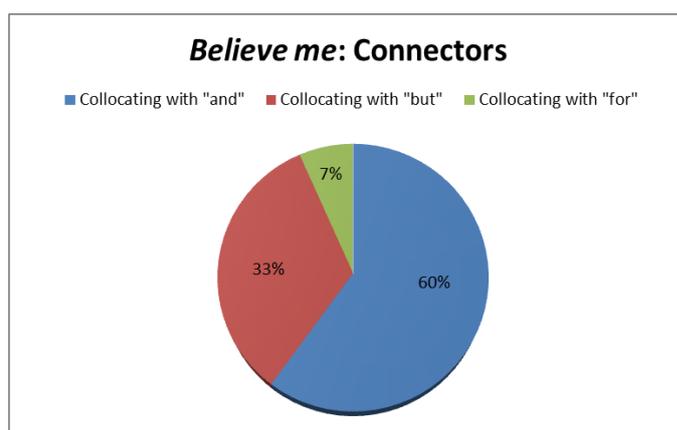

Figure 1: *Believe me*
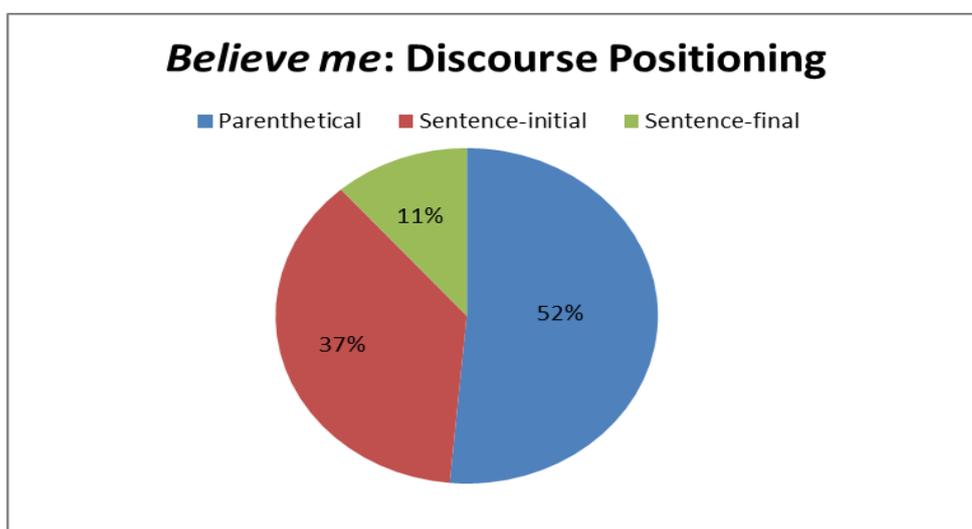

Figure 2: *Believe me*-Connectors

Figure 3: *Believe me*-Discourse Positioning

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[2] The analysis of intensifiers in the surrounding context of the constructions was based on the frequency of their presence in the context displayed automatically by the Sketch Engine Corpus Query System for each node word or expression. In particular, the KWIC (Key Word in Context) size for each construction is automatically set at 20 lines in terms of text.

2.3 Believe you me

The frequency count of *believe you me,* which generally features as a more emphatic counterpart of the previous construction, was found to exhibit the following:
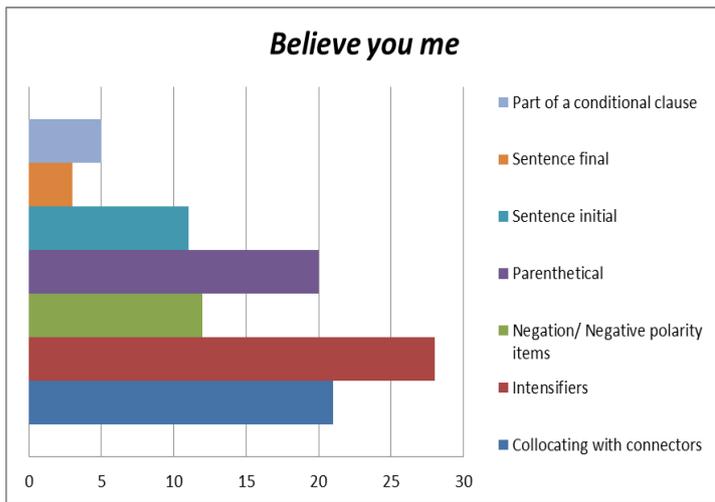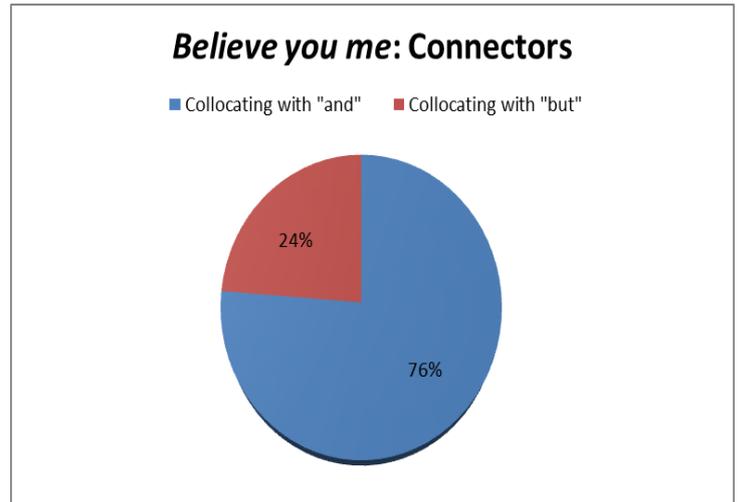

Figure 4: *Believe you me*

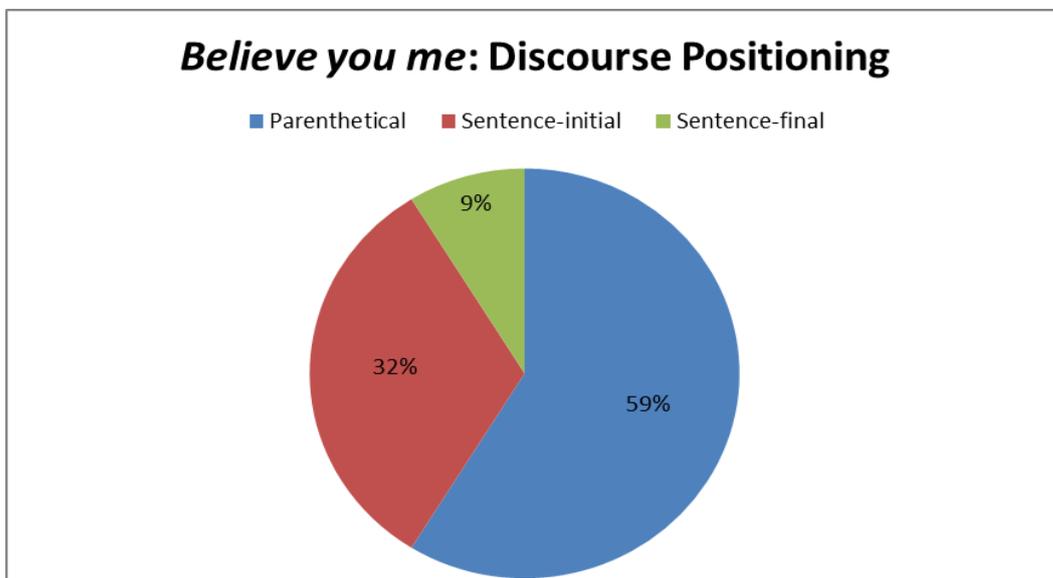**Figure 5:** *Believe you me*-**Connectors**

Figure 6: *Believe you me*-**Discourse Positioning**

2.4 Believe it or not

Finally, for the construction *believe it or not,* the frequency count revealed the following:
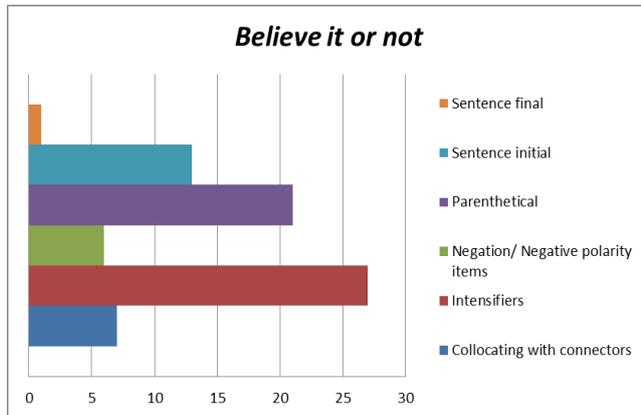
Figure 7: *Believe it or not*
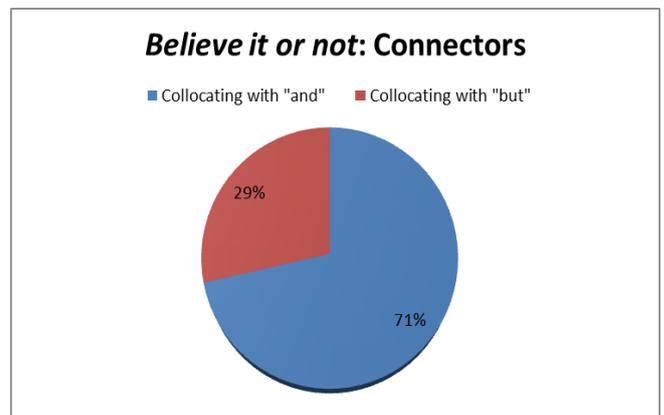
Figure 8: *Believe it or not*-**Connectors**
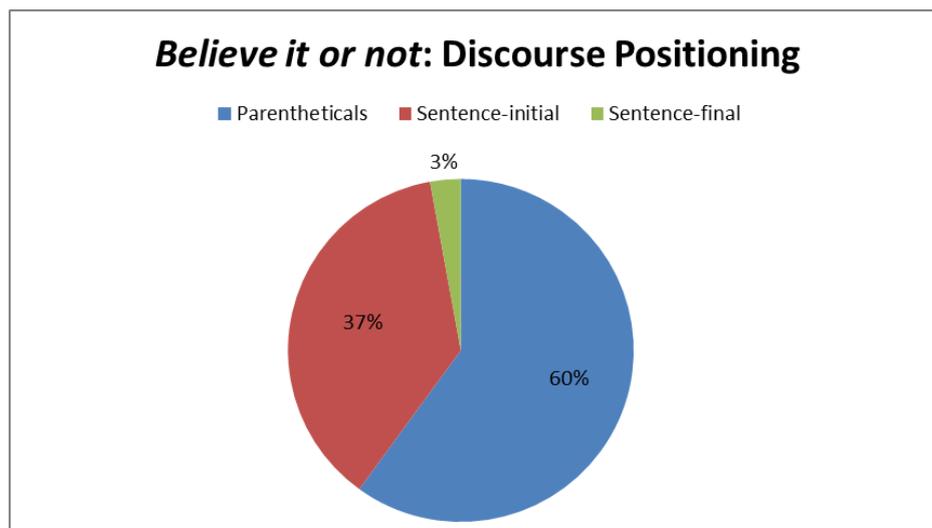
Figure 9: *Believe it or not*-**Discourse Positioning**

Once the manual tagging and the frequency count were completed, the data were subjected to a statistical test aimed at checking the Assumption of Normality deriving from the Central Limit Theorem mentioned above. The test used was the Kolmogorov-Smirnov test (K-S test) which is a non-parametric test that verifies whether the sample to be tested is normal. Indeed, the K-S test indicated that the sample followed normal distribution with an asymp.sig=0.00 <0.05.[3]

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[3] In statistical hypothesis testing, the significance level for a study is conventionally defined as a *p*-value <0.05.

Upon establishing the normal distribution of means in the sample collected, we proceeded to examine which non-parametric tests would allow for safer conclusions on statistical significance of the frequencies of each variable per construction, but also across constructions, too. To this end, and since this small scale research drew on frequency counts related to semantic, pragmatic and discourse features of the family of constructions under investigation, it was decided to subject the data to chi-square (χ2) tests as will be shown in section 4.2. The findings of the chi-square (x2) tests were finally subjected to reliability measurements (Cronbach's-Alpha(α)) as well, in order to verify whether they formed an internally consistent sample.

Schematically, the methodology adopted is divided into the following steps:
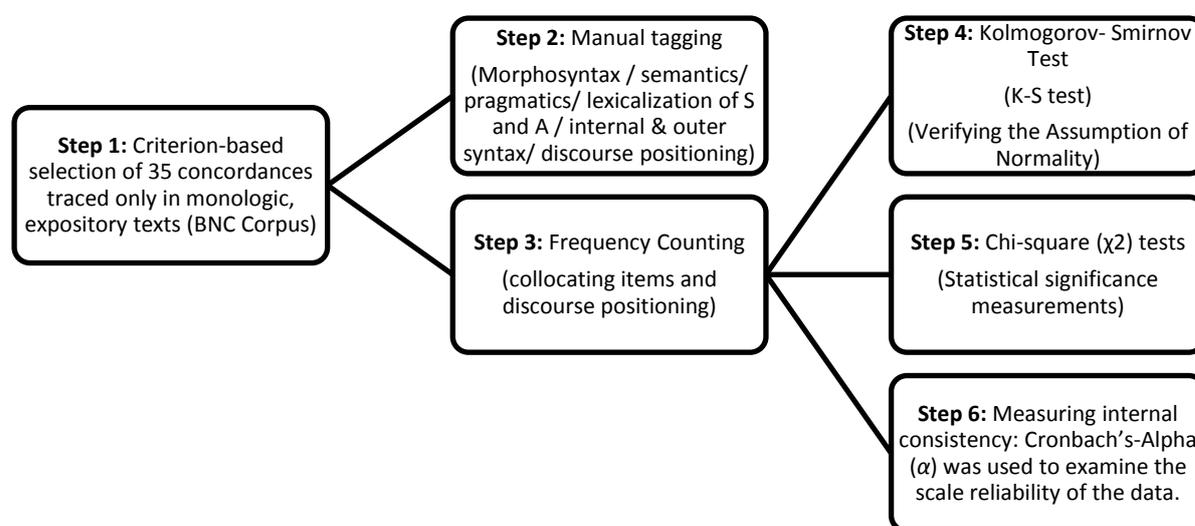
Step 1: Criterion-based selection of 35 concordances traced only in monologic, expository texts (BNC Corpus)

Step 2: Manual tagging (Morphosyntax / semantics/ pragmatics/ lexicalization of S and A / internal & outer syntax/ discourse positioning)

Step 3: Frequency Counting (collocating items and discourse positioning)

Step 4: Kolmogorov- Smirnov Test (K-S test) (Verifying the Assumption of Normality)

Step 5: Chi-square (χ2) tests (Statistical significance measurements)

Step 6: Measuring internal consistency: Cronbach's-Alpha (α) was used to examine the scale reliability of the data.

Figure 10: Methodological framework adopted

3. *Analyzing the data*

The close observation of the data during the system-generated and the manual context-tagging phase revealed three important features that the constructions share at a morpho-syntactic and semantic levels of the data, which support the view that they in fact constitute a family of inter-related constructions.

The first concerns the imperative of the verb *believe*. The imperative is inherently inter-subjective and is recruited by the Speaker to encode a typically unexpressed (i.e. usually non-lexicalized) Addressee by virtue of the addressee-evoking semantics that it already involves; the 'hidden you' as Makkonen-Craig (2014) names it. Apparently, this indicates that the imperative is par excellence capable of signalling a dialogic orientation in discourse.

Secondly, the verb *believe* semantically belongs to the category of *mental state verbs*. Although research about mental state verbs has been primarily preoccupied with their acquisition and perception by learners of a young age (see for instance Beeghly, Bretherton & Mervis 1986; Johnson & Maratsos 1977; MacNamara, Baker & Olson 1976; Moore, Bryant and Furrow 1989; Astington and Olson 1990; Wellman & Estes 1987, Booth & Hall 1995 etc.), relatively little

work has been done on a fine-grained analysis of their special attributes. Nonetheless, research generally agrees that they are characterized by *referential opacity* and should be seen as verbs that *"refer to abstract, invisible referents like desires, intentions and beliefs"* (Slaughter, Peterson and Carpenter 2008:1053). More specifically, they are divided into *volitional* mental state verbs that express desires and intentions, *cognitive* mental state verbs that express thought, intellect and reasoning, and *dispositional* ones which express preferences and affect.

Thirdly, mental state verbs are said to indicate the speaker's attitude to the proposition expressed. In this respect, *believe*, as a cognitive mental state verb, may function as a marker of *evidentiality*. Evidentiality either indicates the Speaker's (S) source of knowledge (e.g. by hearsay, observation, inference, memory etc.), or expresses the Speaker's (S) certainty or commitment to the information conveyed (weak or strong) and by extension to the proposition expressed (Ifantidou 2001: 1-8; Papafragou and Li 2001).

In the context of the present discussion, the constructions at hand inherit the semantics of *believe* in that they highlight the Speaker's certainty and commitment to the truth of a proposition by presenting herself as the source of knowledge. These features are taken into consideration in the subsequent analysis of the data.

As already explained, the criterion for the selection of the concordances in the Sketch Engine Corpus Query System (SkE) was the occurrence of the constructions in monologic expository texts, such as articles from periodicals, parts of novels, which did not involve exchanges between characters, biographies etc. For the purposes of the present paper, two examples of concordances per construction will be analysed. However, section 4 will present the statistical findings on the entirety of the data collected with a view to suggesting that the constructions at hand manifest certain collocational, syntactic and pragmatic regularities.

3.1   Believe me

As shown in the examples below, the *believe me* construction manifests a certain type of flexibility in terms of discourse position. It occurs parenthetically between commas, as in the first example, or sentence-initially, as in the second, or even sentence-finally (as confirmed by the rest of the data). In any case, the construction functions as an independent clause, not taking a that-complement, as is typical of mental state verbs as evidentials, but rather favouring a dispositional sense, which is semantically available in the category of mental state verbs, as already mentioned. If the construction is removed from the discourse, the propositional meaning of the utterance is not affected. Rather, the construction contributes to the expressivity of the utterance by focusing on the Speaker's emphatic confirmation of the truth of her statement, on an assumption of the Addressee's potential disbelief or counterarguments.

Example 1

Concordance:

Genre: fiction, prose, extract from the *Tales of the Loch*

<u>\<previous</u>... Orpheus understood this. Creatures crowded round to hear him sing. Whether or not Orpheus was an angler, I don't know, but I do know that when all else fails, giving them a song always works.
This may sound fanciful, ***but believe me,*** it is true. I know what I am talking about. Or rather singing about. It has happened too often to me to be mere coincidence. If trout are not rising, or fishing conditions seem impossible, I hum a tune. Sure enough, within a few moments, up they come. <u>next\></u>

Example 2

Concordance:

Genre: fiction, prose, extract from the *Ready to Catch Him Should He Fall*

<u>\<previous</u>. Suddenly she giggled and I realised I was still holding her fingers. You see, it was those eyes, so blue in a face so dark, one of God's most beautiful mixtures. I have met such women since, young girls from the west of Ireland, but Agnes Ralemberg was the queen. ***Believe me***, if the eyes are the windows of the soul, then Agnes's soul was as beautiful as she looked. She was totally guileless, honest, with a mordant sense of humour and sardonic wit. <u>next\></u>

Moreover, the first example illustrates the frequent collocation of the construction with the connector *but*. The data suggest that the construction generally collocates with connectors (15 instances out of the total 35 concordances) and in particular with the connectors *but* and *and*, while there is also one example of the connector *for*.

Another feature that appears to be contextually prominent is the presence of intensifying and evaluative terms and grammatical constructions, or figures of speech, such as metaphor.[4] Note the use of the evaluative adjectives *fanciful*, *guileless*, *mordant*, *beautiful*, and *sardonic* in the examples above, or the intensifiers *too*, *mere*, and *totally*. Among the evaluative grammatical constructions used are the comparative and the superlative (e.g. *most beautiful*,

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[4]For lack of space in the present paper, the discussion of intensifiers in other constructions (e.g. *believe* + that-complement) shall be limited to the following observation. Following the same methodology described, a sample of 35 BNC concordances was formed and subjected to frequency counts; the latter indicated considerable differences as regards the number of intensifiers. Unlike the case with the *believe* constructions under investigation in this paper, the *believe* + that-complement constructions exhibited a much more restricted predilection for intensifiers with only 18 out of 35 concordances featuring intensifiers in the surrounding context. Additionally, the intensifying elements in each example were noticeably more restricted both in terms of number and in terms of variety (e.g. more restricted use of metaphors, fewer superlative forms etc.). Yet, since a comparative analysis of this sort lies outside the scope of this paper, we will limit ourselves to suggesting that: a) further statistical analysis will be required in this direction and b) if the initial observations are statistically validated, then it might be claimed that the consistent presence of intensifiers in the constructions under scrutiny may list itself among their identifying, idiosyncratic properties.

as beautiful as she looked), marked word order (e.g. *up they come*), or the emphatic use of the auxiliaries (e.g. *I don't know, but I do know...*). Metaphor is also frequently used (e.g. *but Agnes Ralemberg was the queen... / if the eyes were the windows of the soul*). In terms of grammatical regularities in the surrounding context, it might be interesting to note that *believe me* shows a tendency to collocate with conditional clauses. In particular, in the examples provided, the conditional and the apodosis appear to provide evidence for the truth of the proposition implied or expressed by the Speaker. For example, in *If trout are not rising, or fishing conditions seem impossible, I hum a tune* the factual evidence of the Speaker's humming a tune supports the implied proposition 'Singing attracts fish'. Similarly, in *if the eyes are the windows of the soul, then Agnes's soul was as beautiful as she looked*, the conditional supports the proposition expressed in the following sentence, namely, that Agnes was honest, etc..

The speech act force of the construction is announcing and confirming new and important information that the assumed/imaginary Addressee might not have anticipated (at least not to the extent suggested by the force of the utterance), or predicted. To this end, the Speaker in the first example acknowledges the Addressee's potential doubt (note the use of *may* here), and then uses the *believe me* construction, which is preceded by the concession marker "*but*" and followed by the amended and now more strongly confirming proposition "*it is true*". Evidently, the use of the construction is an instance of the logical form:

- X may sound Y but [construction] X is true.

The second example functions in a similar way since it also confirms information. In this case, the preceding proposition concerning Agnes' looks is stated as true by the Speaker, who then invites the Addressee to accept a further truth, about Agnes' soul, on the strength of the first truth expressed. The *believe me* construction is apparently used to counter-argue the Addressee's potential objection to the syllogism that good looks guarantee good character. This construction, then, is an instance of the following form:

- X is true. [construction], if X is true, then Y is also true. Therefore, Y is true.

It transpires from the above that the *believe me* construction in a conditional context functions to strengthen the truth advocated by the Speaker as part of a syllogism.

The semantic and pragmatic regularities observed so far suggest that when using the construction in question, the Speaker attempts to pre-emptively avoid any potential challenge voiced by the Addressee, who is not actually present, though his identity as a discourse participant is set up by the implicit *you* of the imperative. Given that Speaker and Addressee roles prototypically characterize dialogic discourse, the imperative on the one hand contributes a dialogic perspective to an otherwise monologic text and, on the other, draws on a possible non-alignment of viewpoints.

3.2 Believe you me

The *believe you me* construction is generally claimed to be a more emphatic counterpart of *believe me* and is characterized by a formulaic inversion of the subject. In fact, it is an extra-grammatical idiom (Fillmore et al. 1988), which, albeit not so frequent in use, functions in a similar way with *believe me*.

Example 1

Genre: fiction, prose

Concordance:

<previous. I met this girl recently and I went over her house to hang out for a bit. Aloof the sites name abandoned brings up an angel of two bodies award anniversary added and falling in adulation right? I *believe* that is not far off, ***and believe you me***, I will tell you that. Many Western men have found their sweethearts among fantastic Russian and Ukrainian women. After all, it was easy to think of her as an animal while she wore an. Things may seem a bit off while I explore embedding the page here and figure out the best way to showcase this new aggregated content at the top of the blog. **next>**

Example 2

Genre: fiction, prose

Concordance:

<previous Simon is not impressed. He's in with a lowdown crowd. . . That Mulligan is a contaminated bloody double dyed ruffian by all accounts. His name stinks all over Dublin. . . I'll . . . write a letter one of these days to his mother or his aunt . . . that will open her eye as wide as a gate. I'll tickle his catastrophe, ***believe you me.*** Bloom glances around the carriage at Simon and the others and thinks: Noisy self-willed man. Full of his son. He is right. Something to hand on. If little Rudy had lived. See him grow up. Hear his voice in the house. Walking beside Molly in an Eton suit. My son. Me in his eyes. **next>**

Like *believe me,* it occurs parenthetically in a sentence, as in the first example, or sentence-finally, as in the second, and constitutes an independent clause, not affecting the truth of the proposition expressed in the rest of the sentence. Additionally, its collocation with connectors *and* and *but* (21 out of 35) is more frequent than that of *believe me*.

The first example illustrates a comparison between the lexical semantics of the verb *believe* and the semantics of the construction (e.g. I **believe** that is not far off, ***and believe you me***, I will tell you that). The evidential semantics of the verb is brought out by a that-clause as complement, similar to other mental state verbs, such as *think*. The meaning of the construction at hand, however, a) does not allow for a that-clause complement, b) is 'frozen' in terms of word order and syntax (extra-grammatical) and c) its pragmatics consists in confirming the content of the proposition expressed, 'safeguarding' it against any potential challenge by an Addressee. As a matter of fact, the speech act involved is that of dismissing incredulity and confirming the claim put forward by the Speaker. In the second example, the speech act of confirming the Speaker's claim is bordering that of promising/threatening, which may be regarded as an emphatic type of claim confirmation in any case. More importantly, the construction also serves as a way of introducing new or unexpected information that might not have been anticipated by an Addressee. Moreover, this construction also tends to collocate with emotive terms (e.g. *sweethearts, fantastic, contaminated, bloody, double-dyed ruffian, catastrophe*, etc.) and idiomatic expressions or comparatives and hyperbole (e.g. *that will open her*

eye as wide as a gate). The use of such expressions in the discourse context enhances speaker involvement and the expression of a subjective point of view.

3.3   Believe it or not

The final construction under investigation differs from the previous two in that it does not lexicalize the Speaker role. However, the imperative implicitly establishes both participant roles, i.e. those of Speaker and Addressee, as in the following examples:

Example 1

Genre: biography *Thank you for having me*

Concordance:

< previous I phoned Jack in Hull. Dad had been improving daily - he was eating well, in good spirits and coming up to his eightieth birthday. Except we were always unsure when exactly his birthday was - the 15th or the 18th of January - he'd never really known. (The funny thing is that Jack's father never knew when his birthday was either. *Believe it or not*, his was the 15th or the 18th of January too.) Always prone to bronchitis, he had a slight chestiness, but was well enough to have his birthday dinner out at a restaurant. **next >**

Example 2

Genre: periodicals and newspapers; electronic version of *Daily Telegram*

Concordance:

<previous In many cases a golf cart is included, and some packages add a free beer after the round! Prices do not include air fares. The most famous course at Hilton Head is Harbour Town, the venue of this week's Heritage Classic, which always follows the Masters at Augusta and attracts a large international field. Harbour Town, *believe it or not*, is a rather superb public course, with its 18th laid out alongside the Calibogue Sound, where a lighthouse forms the backdrop to the green - no excuse for missing this one. Green fees here are about $150 (£86 **next >**

This construction also exhibits a certain flexibility in relation to discourse positioning, i.e. sentence-initially, sentence-medially, etc., like *believe me* and *believe you me*, but it systematically collocates with emotive vocabulary (e.g. *superb*) or intensifiers (e.g. *rather*) less frequently than these constructions. Another feature that sets it somewhat apart from the others is its much more restricted collocational tendency towards connectors *but* and *and*, with only 7 concordances out of 35. Such differences, if checked against a greater sample of data, may be found to relate to the non-lexicalization of the Speaker and the possibility afforded to the potential Addressee to, in fact, not believe the Speaker's claim, which thereby lends some kind of objectivity and non-involvement in the claim made. All in all, the construction announces and confirms the content of the upcoming proposition, which is expected to raise feelings of doubt and incredulity on the part of the Addressee.

4. *Discussion and Results*

4.1 An overview of the common constructional properties identified

The analysis of the data suggests that all three constructions share some common properties in respect of semantics, pragmatics and syntax. The properties are summarized in the following table:

Constructional Properties	*Believe me*	*Believe you me*	*Believe it or not*
Imperative	√	√	√
Speech Act	Confirming	Confirming	Announcing/Confirming
Mental State	√	√	√
Evidentiality	√	√	---
Lexicalized Speaker	√	√	---
Lexicalized Addressee	---	√	---
Independent Clause	√	√	√
Intensifiers/evaluative terms in the context	√	√	√ (less frequently)
Challenge by an (assumed) Addressee	√	√	√
Marking unexpected /surprising information	√	√	√

Figure 11: A summary of the constructional properties

4.2 Statistical analysis of the findings

As already mentioned in section 2, the formation of the data pool (N=35) adhered to the assumptions of normality as derived from the Central Limit Theorem. The normality of the data, i.e. that the distribution of the sample means was normal was also confirmed by the K-S test conducted (asymp.sig (2-tailed)=0.00<0.05). In order to conduct the K-S test, however, the frequencies for each variable were first calculated along with their mean, standard deviation and minimum and maximum values (i.e. range). The findings are presented as follows:

Variable Examined	Mean (SD)	Range
Frequency (F)		
F: *Believe you me*	23.34 (3.933)	12-28
F: *Believe it or not*	14.40 (9.829)	6-27
F: *Believe me*	17.11 (3.104)	11-21
Variable Examined	Mean (SD)	Range
Connectors (C)		
C: *Believe you me*	11.46 (5.705)	0-16
C: *Believe it or not*	3.74 (1.597)	0-5
C: *Believe me*	7.29 (2.230)	1-9
Variable Examined	Mean (SD)	Range
Discourse positioning (D)		
D: *Believe you me*	15.74 (3.175)	4-18
D: *Believe it or not*	17.46 (4.828)	1-21
D: *Believe me*	16.17 (4.94)	3 - 20

Figure 12: A summary of the Means (SD) and Range (R) of all the variables examined

To examine the statistical significance of the frequency counts for each construction, the data were subjected to chi-square ($\chi2$) tests as shown below in figure 13. The test drew on the correlation of all the constructions with each and every variable examined (i.e. the whole variable set under examination which included intensifiers, collocational patterns, discourse positioning etc,.) and indicated that the data for the whole *believe* construction family are statistically significant (asymp. sig (2-tailed) = 0.00<0.05).[5]

Chi-Square Tests ($\chi2$) for each construction			
Believe me	Value	Df	asymp. sig (2-sided)
Pearson Chi-square	410,000[a]	25	.000
N of Valid Cases	82		
Believe it or not	Value	Df	asymp. sig (2-sided)
Pearson Chi-square	410,000[a]	25	.000
N of Valid Cases	82		
Believe you me	Value	Df	asymp. sig (2-sided)
Pearson Chi-square	410,000[a]	25	.000
N of Valid Cases	82		

Figure 13: A summary of the Chi-Square ($\chi2$) test results for each construction.

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[5] For more information on the variables examined, see sections 2.1-2.4 that analyse the variables taken into consideration during the manual tagging stage.

After having established the statistical significance of the overall frequency set across all three constructions, we proceeded to examining the statistical significance for specific frequency sets. More specifically, we examined the frequencies of connectors (and their subcategories, e.g. collocating with 'but', 'and' etc.) for each construction. The data were subjected to chi-square (χ2) tests but this time not only in relation to each construction but also comparatively across all three. The aim was to compare the collocational patterns of the constructions with the different connectors traced in the corpus. To this end, the chi-square (χ2) test was carried out on each possible paired combination of construction and connector frequency set. In total, there were 9 chi-square (χ2) tests conducted for every possible combination. The results of the test indicated that the correlation between the connector frequency set and each construction was statistically significant (asymp. sig (2-sided) = 0.00<0.05). The table that follows (figure 14) presents an overall analysis (summary of the χ2 test) of the frequencies of each construction with the connectors identified.

Believe you me Frequencies (F) of Connectors (C) – Overall Analysis					
Summary of the connectors for ***believe you me***:		'For' 1	'But' 5	'And' 16	Total
Summary of all the connectors across the constructions:	a) Collocating with '**and**'	0	0	21	21
	b) Collocating with '**but**'	0	13	0	13
	c) Collocating with '**for**'	0	0	0	0
		0	13	21	34
Chi-Square Results					
		Value	Df		asymp. sig (2-sided)
Pearson Chi-square		70.000[a]	4		.000
N of valid cases		35			
Believe it or not Frequencies (F) of Connectors (C) – Overall Analysis					
Summary of the connectors for ***believe it or not***:		'For' 1	'But' 2	'And' 5	Total
Summary of all the connectors across the constructions:	a) Collocating with '**and**'	0	0	21	21
	b) Collocating with '**but**'	0	13	0	13
	c) Collocating with '**for**'	0	0	0	0
		0	13	21	34
Chi-Square Results					
		Value	Df		asymp. sig (2-sided)

Pearson Chi-square		70,000[a]	4	.000
N of valid cases		35		
Believe me Frequencies (F) of Connectors (C) – Overall Analysis				
Summary of the connectors for ***believe me:***		'For' 1	'But' 5	'And' 9	Total

Summary of all the connectors across the constructions:	Collocating with '**and**'	0	0	21	21
	Collocating with '**but**'	0	13	0	13
	Collocating with '**for**'	1	0	0	1
		1	13	21	35

Chi-Square Results				
		Value	Df	asymp. sig (2-sided)
Pearson Chi-square		70,000[a]	4	.000

Figure 14: A summary of the Chi-Square (χ2) test results for the frequencies of connectors across the constructions

The final step in the statistical analysis of the findings was to examine the frequencies of the constructions in relation to the position they occupied in discourse. As can be seen from the table that follows (figure 15), the chi-square (χ2) test indicated that the relationship between discourse position and each construction was once more statistically significant (asymp. sig (2-sided) =0.00<0.05). As was the case with the connectors, for comparison purposes, the chi-square (χ2) test was conducted by juxtaposing the discourse positioning frequency set (e.g. sentence-initial/sentence-final and parenthetical position) for a different pair of constructions each time (9 pairs in total). Then we conducted a chi-square test (χ2 test) investigating the findings across the whole construction family. The results exhibited statistical significance (asymp. sig (2-sided) = 0.00<0.05) for all three constructions but they did not indicate any marked difference(s) among the discourse-position preferences they exhibit. This may be indicative of the flexibility that the constructions themselves exhibit in discourse. Therefore, as regards discourse positioning, a future goal would be to examine more parameters that might yield insightful results. For instance, to what extent can discourse positioning in these (or similar) constructions relate to discourse unit delimitation and by extension discourse function? The table that follows (figure 15) presents the summary of the χ2 test for the statistically significant correlation between each construction and its discourse positioning preferences.

Believe you me Frequencies (F) of Discourse Positioning (D) – Overall Analysis					
Summary of the discourse positioning across the constructions:		**Sentence-final** 8	**Sentence-initial** 37	**Parenthetical** 59	Total
Summary of the discourse positioning for **believe you me**:	Parenthetical	0	0	21	20
	Sentence-initial	0	11	0	11
	Sentence-Final	3	0	0	0
		3	11	21	35
Chi-Square Results					
			Value	Df	asymp. sig (2-sided)
Pearson Chi-square			70.000[a]	4	.000
N of valid cases			35		

Believe it or not Frequencies (F) of Discourse Positioning (D) –Overall Analysis					
Summary of the discourse positioning across the constructions:		**Sentence-final** 8	**Sentence-initial** 37	**Parenthetical** 59	Total
Summary of the discourse positioning for **believe it or not**:	Parenthetical	0	0	21	21
	Sentence-initial	0	13	0	23
	Sentence-Final	1	0	0	1
		1	13	21	35
Chi-Square Results					
			Value	Df	asymp. sig (2-sided)
Pearson Chi-square			70.000[a]	4	.000
N of valid cases			35		

Believe me Frequencies (F) of Discourse Positioning (D)– Overall Analysis					
Summary of the discourse positioning across the constructions:		**Sentence-final** 8	**Sentence-initial** 37	**Parenthetical** 59	Total
Summary of the discourse positioning for **believe me**:	Parenthetical	0	0	18	18
	Sentence-initial	0	13	0	13
	Sentence-Final	4	0	0	1
		4	13	18	35
Chi-Square Results					
			Value	Df	asymp. sig (2-sided)
Pearson Chi-square			70.000[a]	4	.000
N of valid cases			35		

Figure 15: A summary of the Chi-Square (χ2) test results for the frequencies of discourse position across all the constructions

Finally, in order to measure the internal consistency (i.e. reliability) of the data and whether they form a reliable scale, Cronbach's alpha (α) was used as a means of measuring the strength of its consistency. [6] The resulting (α) coefficient of reliability (range 0 – 1) provides an overall assessment of a measure's reliability. In essence, this means that if all of the scale items involved in a research are entirely independent from one another (i.e., are not correlated or share no covariance), then α =0. If, however, all of the involved items have high covariance, then α will approach 1 as the number of items in the scale approaches infinity. In other words, the higher the α coefficient, the more the items have shared covariance and serve to measure reliably the same underlying concept. Therefore, in order to ensure the reliability of all the items involved in our research, we subjected the data to Cronbach's alpha (α). The results of the Cronbach's alpha (α) indicated that there is indeed increased reliability since the α for the overall frequencies of the constructions, as indicated in figure 16 below, is 0.772. For the frequency set of the connectors with all the constructions the α is 0.687 (increased reliability) and for the frequency set of discourse positioning the *α is 0.361*. The last somewhat less strong reliability probably indicates that, as already mentioned, although the parameter of discourse positioning was correctly taken into consideration, the flexibility that the constructions exhibit merits further consideration. This consideration would probably go beyond the analysis of discourse position as such and extend to discourse function and discourse unit delimitation.

Reliability Statistics Cronbach's Alpha (α)		
(F) Frequencies for all three constructions		
Cronbach's Alpha *(α)* 0.772	N of items*	
		4
(C) Connectors across all three constructions		
Cronbach's Alpha *(α)* 0.687		4
(D) Discourse positioning across all three constructions		
Cronbach's Alpha *(α)* 0.361		4
*N=4 because each frequency set (i.e. i) overall frequency set, ii) connector frequency set, iii) discourse position frequency set) was always measured against all three constructions.		

Figure 16: Cronbach's alpha (*α*) for the frequencies involved in the statistical measurement tests

The constructions under investigation appear to have an intensifying function which is consistent with the expression of the Speaker's subjective point of view, expressed pre-emptively in order to avoid any potential challenge by an (assumed) Addressee. This function is further reinforced by the presence of

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[6] Calculating Cronbach's alpha (α) has become common practice in research papers as it is typically employed as an internal consistency reliability estimator for composite measures containing multiple components. As such, it is widely recommended as a necessary 'step' in statistical analysis since it can allow for safer conclusions as to whether the scores are reliable or not (Ritter 2010; Osburn 2000; Thompson 1992).

evaluative contextual features and intensifiers, such as emotive terms and grammatical constructions (e.g. comparatives, marked word order, etc.)

This intensifying function, common across the constructions investigated, may not be unrelated to their outer syntax and semantics in that they constitute independent clauses that do not affect the truth of the propositions expressed. Moreover, the variety of their position in discourse, initially, medially or at the end of the containing sentence, along with their confirming-commentary pragmatic force, suggests that they have developed (or may currently be in the process of developing) a type of function similar to that of *a discourse marker*. According to the relevant literature (Schiffrin 1987; Fraser 1999; De Klerk 2005; Walrod 2006), discourse markers signal interactional boundaries between speech exchanges, provide utterance interpretive cues (signals) for the sequential, discourse relationships, and inform the relation between the Speaker, the Addressee, and the planning of discourse. As such, Schiffrin (ibid 1987) notes that they do not provide "referential" information, but rather they inform on the speaker's mental states. Fraser (1999) also claims that their core meaning is *procedural*, not conceptual, and any attempt for their deeper interpretation is always "negotiated" by the context, both linguistically and conceptually. So, although "a discourse marker cannot make a sentence "ungrammatical and/or intelligible", in the context of an on-going conversation the omission of discourse markers "removes a powerful clue about what commitment the speaker makes regarding the relationship between the current utterance and the preceding one" (Fraser 1999: 22).

In view of the above, these constructions seem to have acquired the status of discourse markers based on the mental state verb *believe*, whose lexical semantics, however, has shifted from cognitive to dispositional, already available to the category of mental state verbs, and has subsequently been bleached. In other words, the constructions have inherited the lexical meaning of the mental state verb involved (i.e. the verb *believe* in this case) but they have also acquired a new, intensifying, dispositional, constructional meaning that is significant discoursally in the non-referential, *procedural* ways described above. Moreover, they establish a relationship between the Speaker and an assumed Addressee by a non-alignment of views. As such, the constructions appear to be operating as multi-position discourse markers signalling new, unexpected information that is assumed to be counter to an Addressee's expectation(s).

4.4 The dialogic function of *believe* constructions

The fact that the *believe* constructions incorporate the Addressee's expectations and point of view allows for the claim that they contribute a dialogic perspective to discourse. More specifically, we argue that these constructions function dialogically in the sense of perspectivising preceding or following propositions to imaginary/assumed interlocutors.

Moreover, following Linell's line of thinking (1998, 2003, 2009), we claim that the constructions at hand are dialogic in that they follow a conversational structure (i.e. participant roles of speaker and addressee, distinct turns, etc.) that is imposed on the context they find themselves in. The two basic principles of Linell's treatment of dialogism as a paradigm are that: a) every communicative act is interdependent with certain contextual aspects and it manifests *responsive* and *anticipatory* features in relation to previous or

following utterances and b) meaning is determined neither a priori nor outside context; rather it is constructed *in dialogue*. In line with these principles, our analysis has shown that the *believe* constructions establish a dialogue between discourse participants, in which the Speaker anticipates possible objections or incredulity and responds to them by emphasizing the proposition expressed. Further confirmation of our proposal derives from Traugott's working definition of 'dialogism':

"Dialogic texts are "not homogeneous in orientation" but multiply perspectivised either within or across turns", promoting the negotiation of non-aligned perspectives "to others or to imaginary interlocutors". Monologic(al) texts, on the other hand, are typically associated with an 'authoritative voice' discourse that is not characterised by encouragement or negotiation of meaning or viewpoint." (Traugott 2008:143).

In essence, this is what the corpus-attested data seem to suggest, as the constructions are used with a view to negotiating the meaning between two differing perspectives/voices, namely that of the Speaker and that of the Addressee. The negotiation of meaning is manifested in the use of these constructions in texts that are monologic. Their dialogic contribution affects our appraisal of an otherwise monologic context, thereby establishing a form of other-oriented, challenging perspectivisation in discourse, which is presented only to be rebutted pre-emptively by the Speaker. Moreover, these constructions seem to challenge the view of the monologicity of expository discourse in that they present a proposition as a joint enterprise between interlocutors, in spite of the absence of what is conventionally (and to a great extent solely) understood to be a dialogue.

5. Conclusions and Implications

The present paper has attempted to show that a lexically-related family of constructions exhibits constructional properties at the levels of syntax, semantics, pragmatics and discourse function. The constructions feature the mental state verb *believe* in the imperative, inherit the semantics of the verb and the pragmatics of the imperative, but are otherwise used to mark dialogic perspectivisation and unexpected information. More specifically, the *believe* constructions were shown to be variously positioned, syntactically independent, and non-truth-conditional discourse markers with an intensifying function. They also express the Speaker's point of view in an emphatic and confirming tone, 'shielding' the content of upcoming and/or preceding propositions against potential challenge by an assumed Addressee. Therefore, featuring the imperative, which prototypically establishes the participant role of the Addressee, these constructions impose a *multiple perspectivisation*, hence a *dialogic attitude*, on the text in which they occur.

Moreover, the analysis of the *believe* family of constructions as intensifying discourse markers provides further evidence that CxG, as a linguistic model, is capable of addressing conventional aspects of discourse function and dialogic patterning.

The present study seems to pave the way for further research in the field of supra-clause level constructional analysis and a broader discussion of discourse markers in a constructional framework. Moreover, the logical form systematically associated with these constructions raises the issue of text

segmentation. Another task awaiting completion, then, is to explore how these constructions, functioning as discourse markers, create sequential dependencies and regularities, or even delimit discourse units (Geka et al., 2017). A further point of investigation concerns a comparison of the present findings, which derive from written, expository discourse, with those emerging from conversational data (Geka, in preparation). In this case, the comparison of the statistical significance of the frequencies of these constructions in expository and conversational data is expected to shed some light on the validity of the typically binary distinction between the concepts of monologicity and dialogicity.

Acknowledgements

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