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At the Crossroads of Cognition and Emotion: *Wonder*, a Multifunctional and Polysemous Marker

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Introduction

Language provides speakers with ample opportunities both to express different, though related, ideas with the same marker and to construct verb complements in alternate ways. *Wonder*, for example, belongs to the broad category of cognition verbs, which denote processes that come within the perspective of humans. As a lexical verb, its meanings are quite varied as it appears in sentences expressing either an affective stance or a mental process. *Wonder* licenses a wide range of complements, mainly preposition phrases (e.g. *about*-PP, *at*-PP, as in [1-2]) and various types of finite clauses (e.g. *if*-clauses, WH-clauses, *that*-clauses, as in [3-5]). Moreover, *wonder* can also be used as a discourse marker, in parenthetical constructions or in exclamatory sentences, for instance.

- (1) Scarlet went to look through the glass doors, **wondering** about the relationship between distance and responsibility. (BNC)¹
- (2) I knew the joy of the world and **wondered** at it like a child. (BNC)
- (3) After a moment's hesitation, Tess stepped in. Joan Durbeyfield, watching, **wondered** for the first time if she had been right in encouraging Tess to go. (BNC)
- (4) Left alone in her office, Claudia signed letters to her supplies, **wondering** what Dana was doing and, more importantly, where she was. (BNC)
- (5) Lissa glared at him. 'Your arrogance is so potent, I **wonder** that you don't bottle it.' Rourke looked at her thoughtfully. (BNC)

Few studies have been devoted to the verb *wonder* and the fact that it can be used as either a cognitive or emotive verb. Why and how has *wonder* come to be such a polysemous and multifunctional verbal unit? The present study addresses this multifaceted question, and aims to present a thorough analysis of the different types of sentences in which *wonder* is used, with various meanings and for different discursive purposes. It sets out to accomplish three main goals: first, to establish whether each syntactic construction or specific type of complementation matches with one particular meaning – cognition or emotion; second, to determine the discursive uses of *wonder*, both in its cognitive and emotive senses; third, to shed light on the parameters and factors that allow for a unified perspective on the verb *wonder*. To achieve this, a qualitative, corpus-based analysis is conducted, which helps to understand to what extent different grammatical codings embody specific ways of viewing the scene and to show that the syntactic structures are representative of the meaning conveyed both by the licensing verb and the sentence as a whole.

¹ All bold, italics and underlining marks are added for emphasis.

The definitions of the concepts involved – cognition and emotion – and verbal typologies prove particularly relevant in explaining the different, though related, senses and discursive functions of *wonder*. They are addressed in Section 1, which is also devoted to the definition of *wonder* and the respective characteristics of cognitive and emotive verbs. Section 2 presents the methodology employed to collect data for the present study, as well as a corpus-based typology of the complements of *wonder*. The two sections that follow focus on cognitive *wonder* and emotive *wonder*, and their respective prototypical constructions, while underlining their differing discursive functions. Finally, a synthesis of all the meanings and uses of *wonder* is proposed, bringing to light the fact that *wonder* is a telling example of the continuum existing between the intellectual, cognitive pole and the subjective, emotive pole.

1. The main characteristics of *wonder*, an instance of both cognitive and emotive processes

Cognition seems to be opposed to emotion, as is shown by the *OED*'s definition of the term 'cognition': "The action or faculty of knowing taken in its widest sense, including sensation, perception, conception, etc., as distinguished from feeling and volition; also, more specifically, the action of cognizing an object in perception proper." However, the verb *wonder* has two main widely-attested senses, which are closely related, and it could be thought that the cognitive sense originates in the emotive sense:

- 1) *Wonder* was first recorded in Old English (*wundrian*), circa 888, with the sense of "to feel or be affected with wonder; to be struck with astonishment, to marvel" (*OED*).²
- 2) *Wonder* came to be used with its second sense late in the thirteenth century (1297): "to ask oneself in wonderment; to feel doubt or curiosity; to be desirous to know or learn" (*OED*).

Wonder appears to be right from the start a member of two subcategories of mental verbs: emotive verbs and cognitive verbs.³ It is classified as a cognitive verb in a number of grammars: see Biber *et al.* (1999), Dirven (1989), Dixon ([1991] 1992), Halliday & Matthiessen ([1985] 2014), Huddleston & Pullum (2002). Other linguists, such as Levin (1993), categorise it as an emotive verb only. As a matter of fact, few reference books classify *wonder* as both a cognitive and emotive verb: see Herbst (2004), Quirk *et al.* (1985), Sinclair (1996). Indeed, *wonder* is more often considered as a lexical marker of cognition than of emotion, although emotion was its first original meaning. Levin (1993: 192-193) subclassifies *wonder* in the "*Marvel* verbs" – a subset of what she calls "Psych-verbs", that is verbs of psychological state. She considers that *Marvel* verbs are intransitive verbs, taking the experiencer as subject and the stimulus or object of emotion in a preposition phrase. In Sinclair's grammar, emotive *wonder* is part of the "REJOICE group" (1996: 167), which includes verbs denoting a particular feeling in reaction to something.

Most linguists are in agreement over the semantic and syntactic features shared by mental verbs as a whole. These are generally regarded as "private verbs" (Palmer, [1974] 1988: 72), given that they refer to

² It should also be noted that the noun *wonder* was attested as early as 700 (*wundor*: "marvelous thing, miracle, object of astonishment", *OnED*).

³ 'Mental verbs' is one of the various labels that can be found in the literature, along with 'Psych-verbs', 'cognitive verbs', for instance.

processes which only the primary participant, namely the experiencer, is aware of. They thus express a subjective relationship between the experiencer and a cognitive object, which is usually viewed as a stimulus, and as such, they show an affectedness component. In most cases (as with *wonder*), the subject grammatically codes the experiencer, which can also be an agent, whereas the object realises the stimulus. Moreover, mental verbs are usually divided into dynamic and stative verbs (Huddleston & Pullum 2002; Quirk *et al.* 1985): the latter express an intellectual state (e.g. *know*, *rejoice*) while the former denote a mental activity (e.g. *ponder*, *enjoy*).

However, authors have differing opinions on the notions mental verbs express. More precisely, the term 'mental' does not refer to the same concept for all linguists. In the large semantic category of "*mental verbs*", Biber *et al.* (1999) include verbs of perception, cognition, desire, emotion and intention. Huddleston & Pullum (2002) put forward a more restrictive category of "*verbs of cognition, emotion, and attitude*" – which are all stative verbs; this is also the case of Dirven (1989), who deals with "*mental state verbs*". As for Halliday & Matthiessen ([1985] 2014), they devote a large section of their grammar to mental processes, which they categorise into three subdomains of experience: *seeing*, *feeling* and *thinking*. This tripartite division mirrors the classification they adopt in their 1999 work, in which the domain of "sensing" is subdivided into *emoting*, *thinking*, and *perceiving*. In the 2014 edition of *Halliday's Introduction to Functional Grammar*, the general class of "mental clauses" includes four different subtypes of processes, which are related to the categories of the sensing domain: "*perceptive*" (*seeing*); "*cognitive*" (*thinking*); "*desiderative*"; and "*emotive*" (*feeling*). Halliday & Matthiessen (1999: 143-144) sum up their conception of the domain of sensing as follows:

[...] it is possible to bring out certain salient features of the system of sensing as suggested in Figure 4-6. Emotion seems to be closer to quality-ascription than to a prototypical process; it arises from, but does not create, projections. In contrast, perception is essentially closer to behavioural processes. Cognition and desideration are different from both in that they can project (i.e., bring the content of consciousness into existence), can stand for modalities, and are not in general like either behaviour or ascription; they may be interpreted as the most central classes of sensing. Cognition is arguably closer to perception than desideration — there are certain cross-overs like *see* in the sense of 'understand' alongside its basic sense of visual perception, and both can be construed in an active mode as processes of behaviour.

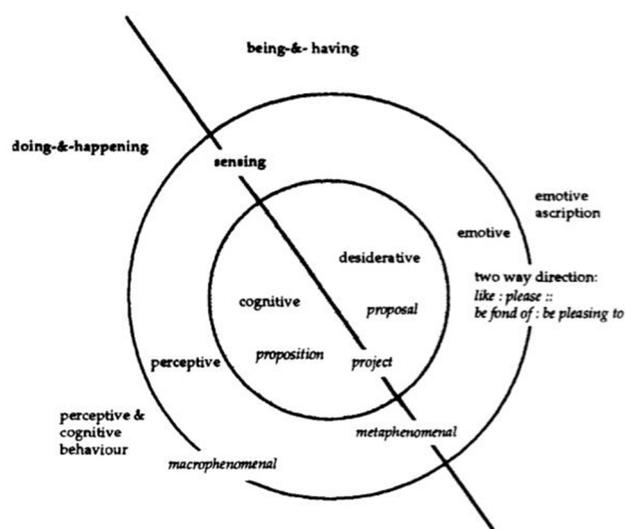


Fig. 4-6: The orientations of the different types of sensing

Figure 1. *Types of sensing* from Halliday & Matthiessen (1999: 144, Figure 4-6)

The authors establish a clear-cut dichotomy in the domain of sensing, separating perception and cognition from desideration and emotion. They make a case for treating these four types distinctly, given that they differ with respect to “phenomenality, directionality, gradability, potentiality and ability to serve as metaphors of modality” ([1985] 2014 : 256-258), while underlining that “the four different types of sensing shade into one another”.⁴ Although in their two works, *wonder* is classified as a cognitive verb only, of the ‘Like’ type, it nevertheless shows characteristics typical of emotive verbs.

Where emotive and cognitive verbs relate to the same domain, namely sensing, they differ with respect to semantic, grammatical and discursive behaviours. Emotive verbs, such as *marvel* or *like*, express some affective reaction, whereas cognitive verbs, such as *think* or *doubt*, express a mental action. Emotive verbs are thus rarely agentive verbs,⁵ while cognitive verbs can be either agentive or non-agentive, or even both.⁶ Moreover, contrary to cognitive verbs, emotive verbs are lexically and grammatically gradable; they fit in a scale of degrees of affect (e.g. *love* showing a higher degree of affection than *like*) and can be graded by a circumstance of degree (e.g. *I hate snakes more than rats*). In addition, cognition and emotion can be distinguished on the basis of the opposition between projection and pre-projection (1999: 137-144). Emotion is activated by pre-existing facts, which are pre-projected, while cognition creates worlds of ideas. Emotive verbs thus entail that the proposition denoted by their complement is true, while cognitive verbs do not, since they project propositions into existence, namely ideas about information that may or not be valid. Therefore, some cognitive processes can be construed as behaviours, namely as activities (e.g. *ponder*),⁷ thus

⁴ See Halliday & Matthiessen (1999: 137-144) for a complete development on the set of properties that differentiate perception, cognition, desideration and emotion.

⁵ The combination of *like* with *would* nevertheless denotes some desire, thus revealing at least the experiencer’s intentionality.

⁶ See, for instance, *consider*, which can be situated along a cline from non-agentivity (e.g. *I consider her a model of feminine beauty and virtue [...]*. (BNC)) to agentivity (e.g. *I’m considering letting him do a year with one of the best dressage riders.* (COCA)).

⁷ When the verb denotes an agentive process, it belongs to a “behavioural clause” (Halliday & Matthiessen [1985] 2014).

functioning on an agentive mode, whereas emotive processes (e.g. *rejoice*) will never show this alternative construal. Indeed, emotive verbs can only express a retrospective stance or perspective, emotion coming under axiologic modality (VALUE); on the contrary, cognitive verbs are a matter of inspective perspective, since cognition comes under epistemic modality (KNOWLEDGE) (Pottier, 2001). Emotive processes then lie towards the modulation pole, as they express the speaker's stance or attitude towards what s/he says, while cognitive processes lie towards the modalisation pole, as they express the speaker's assessment of the validity of a proposition (Halliday & Matthiessen, [1985] 2014: 177-178).

Given all these observations, it may sound surprising that *wonder* can have two different meanings related to two reversely-orientated types of sensing. As a consequence, which elements can help to determine which precise sense of *wonder* is involved in one particular sentence? The answer might reside, as usual, in the context and, more particularly, in the different types of complementation licensed by *wonder*.

2. Data collection procedure and typology of the complements of *wonder*

To conduct this research, the British National Corpus (BNC) was examined in search of occurrences of *wonder* in different syntactic constructions. The Corpus of Contemporary American English (COCA) was also occasionally consulted, in a comparative perspective.

The first objective was to identify the types of complements of *wonder*, and to establish whether each type of complement aligns perfectly with one particular meaning of *wonder*, emotive or cognitive. The second objective was to determine if attested sentences correspond to the types of complements already identified in some reference books. For example, Herbst (2004: 951) lists the following complements for:

- emotive *wonder* (i.e. "be surprised or puzzled by [something]"): *at* NP, *about* NP / V-ING, *about* WH-clause, *about* WH- to-infinitive clause, (*that*-)clause;
- cognitive *wonder* (i.e. "think about [something], usually because it is unknown or uncertain"): intransitive use, *about* NP / V-ING, *about* WH-clause, *about* WH- to-infinitive clause, WH-clause, IF-clause, WH- to-infinitive clause, quote sentence (e.g. *She wondered, are we back where we started?*).

Sinclair's (1996) typology diverges from Herbst's on one major point: *about*-PPs (whatever follows the preposition) are identified as complements of *wonder* when the latter belongs in the "THINK" group, but not in the "REJOICE" group.

The BNC was thus searched along successive lines, as for practical reasons, it was not possible to study the impressive total of 11,019 occurrences for the verb *wonder*.⁸ Besides, a quantitative analysis was not the primary motivation underlying this study. First, different strings were used in the interface to identify the types and occurrences of clausal complements in declarative sentences: e.g. '[wonder].[v*] if', '[wonder].[v*] whether', '[wonder].[v*] how', which read as 'all forms of the verb *wonder* + conjunction IF / conjunction WHETHER / adverb HOW'. Second, a similar search was carried out to identify the types of

⁸ 72,358 tokens were obtained in the COCA.

prepositional complements: '[wonder].[v*]_i*', which reads as 'all forms of the verb *wonder* + any preposition'. Third, the use of *wonder* with quotes was searched, using the following strings: e.g. '[wonder].[v*] ,', '[wonder].[v*] .', which read as 'all forms of the verb *wonder* + comma / full stop'.

Then the lists of findings were carefully analysed and several types of complements and of uses of *wonder* were identified (see Table 1 for detailed results page 19⁹):

- the intransitive use of *wonder*, both in its cognitive and emotive senses;
- the intransitive parenthetical use of cognitive *wonder* with quotes, either in interpolated position or not;¹⁰
- cognitive *wonder* licensing IF-clauses, WH-clauses and PPs in *about*, *into*, *on*, *over* and *as to*; more rarely, NPs;
- emotive *wonder* licensing THAT- or \emptyset -clauses, HOW-clauses and *at*-PPs; no *about*-PP could be found in the *BNC*.

3. Cognitive wonder: A lexical marker of reporting and a discursive marker of quoting

The results presented in Table 1 show conclusively that cognitive *wonder* (henceforth *c-wonder*) is far more frequent in contemporary English than emotive *wonder* (henceforth *e-wonder*). In the *BNC*, its occurrences represent 93.42% of the total occurrences of the verb *wonder*. It also appears clearly that, contrary to *e-wonder*, the most frequent type of complementation of *c-wonder* is a clausal complement (81.34% of *c-wonder*), followed by its intransitive use – with or without a quote – (15.27%), while it licenses a PP in only 2.88% of *c-wonder* occurrences.

WH-clauses are the most frequent complements of *c-wonder* (55.36%), *what*-, *whether*- and *how*-clauses being the most numerous. Some of them can be elliptical ([8]) while others are WH-*to* infinitivals ([9]). While *whether*-clauses ([7]), along with *if*-clauses ([10]), correspond to subordinate closed interrogatives expressing polar ([7]) or alternative questions (as in [10], which contains an *or*-coordination), the other WH-clauses correspond to subordinate open interrogatives expressing variable questions ([6, 8-9]).¹¹ Where finite interrogatives express information questions – that is, they seek to elicit information – infinitival interrogatives ([9]) denote direction or deliberative questions, namely questions whose answer has the illocutionary force of directives.¹²

⁹ The figures and percentages provided in Table 1 show tendencies only in the variety (British English) and corpus selected for this study.

¹⁰ Biber *et al.* (1999) consider that the quoted clause (whether in quotation marks or not) is a nominal clausal complement of the quoting verb, whatever its position in the sentence. On the contrary, Creissels (2006) excludes such clauses from the category of verbal complements, and Halliday & Matthiessen ([1985] 2014) postulate that such sentences belong in paratactic constructions. I follow both Creissels and Halliday & Matthiessen, considering that the verb is in intransitive use.

¹¹ It would be interesting to study the difference between *whether*-clauses and *if*-clauses, which are sometimes said to be interchangeable. However, *if*-clauses are excluded in some contexts, while some factors, either syntactic or pragmatic, favour one or the other in constructions that permit both. See, for instance, Lacassain-Lagoin (2014) for a development of *if*-interrogative complements of non-agentive perception verbs.

¹² It should be noted that in subordinate interrogatives, the illocutionary force is weakened.

- (6) They saw this brash bloke coming to Yorkshire and probably **wondered** what was happening. (BNC)
- (7) Sometimes, when Henry was trying to write a letter of apology to the analyst for having quit, and **wondering** whether the man was all right – and when Finch was pondering the need to do the same thing – they would wander off together and watch Cecil coaching the people he referred to as ‘the speaking parts’. (BNC)
- (8) The set of his mouth suggested that he was angry, and Lindsey felt the dull colour rising in her cheeks as she **wondered** why. Then it suddenly hit her that, of course, he didn’t approve of relationships. (BNC)
- (9) I reminded him that it was against the law for him to have possessed a wild animal in the first place, and he shrugged. So Pula arrived. We **wondered** what to do with him. Should we release him? (BNC)
- (10) I called again, and again he whinnied. I went over to him **wondering** if something was wrong or if he was just being lazy. (BNC)

The second type of complements of *c-wonder* is a prepositional phrase, more precisely an *about*-PP in almost all the cases ([11-13]). The preposition *about* can be complemented by an NP ([11]), an -ING gerund-clause ([12]), or a WH-clause ([13]). Sentences such as (13), in which *about* is followed by a *why*-interrogative clause, clearly show that *about*-PPs are complements of *c-wonder*, and not of *e-wonder*.

- (11) As I looked out of the window into the black emptiness, I **wondered** about the great mystery of death, and thought of Helen Burns, who was so sure her spirit would go to heaven. (BNC)
- (12) She let the silence go on, and **wondered** about just getting up and leaving right then without one word, not one word of the torrent foaming in her guts. (BNC)
- (13) We were both disappointed but Nellie said we could wait until the next time. I also **wondered** about why we never saw Nellie’s Dad and eventually I asked her about him. (BNC)

C-wonder can also license, though infrequently, an NP, most often anaphoric as in (14-15); only 53 such occurrences were found in the BNC, with anaphoric *that/this* (a pronoun in [14]), the definite article *the* (4 occurrences), a relative pronoun (e.g. *what*, object of *wondering* in [15] – representing 28 occurrences), the interrogative pronoun *what* as object of *wonder* (in 2 occurrences only) or an indefinite NP (e.g. *something*, in 4 occurrences).

- (14) ‘I guarantee it. He wants to know why you’re still here.’ ‘I’m beginning to **wonder** that myself!’ she exclaimed weakly. (BNC)
- (15) He wondered how much the farm was worth. Rose, watching him across the shining mahogany table, guessed what he **was wondering**. (BNC)

Although the mental activity of wondering cannot be processed without any cognitive object to reflect upon (in a PP containing an NP referring to an entity) or any idea to be created (in all the other cases), *wonder* can be used intransitively, that is, without any syntactic complement. However, the object or idea can most often be recovered in or inferred from the co-text, as in (16-18). On the contrary, it is left implicit in (19): what is focused is the mental activity the experiencer is engaged in, rather than the idea s/he creates or the object s/he exercises his mental faculties on.

- (16) ‘You’ve had a wasted journey. I’m not pregnant after all.’ He nodded. ‘I see. I **wondered**.’ ‘*About what?*’ ‘*Elise rang me to say you were crying your eyes out every night.*’ (BNC)

- (17) 'I can think of no way in which a man in his apparent condition could have pulled off this murder.' 'I'll see to it, sir. I **was just wondering**.' 'What?' 'The Cambridge connection and all that.' (BNC)
- (18) She knew that she would not have lived happily ever after with Peter Datchett. No one lives happily ever after. Very likely there would have been a further coolness or misunderstanding and they would have parted. The point was that one would never know, now. And so **would wonder**, and go on **wondering**. One would construct *alternative scenarios*, and brood about them. (BNC)
- (19) He was standing now on the steel floor, the corner of the first container some twenty feet away. Delaney sank down and waited, all the while listening to his breathing, and **wondering**. The power of the mind – of the terrified mind – over the body, he mused. (BNC)
- (19') Delaney sank down and waited, all the while listening to his breathing, and **wondering**. The power of the mind – of the terrified mind – over the body, he mused. After a while, *he stopped wondering*.

In sentences (6-19), *wonder* denotes an agentive thinking activity which can be described as an initial stage in cognitive processes, and equates with verbs such as *brood* or *ponder*. The experiencer's agentivity is sometimes underlined by the use of BE + -ING ([17]), which is frequently associated with dynamic mental verbs. For example, Biber *et al.* (1999: 472) state that such verbs occur frequently with this aspect ("more than ten times per million words"). The highly compatible association of BE + -ING with dynamic mental verbs stems from the fact that they denote an "acquisition situation", which leads Huddleston and Pullum (2002: 169) to postulate that BE + -ING is the default aspect of these verbs. The inherent or primary participant of the wondering process, namely the experiencer, controls the mental activity denoted by the verb, and as such, s/he can decide to put an end to it. Therefore, a paraphrase such as (19') is totally appropriate, in which the verb *stop* indicates that the cognitive activity is put an end to, while it would be impossible with stative *e-wonder*, whose experiencer is typically non-agentive.

In addition, *c-wonder* functions as a discourse marker: either it indicates the cognitive object of the thinking activity (which is then realised under the form of an *about*-PP containing an NP), or it reports an idea, which is expressed by a subordinate clause – except in its intransitive use, as mentioned above. An idea is a sheer product of the mind; contrary to a fact, it is not based on an extralinguistic event which has been grammatically processed as a meaning. Clauses that grammatically code ideas are compatible with cognitive verbs only, as their propositional content is engendered by a mental activity. The cognitive verbs that favour a clausal complement expressing an idea usually refer to the inferential and conclusive stages of cognitive processes. *C-wonder* can thus evoke both initial and evaluative/inferential stages of cognitive processes, as it can allude at the same time to the triggering of the thinking activity and to the idea generated by the process. It appears clearly that the proposition denoted by the subordinate clause does not amount to a fact, but to an idea. Indeed, the clausal complement cannot be glossed by *the fact that...* ([10']), nor can it be replaced by an abstract NP or nominalisation ([10'']). On the contrary, it can be paraphrased by a quoted clause ([6']) or replaced by *so* ([10''']).

- (6') They [...] **wondered**: "What is happening?".
- (10') * I went over to him **wondering** the fact that something was wrong or the fact that he was just being lazy.
- (10'') * I went over to him **wondering** his laziness.

(10'') I went over to him **wondering** if something was wrong or if he was just being lazy; and my brother **wondered** so.

These characteristics are particularly evident when *c-wonder* is used in a discursive quoting function. Indeed, *c-wonder* is part of the restricted set of mental verbs which are regularly used in quoting function (along with, for instance, *think*, *reflect*). This clearly shows when the quoted clause is an interrogative one, as in most cases: the auxiliary-subject inversion is then often accompanied by a question mark ([20]), although the latter is not compulsory ([21]).

- (20) The russet and gold forest blurred suddenly before Isabel's eyes. Did fitzAlan hate her so much, then? she **wondered**. Did he consider her to have no good qualities at all, to be so scornful of her? [sic] (BNC)
- (21) Pete blushed. Why is he blushing, Marion **wondered**. And why isn't he saying anything? (BNC)

In some sentences, the quoted clause is clearly delimited by quotation marks ([22]). The latter stand for quoted thought, rather than quoted speech ([22] being an exception), but in discourse, the use of *wonder* is similar to that of a verb of speech, such as *say*. This may explain why Sinclair (1996) includes verbs such as *wonder* in the "SAY" group.

- (22) 'I have heard enough! It is hereby resolved that the dog must go. I will now entertain suggestions as to how we can rid ourselves of this horrible dog menace.' 'It's simple,' stated Simon. 'Someone will have to drive him away.' 'Drive him away?' the mayor **wondered**. 'Can we do that?' 'Yes! Drive the beast away!' the crowd answered. [sic] (BNC)

The use of *c-wonder* as a discursive marker of quoted thought is linked to its discursive function of reporting. Indeed, when *c-wonder*, which denotes an undecided state of mind, has a clausal complement, it has the function of reporting an idea, which is construed as a meaning, given that the clausal complement corresponds to an indirect question. When *c-wonder* is used in discourse as a quoting verb of speech like *say*, it also projects an idea, which, this time, is construed as a wording. Although "[p]rojection is the critical link between sensing and saying" (Halliday & Matthiessen, 1999: 140), there exists a slight difference between the reporting function and the quoting function of *wonder*. An idea is a phenomenon of experience that has been construed and projected as a meaning; to put it briefly, it has been processed only once. When it is reported as such by a mental process of cognition (e.g. [7]), it is presented at a semantic level. On the contrary, when the phenomenon of experience is first construed as a meaning, and then turned into a wording, it has been processed twice: this can be symbolised by the use of quotation marks (e.g. [22]).¹³ The construction is then clearly paratactic or parenthetical, as it is in (20-21, 23-25), which show quotes without

¹³ Halliday & Matthiessen ([1985] 2014: 518) state that "in principle, single quotation marks stand for a meaning and double quotation marks stand for a wording"; however, these characteristics are not always respected in English (see [22-23], for instance). As a consequence, single quotation marks and double quotation marks cannot serve as a basis for a clear-cut distinction between meaning and wording.

quotation marks.¹⁴ It should be noted that in (23-25), *wonder* and its grammatical subject are interpolated. Such sentences most often present an interrogative anchor and a declarative parenthetical ([23-24]), but less often a declarative anchor and a declarative parenthetical ([25]).

- (23) 'For two miles across the dunes,' he waved his hand at the lumpy landscape, 'there are walks for naturists. Lovely places. Really lovely. Would you, I wonder, would you walk with me? Just a short way? We would be quite alone.' Julia shook her head. (BNC)
- (24) As she spoke, her mind was still on Janice. How much would it hurt him, she was wondering, when he finally discovered the truth about his fiancée? (BNC)
- (25) 'When? Today. Why?' he repeated, and, giving her a long, level stare, 'Why – because you'd run away from me, that's why!' he stated with a hint of some of his old aggressiveness – or perhaps, Fabia suddenly **wondered**, startled, it was not aggression, but nervousness! Rubbish, she thought, and consigned that notion to the bin. (BNC)

Where there seems to be no significant discursive difference between sentences (20-25), there are some between (6-10) on the one hand and (20-25) on the other hand. First, in (20-25), the thought is presented as if it were a wording, not a meaning. The parenthetical use of *c-wonder* is about 8.5 times less frequent than its reporting use as a main verb licensing a subordinate clause. Second, the syntactic structure in (20-25) indicates that the anchor is foregrounded at the discursive level, while the parenthetical part is backgrounded. The main differences between the reporting and quoting uses of *c-wonder* then reside in both the syntactic and discursive levels: either a reported clause is construed as a meaning and is thus embedded as a complement of *wonder*, or a quoted clause, which is construed as a wording, is part of a paratactic sentence, *wonder* and its grammatical subject being appended to it. While the *wonder*-parenthetical could be suppressed without altering the sentence's grammaticality in (20-25), the *wonder*-main clause could not in (6-10).

4. Emotive wonder: A lexical marker of surprise and a discursive marker of probability or incredulity

The results presented in Table 1 clearly show that emotive *wonder* is far less frequent in contemporary English than cognitive *wonder*. In the BNC, the occurrences of *e-wonder* represent only 2.97% of the total occurrences of the verb. This infrequency of *e-wonder* might explain, on the one hand, why it is rarely mentioned in grammars and reference books and, on the other hand, why, when it is, the construction with an *at*-PP is often considered as its only type of complementation. Indeed, an *at*-PP is by far the most frequent complement of *e-wonder* (46.79% of all its occurrences), followed by its intransitive use (27.22%), while its construction with a clausal complement represents 25.99% of *e-wonder* occurrences.¹⁵

¹⁴ I use the term "parenthetical" in Huddleston and Pullum's sense (2002: 895-896): parentheticals are "expressions which can be appended parenthetically to an anchor clause but which also have a non-parenthetical use in which they take a declarative content clause as complement [...]. In the parenthetical construction the anchor is syntactically a main clause, whereas the corresponding clause in the non-parenthetical construction is subordinate. [...] in this construction verbs which (with the meanings they have here) normally require a complement occur without one."

¹⁵ Only two occurrences of *how*-clauses were found in the BNC and, in fact, it turns out that the same sentence was recorded twice: 'When Graham was born,' says Kathleen, 'I did what all mothers do. I looked at his little hands, counted his fingers and **wondered**

These results are compatible with the idea that emotion verbs do not have as wide a range of complements as cognition verbs, or as other psych-verbs (Levin, 1993: 188-193). For instance, “Amuse verbs” are considered as transitive verbs with the stimulus or cause of emotion as subject and the experiencer as object (e.g. *I thought we should break the embrace and take to the oars. This **amused** the Prime Minister.* (BNC)) Although “Marvel verbs”, to which *e-wonder* belongs, are considered as intransitive by Levin (1993: 193), I’d rather say, following Sinclair (1996), that *wonder* takes an object, which is either a PP or a clause – it is to be noted that Levin only mentions *at*-PPs, contrary to Sinclair, who indicates that *that*-clauses and \emptyset -clauses are possible complements of *wonder*.

E-wonder always denotes an *a posteriori* reaction of the experiencer, who finds him/herself in a state of puzzlement, perplexity or even surprise when facing the stimulus. In fact, the complement of *e-wonder* grammatically codes a fact which has been construed as the origin or stimulus that causes the experiencer to be in such a state. Thus, the experiencer is only the mere subjective seat of a psychological experience (Groussier & Rivière 1996: 182) which imposes on him/her. This is confirmed, on the one hand, by the fact that *e-wonder* is never associated with the aspect BE + -ING and, on the other hand, by the way the stimulus is grammatically coded in discourse.

The frequent complementation by *at*-PPs (46.79% of the 327 occurrences) may derive from the fact that *e-wonder* is semantically highly compatible with the preposition *at*, which conveys an idea of spatial location and simple contact.¹⁶ *At* indicates that there exists a simple contact between the subject referent (e.g. *people* in [26]) and the stimulus, denoted by the prepositional object (e.g. *that fact* in [27]). This contact is at the origin of the experiencer’s perplexity ([26]) or surprise ([27]), or even admiration ([29]); the feeling is sometimes difficult to identify precisely, though the co-text can be helpful: in (29), for instance, *exclaim at its resplendence* leads to view it as admiration, not as surprise or perplexity. What is evident in all the sentences is that emotion or affect is subsequent to an actualised event, which is then conceived and construed as a cognitive object; see, for example, the nominalisations *inability* in (26) and *change* in (28) – where the stimulus is realised as subject in the passive sentence, or the noun *fact* in (27). Indeed, most of the NPs complementing the preposition *at* contain either nominalisations, factive nouns (e.g. *hatred, irony*) or event nouns (e.g. *risk*), which directly or indirectly allude to an actualised process. Therefore, with an *at*-PP, we are not dealing with a material process, but with a mental construct, which is construed as the source of the emotion; the latter is not an idea, but a fact (see [27]). A stative paraphrase such as (26’) also shows that the experiencer can only be considered as non-dynamic in the emotive process – moreover, emotions can only surge independently of the experiencer’s will.

how perfect he was.’ (BNC) As it could not be considered a representative sample of WH-clauses, such clauses were left out of the study of *e-wonder*.

¹⁶ *At*: “The most general determination of simple localization in space, expressing, strictly, the simple relation of a thing to a point of space which it touches [...]” (OED)

- (26) I suspect that in another hundred years' time people will look back and **wonder** at our apparent inability to regard sound recordings as permanent media, like books, music, or paintings. (BNC)
- (27) Like all his brothers, Charles was destined to outlive his wife; and in a sense we **may not wonder at that fact.** We have seen what a struggle it must have been for men in the late 18th century to keep body and soul together – how much worse, then, for their womenfolk. (BNC)
- (28) Even more important is the need to delineate and explain the growth in anticlericalism and antipapalism which was so marked in the second half of the century and which so drastically modified the relation of the church to the realm. *This change*, in itself, is hardly to **be wondered at** in a century which saw such dramatic features as large-scale warfare and recurring visitations of the plague: the consequences of both affected society as a whole, the church included. (BNC)
- (29) But outside the house on this Sunday morning the usual gossip was forgotten, for Max Klein's new motor-car was parked at the Rabbi's front door and it seemed that half the community had gathered to **wonder at it.** Many of them had seen it at the synagogue meeting on the previous night, but now in the daylight they were able to examine it more closely and *exclaim at its resplendence.* (BNC)
- (26') [...] in another hundred years' time people will look back and **be perplexed** at / because of the fact of our apparent inability to regard sound recordings as permanent media, like books, music, or paintings.

The same semantic analysis applies to sentences with a *that*- / \emptyset -clause. *That*-clauses (35 occurrences) and \emptyset -clauses (48 occurrences only) are far less frequent complements than *at*-PPs, representing only 25.99% of *e-wonder* occurrences. The conjunction THAT has an anaphoric value in that the submorpheme TH- is mentally retrospective, giving the clause an 'already' feature. Indeed, the proposition expressed by the *that*-clause has already been mentioned, is part of shared knowledge or can be inferred from the co-text or the situation in the real world; this is evident with the NP *her prejudices* in (33). Therefore, a *that*-content clause does not describe a real event, but an abstract cognitive object; it can then be glossed by a sentence containing an *at*-PP such as *at the fact that...*, with an abstract head noun like *fact* ([33']). THAT can then be interpreted as the discursive sign of a mental mediation, as the discursive image of the distance between the event itself and the subsequent idea that causes the surprise or perplexity felt by the experiencer. The (*that*-) clause, indeed, expresses a state, either permanent ([31]) or resulting ([30]), whether it is expressed directly or through a negative wording, as in (34).

- (30) But he stood like a rock, his burning eyes fixed. She ceased to **wonder** that he had survived his long ordeal of flight and hiding and hunger; he was durable beyond most men. (BNC)
- (31) Indeed, given the high claims monarchs made for themselves, and the excesses of adoration with which they were treated [...] we **may wonder** that so many of them retained any sense of balance at all. But the great monarchs of the sixteenth century knew very well how to use that adulation to enhance their power. (BNC)
- (32) The New English Weekly article was a follow-up to one I wrote about the abdication crisis. It would probably read very stale now, if I could bring myself to look at it. I **did not wonder** that it failed to 'shake' Eliot. (BNC)
- (33) I *was surprised* that Madame expressed herself so warmly when she spoke of Nissim. I **wondered** that her prejudices did not stretch to itinerant Arabs. (BNC)
- (34) 'I've made another pot of tea for us. It will do your head the world of good. No restorative like tea.' I **wonder** the British don't bath in it as well, thought Sally-Anne naughtily, but she was grateful for the extra cup, and for the sandwiches which Miss Mates brought in with it for them both. (BNC)
- (32') ?? I **did not wonder:** "It failed to shake Eliot / Did it fail to skake Eliot?"
- (33') I **wondered** at the fact that her prejudices did not stretch to itinerant Arabs.

Whereas a (*that-*)content clause can express either an idea or a fact, it can only refer to a fact when it is used as object of *e-wonder*. To put it briefly, a fact is a semiotic phenomenon: the subordinate clause denotes a proposition which, as such, is matter of a more abstract, higher, mental level than the real event it is derived from. Content clauses presenting facts are thus usually favoured by verbs referring to final and *a posteriori* mental stages of cognitive processes, such as *know*, *realise*, and *remember*, *rejoice* and *e-wonder* respectively. Such verbs indicate that the cognitive object has already been established: the experiencer can only go back mentally to this object (e.g. *remember*) or be emotionally affected by it (e.g. *e-wonder*, *rejoice*). The meaning of *e-wonder* is then highly compatible with the stative and acquired characteristics of the cognitive object, which is the first to be processed in the mental representation: in (30), for instance, *he survived his long ordeal of flight and hiding and hunger* could be the event serving as a basis for the cognitive object denoted by the *that*-content clause. Therefore, while such a factive content clause can be glossed as in (33'), it cannot be turned into a quote that is a wording (see the unacceptability of [32']).

The primacy of the cognitive object in the conceptualisation shows clearly when *e-wonder* is used intransitively, as in (35-37). In such sentences, the cognitive object can be inferred from the left co-text (e.g. *the girl's apparent excitement, her shining eyes and lightness of step* in [35]) and therefore need not be repeated in an explicit complement. It is to be noted that most of the intransitive occurrences of emotive *wonder* (27.22% of *e-wonder* occurrences) are combined with negation ([36-37]). In such sentences, it is the meaning of surprise – or rather, of absence of surprise – and *I don't wonder* could be glossed as *I'm not surprised*.

- (35) She noticed the girl's apparent excitement, her shining eyes and lightness of step as she made ready for the adventure; and again she **wondered**, *surprised* that her charge should give the appearance of a damsel in love, one shortly to be reunited with her bridegroom. That she is fond of him is natural enough, she thought. That she is concerned for him and wishes to assure herself as to his welfare is understandable, but that look of shining radiance is a trifle *puzzling*. (BNC)
- (36) [...] I was struck by his almost fierce, perhaps too possessive, loyalty to Eliot. He [...] was scathing about the award by Oxford of an honorary doctorate to a minor littrateur, E. V. Lucas, instead of to Eliot, and I **don't wonder**. Given his distressing complaint (muscular dystrophy), he possessed, apart from a commanding voice, an ebullience which, as I can now see, suited Eliot, though I believe there were moments when the two temperaments were at odds. (BNC)
- (37) 'You're a Holden Caulfield. He doesn't fit anywhere and you don't.' 'I **don't wonder**, the way he goes on. He doesn't try to fit.' (BNC)

Emotive *wonder* has more restricted discursive functions than *c-wonder*, both in its occurrences and in its uses. However, as is the case for *c-wonder*, they are derived from its intransitive use as a lexical marker.

One of its two uses is shown in (38-39), with the fixed phrase *I shouldn't wonder* (11.93% of *e-wonder*), combining *wonder* and the negated modal auxiliary *should*; here, this phrase could be read as *I shouldn't be surprised (at the fact) that / if...* (see glosses [38'-38'']). In fact, in such sentences, the near-absence of perplexity or surprise leads the experiencer to have near-certainty about the actualisation of an event, which

is always expressed in the left co-text. Emotive *wonder* thus acquires a discursive dimension, expressing rather probability than absence of surprise (see paraphrase [39']).

- (38) 'Greg was working on some kind of deal in Italy not long before he... before the accident. It's quite conceivable they were involved in it and he met Maria as a result. He swept her off her feet, **I shouldn't wonder.**' His lip curled in a bitter smile. 'He was very attractive to women, was Greg.' (BNC)
- (39) "What time is it Tom?" Patrick asked as they drew level with the old man. "Half ten son; why, are you in a hurry somewhere? Off to meet a girl, **I shouldn't wonder**, eh?" Tom Rooney knew Patrick Montgomery's identity; like Joseph Hyde he had also known the Madam in Dublin and was all too aware of her reputation. "Something like that," Patrick grinned. (BNC)
- (38') 'I shouldn't be surprised (at the fact) that he swept her off her feet.'
- (38'') 'I shouldn't be surprised if it is true that he swept her off her feet.'
- (39') "Half ten son; why, are you in a hurry somewhere? You're *probably* off to meet a girl, eh?"

The second use of e-*wonder* as a discursive marker is much rarer; only 3 occurrences of *I wonder!* could be found in the BNC. The fixed phrase *I wonder!* conveys the experiencer's doubt or incredulity, in reaction to a statement ([40]) or a question ([41]) previously mentioned; it could be glossed by *It would surprise me if...* or *I don't think this is/was/would be the case at all*. The whole meaning of the sentence is generated by the combination of e-*wonder* with the first-person pronoun and an exclamation mark, which is mostly responsible for the interpretation identified above.

- (40) 'But some day – some day I'll travel, and meet people, and know things, and then I shall write a true book – a book of experience.' 'You'll be famous, Gay.' '**I wonder!** I don't care about that. What does fame mean, after all, except that one's privacy is invaded?' (BNC)
- (41) Suddenly there was this tremendous roar, and we looked up to see a mass of snow and rocks rolling down a gully. Post hoc ergo propter hoc? **I wonder!** It was far enough away to be no real danger, but it certainly stopped me going any further and was probably a timely warning! (BNC)

The link between the lexical e-*wonder* and its discursive functions – similar to that between c-*wonder* and its discursive functions – naturally leads me to postulate that there exists an articulation not only between the two senses of the verb, but also between the lexical meanings and the discursive functions.

5. Synthesis

Although emotive *wonder* was the first to appear in the language, in contemporary English it is far less frequent than cognitive *wonder*. However, it may be wondered how and why this verb can still have two almost opposite meanings, and can function in discourse as a marker used for different purposes: reporting or quoting functions; marker of surprise, incredulity or probability. In addition, cognitive *wonder* can also be used in phrases such as *I was wondering if / whether...*, which can be viewed as markers of politeness at the beginning of requests ([42]) or offers ([43]) rather than markers of a real questioning.

- (42) 'Please don't run off,' said the man calmly. 'I'll not harm you. I **was wondering** if you could help me? I came to the school some time ago to investigate the giant eel and got lost. Could you show me the way out?' (BNC)
- (43) 'I **was wondering** whether you would like to come and see some friends with me next weekend. They have a tennis court and a swimming pool.' (BNC)

What seems to be the common ground of *c-wonder*, *e-wonder*, and their various discursive functions is the presence of an information gap. *C-wonder* indicates that the experiencer expresses a wish to know about something, that is, to fill an information gap. Besides, WH-clauses – the most frequent complements of *c-wonder* – also indicate the desire to fill some gap, given that WH- is often considered as an information gap marker (Lapaire & Rotgé, [1991] 1998: 609). This desire is then marked twice when reporting *c-wonder* is complemented by a WH-interrogative clause or an *if*-subordinate interrogative (25.98% of *c-wonder* occurrences), but also when quoting *c-wonder* is used parenthetically. Therefore, the search for information denoted by *c-wonder* appears to be the main core meaning of *wonder* in contemporary English, given that the occurrences of *c-wonder* represent 93.42% of all the occurrences of *wonder* in the BNC – 3.58% of which corresponding to a wrong tagging – where the occurrences of *e-wonder* only represent 2.97% of its total occurrences. *Wonder* is therefore mostly used in discourse as a reporting or a quoting marker: either ideas are reported, realised as clausal or prepositional objects, or ideas are quoted, realised under the form of a syntactically autonomous clause.

Emotive *wonder* can also be said to denote some kind of information gap, as the experiencer is left in a state of perplexity or surprise when facing a pre-projected fact. Here, it is the state itself which can be interpreted as involving some gap – perplexity being defined as an inability to decide what to do or to think, and surprise as a mental state caused by an unexpected situation. The same is true when *e-wonder* comes to express admiration: this feeling matches with the highest degree of affect, and can even be said to imply so high a degree that it cannot be expressed or described, which amounts to implying that there exists an information gap about the precise high degree of the state itself. Another semantic feature shared by cognitive and emotive *wonder* is that in both cases, the experiencer is affected, either by his/her questioning and the answer s/he may get, or by an entity, an event, a situation which leaves him/her in a state of puzzlement, surprise or admiration.

It can be added that when *c-wonder* is used as a marker of politeness ([42-43]), it is the addressee's affect that is spared or at least taken into consideration. Examples like (42-43) can be regarded as containing softeners (*I was wondering if / whether*) used to make the request, order or suggestion less face-threatening; these come to be interpreted as markers of a politeness strategy on the speaker's part, as s/he is aware of the potential face-threatening character of his/her request or suggestion. Moreover, making communication smoother is also a way to avoid causing the addressee to be perplexed or surprised. The same softening or mitigating interpretation can be applied to *I shouldn't wonder*, which is used to modulate a previous statement made by the speaker: with *e-wonder*, the aim could also be to (pretend to) avoid challenging the face of the addressee or of another person.

Wonder thus appears to be a two-faceted verb:

- Cognitive *wonder* can be paraphrased as: 'I am involved in a wondering/questioning process, trying to find an answer or to know about something in particular.' The inherent participant is thus construed as both an experiencer and an agent in a dynamic cognitive process. Cognitive *wonder* denotes a mental activity, namely an activity that corresponds to an initial, introspective stage in cognitive operations. A clausal complement of cognitive *wonder* is then better viewed as an idea projected, created by the introspective, dynamic activity than as a stimulus triggering the activity, while a prepositional complement containing an NP mentions the topic of the mental activity, which is more akin to a stimulus.
- Emotive *wonder* can be paraphrased as: 'An entity or situation exists, which causes me to be in a state of puzzlement, surprise or even admiration'. The inherent participant is construed as an experiencer only in a stative mental process. Emotive *wonder* denotes a mental state, namely a reaction that corresponds to an *a posteriori* stage in cognitive operations. The clausal and prepositional complements of emotive *wonder* can be regarded as pre-projected entities or situations that cause the emotive reaction, as stimuli.

6. Conclusion

While it was evident from the start that *wonder* has at least two different senses as a lexical verb, the thorough analysis of the syntactic constructions it takes brought to light subtler shades of meaning and discursive functions. This also implies that syntax is meaningful or, to see things the other way round, that syntax is motivated by meaning. Indeed, the syntactic constructions are in keeping with the two different senses of *wonder*, as well as with its various, though distinct, functions in discourse. They are not interchangeable, as they contribute to both conveying a particular meaning and carrying out a precise discursive function, which are adapted to the speaker's intentions. The complete and comprehensive meaning of the sentences analysed in the present paper can be apprehended only if a whole set of factors and parameters are taken into account: the twofold meaning of *wonder*; the type, category and structure of its complements as well as the meaning of the different operators they contain; the discursive and pragmatic effects of the whole sentence.

Wonder then appears to be able to refer to two orthogonal, though complementary, phases of cognitive stages: an initial, active phase of thinking and an *a posteriori*, stative phase of reaction, which can nevertheless be related by intermediary cognitive stages: the inferential stage (during which a cognitive object is evaluated; e.g. *think*), the conclusive stage (during which the cognitive object is accepted; e.g. *infer*) and the final, integrative stage (when the cognitive object is totally integrated; e.g. *realise*). As *wonder* belongs to two subclasses of mental verbs, it can be postulated that there exists a continuum not only between the two main senses of this verb, but also between different mental verbs. This continuum is iconic of the unbroken chain of cognitive processes in the human mind, which means that the structure of the

lexical field of cognition mirrors the organisation of cognitive phenomena. Therefore, the separation between cognitive *wonder* and emotive *wonder*, adopted in this study, should be regarded only as an extremely convenient device to show the extensive range of meanings and functions of this mental verb.

Looking back at the origin of the term, it turns out that *wonder* has undergone a gradual evolution and has reached, in contemporary English, a status which is quite the reverse of its status in Old English. The use of *wonder* as an emotion verb seems to have become gradually restricted over the centuries, while its use as a cognition verb seems to have gained ground, both in importance and in variety, as is also the case for its discursive functions. It is little wonder, then, that this ever-growing diffusion in contemporary language is still spreading nowadays, as attested by the new intransitive, exclamatory use of “*I wonder!*”, which was first recorded in the BNC in 1983 and whose pragmatic function is to express doubt or incredulity.

References

- BIBER, D., JOHANSSON, S., LEECH, G., CONRAD, S. & FINEGAN, E. (1999): *Longman Grammar of Spoken and Written English*, Harlow, Pearson Education Ltd, 1204 p.
- BROWN, P. & LEVINSON, S. C. (1987): *Politeness: Some Universals in Language Usage*, Cambridge, Cambridge University Press, 358 p.
- CREISSELS, D. (2006): *Syntaxe générale : une introduction typologique*, Vol. 1 & 2, Paris, Lavoisier, 412 p & 334 p.
- DIRVEN, R. (ed.). (1989): *A User's Grammar of English: Word, Sentence, Text, Interaction*, Frankfurt am Main/Bern, Verlag Peter Lang, 959 p.
- DIXON, R. M. W. ([1991] 1992): *A New Approach to English Grammar, on Semantic Principles*, Oxford, Clarendon Press, 398 p.
- GROUSSIER, M.-L. & RIVIÈRE, C. (1996): *Les mots de la linguistique. Lexique de linguistique énonciative*. Paris, Ophrys, 220 p.
- HALLIDAY, M. A. K. & MATTHIESSEN, C. M. I. M. (1999): *Construing Experience through Meaning. A Language-based Approach to Cognition*, London, Continuum, 657 p.
- HALLIDAY, M. A. K. & MATTHIESSEN, C. M. I. M. ([1985] 2014): *Halliday's Introduction to Functional Grammar*, 4th ed. revised, London/New York, Routledge, 786 p.
- HERBST, T. (2004): *A Valency Dictionary of English: a corpus-based analysis of the complementation patterns of English verbs, nouns and adjectives*, Berlin / New York, Mouton de Gruyter, 961 p.
- HUDDLESTON, R. & PULLUM, G. K. (2002): *The Cambridge Grammar of the English Language*, Cambridge, Cambridge University Press, 2002, 1842 p.
- KERBRAT-ORECCHIONI, C. (2005): “La construction de la relation interpersonnelle : quelques remarques sur cette dimension du dialogue”, *Cahiers de la linguistique française*, n° 16, pp. 69-88.
- LACASSAIN-LAGOIN, C. (2014): “Réalité d'une perception envisagée et expression d'un possible : les propositions en IF à la suite des verbes de perception visuelle”, *Travaux du CerLiCO 25, Du réel à l'irréel. 1. Diversité des langues et représentations métalinguistiques*, pp. 259-275.
- LANGACKER, R. W. (2008): *Cognitive Grammar. A Basic Introduction*, Oxford, Oxford University Press, 550 p.
- LAPAIRE, J.-R. & ROTGÉ, W. ([1991] 1998): *Linguistique et grammaire de l'anglais*, 3rd ed., Toulouse, Presses Universitaires du Mirail, 734 p.

- LEVIN, B. (1993): *English Verb Classes and Alternations. A Preliminary Investigation*, Chicago/London, The University of Chicago Press, 348 p.
- PALMER, F. R. ([1974] 1988): *The English Verb*, London, Longman, 268 p.
- POTTIER, B. (2000): *Représentations mentales et catégorisations linguistiques*, Louvain / Paris, Éditions Peeters, 315 p.
- QUIRK, R., GREENBAUM, S., LEECH, G. & SVARTVIK, J. (1985): *A Comprehensive Grammar of the English Language*, London / New York, Longman, 1779 p.
- SINCLAIR, J. (1996): *Collins Cobuild Grammar Patterns 1: Verbs*, Online ed., London, Harper Collins, 610 p.

Dictionaries and Corpora

- DAVIES, M. (2004-): *BYU-BNC*. (Based on *the British National Corpus* from Oxford University Press). 100 million words, 1980s-1993. < <https://corpus.byu.edu/bnc/> >, accessed 12 February 2018. (BNC)
- DAVIES, M. (2008-): *The Corpus of Contemporary American English*. 560 million words, 1990-present. < <https://corpus.byu.edu/coca/> >, accessed 12 February 2018. (COCA)
- HARPER, D. (2001-2018): *Online Etymology Dictionary*. < www.etymonline.com >, accessed 12 February 2018. (OnED)
- Oxford English Dictionary Online* (2018), Oxford, Oxford University Press. < www.oed.com >, accessed 12 February 2018. (OED)

Table 1. Types of complementation and uses of *wonder* in the BNC

<i>Wonder</i> in the BNC		11,019 occurrences					
cognitive <i>wonder</i> (c- <i>wonder</i>)				emotive <i>wonder</i> (e- <i>wonder</i>)			
		% of c- <i>wonder</i>	% of <i>wonder</i>			% of e- <i>wonder</i>	% of <i>wonder</i>
TOTAL	10,294		93.42%	TOTAL	327		2.97%
<u>clausal complement</u>	8,373	81.34%	75.99%	<u>clausal complement</u>	85	25.99%	0.77%
* <i>wonder</i> + IF-clause	2,674	25.98%	24.25%	* <i>wonder</i> + THAT-clause	35	10.70%	0.32%
				* <i>wonder</i> + Ø-clause	48	14.68%	0.44%
* <i>wonder</i> + WH-clause	5,699	55.36%	51.72%	* <i>wonder</i> + WH-clause	2	0.61%	0.02%
<i>whether</i> -clause	1,261	12.25%	11.44%				
<i>what</i> -clause	1,571	15.26%	14.26%				
<i>whatever</i> -clause	3	0.03%	0.027%				
<i>how</i> -clause	1,178	11.44%	10.69%	<i>how</i> -clause	2	0.61%	0.02%
<i>why</i> -clause	971	9.43%	8.81%				
<i>which</i> -clause	56	0.54%	0.51%				
<i>who</i> -clause	175	1.70%	1.59%				
<i>whom</i> -clause	9	0.09%	0.081%				
<i>whose</i> -clause	9	0.09%	0.081%				
<i>where</i> -clause	378	3.67%	3.43%				
<i>wherever</i> -clause	1	0.01%	0.01%				
<i>wherein</i> -clause	1	0.01%	0.01%				
<i>when</i> -clause	86	0.84%	0.78%				
<u>prepositional complement</u>	296	2.88%	2.69%	<u>prepositional complement</u>	153	46.79%	1.39%
<i>about</i> -PP	285	2.77%	2.59%	<i>at</i> -PP	153	46.79%	1.39%
<i>into</i> -PP	1	0.01%	0.01%				
<i>on</i> -PP	6	0.06%	0.054%				
<i>over</i> -PP	3	0.03%	0.027%				
<i>as to</i> -PP	1	0.01%	0.01%				
<u>NP</u>	53	0.51%	0.48%	<u>NP</u>	0	0%	0%
<u>intransitive use</u>	1,572	15.27%	14.27%	<u>intransitive use</u>	89	27.22%	0.81%
without quote	576	5.59%	5.23%	<i>I shouldn't wonder</i>	39	11.93%	0.35%
parenthetical use (interpolated incl.)	996	9.68%	9.04%	<i>I wonder!</i>	3	0.92%	0.027%
				miscellaneous	47	14.37%	0.43%
<u>wrong tagging</u>					395		3.58%
<u>miscellaneous</u>					3		0.03%