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Clausal and Constituent Negation Based on the Negators *Not* and *Never*

(Bakalářská práce)

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# 1 NEGATION AND ITS ENGLISH TYPES

In this chapter, I will define negation and divide the negation into individual types. I will concentrate on the distinction between clausal and constituent negation and the difference between the two negators *not* and *never* that occur in various environments.

If two units of grammar have opposite meaning, which means they cannot be true in the same situation, then one is the negation of the other. The negative element of the pair is the one which is intuitively missing a property, as in the second of each pair in (1) and (2):

- (1) a) *John has a good personality.*  
b) *John doesn't have a good personality.*
- (2) a) *He is happy.*  
b) *He is unhappy.*

There are several types of negation. Veselovská (2009, 54-55) differentiates semantic, lexical, phrasal and clausal negation. **Semantic negation** covers antonymy - relations with opposite meanings. In English, as well as in other languages, they have mostly different stems. Example (3) demonstrates opposites *alive* and *dead* in three languages. Since they all have different stems, no negative affixes are needed in order to create a semantic negation:

- (3) a) *alive - dead* (English)  
b) *živý - mrtvý* (Czech)  
c) *lebendig - tot* (German)

Example (3) shows that *dead* is negative because it lacks the property of *life*.

This concept of opposites is applied to **lexical negation** which is created by adding negative prefixes and suffixes such as *im-*, *in-*, *non-* and *-less* or *-free* to a positive word. The affixes make opposites to a positive word and they create positive-negative pairs of words. One positive word can thus have two negative counterparts, words that belong to semantic or lexical negation. Example (4) indicates the lexical negation *untrue* and the semantic negation *false* of their positive counterpart *true*:

- (4) *true - untrue/false*

**Phrasal negation** contains a negative phrase that consists of a negative element (*not*, *no*) and at least one lexical word. However, phrasal negation does not apply to a whole clause, but only to a part of one. Otherwise, it would be clausal negation which will be discussed below.

- (5) *I want to read novels, **not to study vocabulary**.* (Veselovská 2009, 54)

Example (5) clearly demonstrates that only the VP *not to study vocabulary* is negative, there is seen the special use of *not* that is semantically and syntactically different from other uses.

The last type of negation is the **clausal negation** that is attached to a full clause. This is the only type of negation which changes the truth value of the whole proposition, and it also changes some of its formal properties. Truth value of a clause is either 1 (*true*) or 0 (*false*) under a given set of real world conditions. Consider:

- (6) a) *The table weighs a lot.*
- b) *The table doesn't weigh a lot.*

The sentence (6) b) reverses the truth value of the sentence (6) a) because there is a particle *not* that follows the first auxiliary. *The table* in the sentence (6) b) lacks the property of *weighing a lot*. It means that there is no situation in which (6) a) and b) can both be true.

Clausal negation is fixed with the negative preverbal particle *not* or other negative words such as *never*, *nothing*, *nobody* or *nowhere*. The clausal negators *not* and *never* are part of the predicate, whereas the negators *nobody* and *nowhere* represent other sentence members such as subject, object or adverbial, so the grammatical function of the phrases with negation can vary:

- (7) a) *Peter cannot come to work.*
- b) *I have never been to New York.*
- (8) a) *Nowhere in the world can I feel more safe than here.*
- b) *Nobody is at home.*

Sentences (7) a) and b) contain negative items in a predicate, whereas sentences (8) a) and b) have them in an adverbial and subject.

Quirk et al. (1985, 775) distinguish between only three types of negation: clause negation, local negation and predication negation. In clause negation, the whole sentence has negative polarity, which means that it contains negative clausal elements; it is syntactically negative and positive polarity tags can then be created. Local negation means the same as phrasal or constituent negation, it is just another term. They define predication negation as follows: ‘Very rarely, predication negation occurs in the context of denials and permission. In predication negation, a modal auxiliary is used with a different scope of negation than is normal for that auxiliary. With a special emphatic pause before *not (...)*’ (Quirk et al. 1985, 797). Example (9) represents clause, local and predication negation respectively:

- (9) a) *She does not work very hard.* (Quirk et al. 1985, 776)
- b) *She is a not unattractive woman.* (Quirk et al. 1985, 791)

c) *They may 'not go swimming'.* [*'They are allowed not to go swimming'.*]  
(Quirk et al. 1985, 797)

Biber et al. (2002, 239) divide clause negation into 'not-negation' and 'no-negation'. Not-negation includes the negative particle *not* and its contracted form *n't*. No-negation includes negative words such as *no*, *nothing*, *none* or *never*. Biber et al. (2002, 239) also state that according to *Longman Spoken and Written English Corpus* (LSWE corpus), not-negation is more common than no-negation.

## 1.1 Syntactic and semantic properties of clausal negation

I will now look at clausal negation in more detail and examine its semantic and formal properties.

First of all, there are ways that clearly indicate a sentence negation. There are so called 'tests for polarity' (Huddleston and Pullum 2002, 785). A given sentence is negative if a positive polarity tag (10) b), *neither*-tag (11), *either*-conjoining (11) or structure with *not even* (13) can be added.

(10) a) *John married an Italian, didn't he?*

b) *John didn't marry an Italian, did he?*

(11) *He didn't show any mercy, neither was he sorry for what he's done.*

(12) *He will never accept your help, and his sister will never accept it either.*

(13) *Jenny cannot do the homework for you, not even on Saturday.*

Sentences (10) a) and b) have opposite truth values. The former is positive because there is no negation in the main clause. Then there is a negative polarity tag that appears only with a positive sentence. The latter sentence is negative because it contains clausal negation in the predicate *didn't marry*, and so it is followed by a positive polarity tag *did he*. The truth condition for the sentence (10) b) is that *it is false that John married an Italian*, so these sentences (10) are contradictory.

A *neither*-tag can also appear only with clausal negation (Klima 1964, 265-266):

(14) a) *Writers **won't** be accepting suggestions, and **neither** will publishers.*

b) *\*Writers will be accepting suggestions, and neither will publishers.*

*Neither* attracts the modal or auxiliary and creates a short tag. Compared to the polarity tag, the subject can be a NP containing a noun, *publishers* in this case, not only a pronoun.

*Either*-conjoining appears in coordinate structures (Klima 1964, 262-266):

(15) a) *Writers will seldom accept suggestions and publishers will seldom accept them **either**.*

b) \**Writers will never accept suggestions, and publishers will surely reject them, either.*

The occurrence of *either*-conjoining is limited in that it needs two clauses in a coordinate structure, the second of which is obligatorily negative. The ungrammatical sentence (15) b) contains two clauses, but the one closer to *either* does not contain a clausal negator.

Another typical syntactic property of English negation is inversion of a modal or auxiliary with the subject after an initial negative phrase. The word order is the same as in a *wh*- question:

(16) **What** do you want?

(17) **Never** can I hate him.

It should be noticed that only the first auxiliary inverts with the subject; other parts of the predicate follow the subject. However, positive adverbs never cause an inversion:

(18) \**Often must I go there.*

Quirk et al. (1985, 780) say that there are certain adverbs and determiners such as *hardly*, *scarcely*, *rarely*, *seldom*, *barely*, *little* and *few* that are not fully negative in meaning, but in form. They have the same syntactic properties as items such as *never* and *nobody* including inversion:

(19) a) *Little did I expect such enthusiasm from so many.*

b) *Scarcely any wine has yet arrived, has it?*

(Quirk et al. 1985, 781)

Another property of English clausal negation is that it is single. Generally, multiple and single clausal negation can be distinguished. Multiple clausal negation has more clausal negative elements and it is typical for Slavic languages. English negation, on the other hand, is single and cannot use more negative clausal elements. English clausal negation rather uses polarity items such as *any* or *at all* that follow the negative clausal element.

(20) a) **Nikdy nic neudělal.** (Czech)

b) **He never did anything.** (English)

The example (20) suggests that Czech clausal negation can include more than one negative clausal element, in this case three: *nikdy*, *nic* and *ne-*, but the same rule cannot be followed in English because there is only one negative element *never*. The meaning of both sentences is the same though. Multiple negation in English occurs only in non-standard speech, songs that have artistic purpose, it is used in untutored speech or by non-native speakers who have no command of standard grammar. However, true double negation can occur in sentences like this one:



(21) *I can't **not visit** my parents at home.*

The truth value is not: *I can't visit my parents at home*, but rather: *I must visit my parents at home*. It is not the case of multiple clausal negation as is the Czech one, it is rather combination of clausal negation in predicate and constituent negation *not visit*.

Being single, clausal negation is characterised by other semantically negative words that follow it which are not formally negative. The process is called 'the scope of negation' (Quirk et al. 1985, 787). It means that 'the polarity item *any* gets negative interpretation' (Veselovská 2009, 62). The polarity item *any* must follow the negation:

(22) *She did **not do anything anywhere**.*

Compared to Czech that would need three clausal negators, English uses only the particle *not*.

In this section, we have seen the different semantic and syntactic properties of the clausal negation. This will be compared with constituent negation and further taken into consideration for research of sentences.

## 1.2 Syntactic and semantic properties of constituent negation

Many different authors have many different names for constituent negation: phrasal negation, partial negation, subclausal negation, local negation. Constituent negation consists of a negative phrase: one negative word and other positive words. Constituent negation, compared to clausal negation, has scope just over one phrase.

(23) a) *She is so **not French**, isn't she?*

b) *She is not French, is she?*

The above sentence (23) a) contains a constituent negation *not French*. It indicates the adjective *French* that is premodified by the adverb *so*, and the negative polarity tag *isn't she*. The different tags in (23) differentiate between clausal in b) and constituent negation in a).

Clausal and constituent negation are not opposites, they don't contradict. Only clausal negation and a positive sentence are in contradiction as was mentioned in (10). In fact, sometimes a positive sentence and constituent negation can have the same truth value:

(24) a) *You can buy your present in time.*

b) *You can buy your present in no time.*

In any case, linguists feel that clausal and constituent negations are not the same, and they have given various examples of constituent negation. They state syntactic rules where it can appear. It can be represented in more parts of speech such as time adverbial, object, attribute, 'complementary material' (Klima 1964, 302-303), but it is questionable if it can be part of a predicate. The following examples illustrate constituent negation:

(25) *Not John but Mary supports the family, doesn't she?*

(26) *Not long ago it rained, didn't it?*

(27) *She had a not inconsiderable income, hadn't she?*

(28) *She looks not happy, doesn't she?*

The example (25) represents constituent negation in complementary material *Not John*. The following polarity tag is negative, so the clause *Not John but Mary supports the family* is positive with constituent negation *Not John* that precedes the subject *Mary*. Polarity tags in examples (26), (27), and (28) are also negative. This fact conclusively demonstrates that the particle *not* negates only certain part of the clause. Sentence (26) also does not contain any inversion after *not long ago*, which is another feature of constituent negation (Klima 1964, 300).

Inversion is an important element which can help to distinguish between clausal and constituent negation. There are clauses with a negative element in the end position. Such clauses are ambiguous:

(29) *I will do it in no time.* (Veselovská 2009, 66)

The sentence can be read either as *I will never do it* (clausal negation) or as *I will do it in short time* (constituent negation). In case we front the negative phrase, two unambiguous sentences appear. The example (30) is a source of clausal negation because of the inversion of the modal auxiliary with the subject, whereas the example (31) is a source of constituent negation.

(30) *In no time will I do it.*

(31) *In no time I will do it.*

Klima (1964, 303) gives examples with *not* as constituent negation. The first group he examines are infinitive and gerund phrases and subordinate clauses containing *not*. He gives an example sentence:

(32) *I would force her not to marry anyone.*

He states that *not to marry anyone* is a complement to the verb *force* and thus *not* is not in the position of short adverbs where clausal negation which is a part of the predicate appears.

The situation with subordinate clauses is more complicated:

(33) *He knows that no rain need fall and so does she.* (Klima 1964, 304)

Klima argues that the subordinate clause *that no rain need fall* cannot be considered sentence negation because the main clause is positive. He adds that '*no (...)* is not an incorporated and

fused form of the [neg]<sub>PvP</sub><sup>1</sup> *from the base sentence*' (Klima 1964, 305). It means that *no* does not go back to the predicate of the main clause.

Constituent negation may further occur with certain quantifiers such as *a few* (Klima 1964, 305),

(34) *Not a few authors criticized him severely, didn't they?*

or with an adverb:

(35) *Writers not infrequently reject suggestions, \*and neither do publishers.*

The example (35) shows that the main clause is positive because it shows the ungrammatical *neither* tag, but it contains constituent negation *not infrequently*. A negative question tag in (34) again shows that the main clause is positive and *not* is a part of the constituent negation *not a few authors*.

Klima (1964, 306-307) further presents other examples with constituent negation. Many of them are incorporated in time adverbial. In these cases, the word order (absence of inversion) is crucial, otherwise it would be clausal negation as it was mentioned above.

(36) *Not even two years ago you could enter without paying.*

(37) *Not many hours earlier he had spoken with someone else.*

Quirk et al. (1985, 791) provide an example for local negation within a disjunct,

(38) *Not surprisingly, they missed the train.*

and for negation of a prepositional phrase with the negator *no*:

(39) *He was decorated by non other than the President.*

Although Klima provides a lot of examples of environment for constituent negation, he does not go too deep into a problem when the negative particle *not* appears in a VP, more specifically in front of a certain lexical verb:

(40) *Saddam Hussein **may be not suffering** from that sanction but the people, the majority, all people of Iraq, are suffering.* [COCA:1993:SPOK: PBS\_Newshour]

(41) a) *Perhaps the ultimate luxury in shopping **would be not shopping** at all.* [COCA:2006:MAG:Bazaar]

b) *Perhaps the ultimate luxury in shopping **would be not shopping** at all, would it?*

If there are no principles for this case, it is unclear whether *not* in the example (40) is part of clausal or constituent negation. Sentences (41) a) and b) can be seen as two different structures. Sentence a) contains constituent negation *not shopping* with *shopping* as gerund.

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<sup>1</sup> PvP means preverbal particle *not*.

However, sentence b) contains a positive question tag *would it* that is always an indicator of clausal negation. In both sentences, there is a polarity item *at all* which appears with sentence negation or in interrogative sentences. It seems that this case is very unclear and it will provide more thinking and researching, so I made a questionnaire for native speakers that will be described in the section 3.2 that answers the dilemma whether there is constituent or clausal negation in (41).

Another possibility is that the preverbal particle *not* of clausal negation is attracted to the focus, to the lexical verb which is stressed. The speaker wants to emphasize the negation of the lexical verb. From this follows that clausal and constituent negation are the same because these two possible interpretations of one single sentence represent only one truth value.

### 1.3 Negators *not* and *never*

This part will deal with the two negators *not* and *never* and demonstrate their differences and things in which they are identical. The main difference between *not* and *never* is that *never* is an adverb, a lexical morpheme, and *not* is a particle, a grammatical morpheme (Veselovská 2009, 58). They differ in several ways.

#### 1.3.1 *Not* and *n't*

As has been stated before, *not* can appear in both clausal and constituent negation. It can occur as a free morpheme *not* in constituent negation, and as both free morpheme *not* and bound morpheme *n't* in clausal negation. The bound morpheme *n't* is a part of the first modal/ auxiliary verb and it cannot be separated from the first auxiliary in a question or in a complex predicate as examples (42) and (43) show:

(42) \**Do you n't see?*

(43) a) \**John must have n't been at home.*

b) *John mustn't have been at home.*

Example (43) a) contains two grammatical mistakes: first, *n't* cannot be separated from the verb, second, *n't* must be part of the first modal/ auxiliary verb. On the other hand, the free morpheme *not* can follow first, second or third auxiliary as examples (44), (45) and (46) demonstrate respectively:

(44) *He must **not** have been beaten at home.*

(45) *He must have **not** been beaten at home.*

(46) *He must have been **not** beaten at home.*

Compared to *never*, *not* being a grammatical morpheme has no lexical meaning. It only serves for creating negation. It therefore cannot stand separate as a statement:

- (47) *Can you forgive me?* (a) - *Never*.  
(b) - *\*Not*.

Crystal (1994, 205) states that the contracted form *n't* can be just part of auxiliary verbs and of most modal verbs, but it is never part of lexical verbs. He adds that some usages of a verb and *n't* are obsolete like by the modal verb *may*:

- (48) *Mayn't*.

### **1.3.2 *Never***

*Never*, as an adverb of time, answers the question *when*. It is therefore semantically unacceptable to use another time adverb such as *yesterday*, *tomorrow*, *sometimes*, etc. in the same clause:

- (49) *\*He has never been there yesterday*.

Quirk et al. (1985, 438) differentiate several types of adverbs according to the morphology: simple adverbs that are composed of one stem, e.g. *well*, *only*, *just*, compound adverbs that are composed of more stems, e.g. *somehow*, *therefore*, *hereby*, and derivational adverbs that morphologically belong to an open class, e.g. *oddly*, *interestingly*. *Never* belongs to compound adverbs because it was created from two morphemes: *no/not* + *ever*. The word is negative because it contains the negation *no/not*. *Never* therefore does not need any other negator in a clause.

Compared with *not*, *never* has more strength. It also expresses completeness and time. It can be said that *never* is focused *not*. There is often a phonetic emphasis on *never*.

As other adverbs, *never* can be a sentence member, adverbial. Adverbs generally appear in a position of adjunct, conjunct or complement. The adverb *never* is an adjunct of time (Veselovská 2009, 17).

### **1.3.3 *Position of not and never in complex VPs***

In a negative declarative clause, parts of the predicate are in the following order (Veselovská 2009, 57): the auxiliary/ modal goes first, then the negator, then other auxiliaries and finally the lexical verb. The first modal auxiliary has a specific role because in a question, it inverts with a subject. The second position, so called position of short adverbs, is the one where negation or short adverbs such as *so*, or pronouns *either* and *neither* take place. In this position, there is the particle *not* or the adverb *never*. We can define the word order like this:

(50) S - M/A - NEG - Aux - V(lex)

The rule (50) is general and does not include other possibilities for a negative element. However, the grammar books accept the varieties with *never* that appears after the second auxiliary:

(51) *He will be never reading.* (Veselovská 2009, 58)

This possibility is also grammatically correct according to Quirk et al. (1985, 490), who in the chapter ‘The semantics and grammar of adverbials’ examines various position of adverbs, and because *never* is an adverb, these principles are valid for it as well. He states that adverbials can stand after the first, second or even third auxiliary.

However, the literature I studied does not say anything about various positions of *not* inside a VP for the clause negation. The situations when *not* stands in front of a lexical verb were discussed earlier and it cannot be decided according to grammar books whether it is constituent or clause negation.

To specify the various position of the negative adverb *never*, we must look back to various positions of adverbs in a clause in general. Quirk et al. (1985, 490) state various positions that an adverb can take, but some of them are less likely to appear, and the meaning can also differ according to the given position. They recognize one initial position (I), four medial positions (iM, M, mM, eM) and two end positions (iE, E).

- (52)
- |  |           |
|--|-----------|
| a) <i>By then the book must have been placed on the shelf.</i> | <b>I</b>  |
| b) <i>The book by then must have been placed on the shelf.</i> | <b>iM</b> |
| c) <i>The book must by then have been placed on the shelf.</i> | <b>M</b>  |
| d) <i>The book must have by then been placed on the shelf.</i> | <b>mM</b> |
| e) <i>The book must have been by then placed on the shelf.</i> | <b>eM</b> |
| f) <i>The book must have been placed by then on the shelf.</i> | <b>iE</b> |
| g) <i>The book must have been placed on the shelf by then.</i> | <b>E</b>  |

(Quirk et al. 1985, 490)

Sometimes, the word order can be slightly different, especially when fronting with negative adverbs appears. If *by then* is replaced by *never* in the I position, auxiliary/ modal must follow the adverbial. The subject *the book* comes after the modal verb *must* as the example (53) illustrates:

(53) *Never must the book have been placed on the shelf.*

Another position is the medial position. The medial position occurs inside a VP between a subject and a lexical verb (Quirk et al. 1985, 491). In complex VPs, M positions

vary according to the distribution of auxiliaries in a VP. The iM position follows subject and precedes the whole VP.

The M position takes place after the first modal auxiliary. The M position is on the position of short adverbs where also negative particle *not* appears. It is expected to be the most frequent one.

The mM position occurs between the second auxiliary and the rest of the predicate. Both *not* and *never* are likely to appear on this position.

The last M position is the eM position that occurs after the last auxiliary and before the lexical verb. The iE position means that an adverb is placed right after the lexical verb. On the other hand, the adverb in the E position occurs at the end of the clause.

Huddleston and Pullum (2002, 575) differentiate in general between front, end and central position for adjuncts. An adjunct in the front position precedes the subject. The central position means that an adjunct occurs between a subject and the verb. The end position is where an adjunct follows the lexical verb. They further specify the central position in pre-auxiliary and post-auxiliary (Huddleston and Pullum 2002, 575); auxiliary means the first auxiliary in this case. They also mention that frequency adjuncts (such as *never*) are less likely to appear in the front position, but they prefer the central position.

This section described the main differences of *not* and *never* which can be found in various grammar books. However, the actual importance and frequency of the individual positions will be talked in more detail in the section 4.1 containing the corpus results and the study will compare the presumptive results based on the books and supported by the corpora results.

## 2 HYPOTHESIS

From the research on the literature above it is obvious that clausal and constituent negation are not as independent as they have been presented there. Clausal and constituent negation can be compared to active and passive voice. Each has the same deep structure, but different surface structure, and the truth value remains the same. There is only a different focus. Example (54) demonstrates the active in a) and the passive in b) surface structure. The focus is *a letter* in a) and *John* in b). Nevertheless, the deep structure is the same in both sentences.

(54) a) *John wrote a letter.*

b) *A letter was written by John.*

Constituent negation can be divided into true constituent negation (55), constituent negation that is very close to lexical negation (56), and then constituent negation with a clausal negator that is too far to the right in a VP, specifically it is in front of the lexical verb (57):

(55) *Not John, but Mary came to the party.*

(56) *I can't not visit my parents at home.*

(57) *He may be not suffering.*

Example (55) suggests that the negative part is *not John*, whereas *but Mary came to the party* remains untouched by the negation. The latter part is so called presupposition (Hajičová 1975, 122) and therefore *not John* is a clear example of constituent negation. Example (56) indicates that *not* could be understood either as constituent negation of the verb *visit*, or *not* could be described as an element expressing a lexical negation. Although the verb *visit* does not have any possible negative prefix in English, it is translated into Czech as *nenavštívit* with negative prefix *ne-* that causes the clausal negation. This principle of clausal prefixes cannot be applied generally to all languages, so it depends on the point of view of individual linguists and approaches.

Example (57) differs from the two above. In the surface structure, it might be constituent negation, such as in the example (56), but there is only one deep structure. It is just another variant that is caused by the usage of a speaker who thought at the last moment that he should negate the clause, or he put only a phonetic stress on the negative element. What is important, a variant does not change the truth value (Hajičová 1975, 84). Here, we



can compare the active/ passive transformation with clause and constituent negation in the example (57).

So I suggest that constituent negation is a special case of clausal negation in many cases, and the example (57) is the type of negation which I will examine deeper in the following research.

### 3 METHODOLOGY

This part will provide information about the research part. It will introduce the two corpora, *British National Corpus* (BNC) and *Corpus of Contemporary American English* (COCA). It will show the methods of how to get the data from these corpora, the types of tables they were placed in, and counting the frequency of occurrence. Another methodological part will show "The English Negation Questionnaire", the process of making and answering it which was necessary to do because of the corpora results (see the chapter 4.1).

#### 3.1 BNC and COCA

BNC is a corpus of 100 million words. The written part contains 90% of all samples, the spoken part only 10%. It was created between 1980s and 1993. In August 2012, the tag set CLAW 5 was changed to the new version CLAW 7; that is the same as in COCA. That means that I used the same tag set for both corpora. There was only one exception: the modal verb *can* is negated in two forms: with space or without - *can not/ cannot*, but in the BNC, it is tagged in only one possible way - *can not*.

Although programmes such as SARA or the new version XAIRA are commonly used for searching in the BNC, I preferred Mark Davies' interface on the Internet because I could use the same queries for both corpora.

COCA is a corpus of 450 million words, so it is four times bigger than the BNC. Compared to the BNC, the written part comprises 80% of all samples and the spoken part 20%. The samples are from the time period between 1990-2012. It is being updated every year. It was created by Mark Davies of Brigham Young University.

In this research, I used eight modal verbs: *should, must, would, can, could, may, might* and *need*. I made five basic queries in different tense forms and voices. The phrases contained a lexical verb in the past or present participle. These phrases create complex verb phrases, so I could examine the individual positions of *not* and *never* inside the VPs. For each tense, I made various queries with a negator following a first, second or third auxiliary, with *never* also in the initial preverbal position:

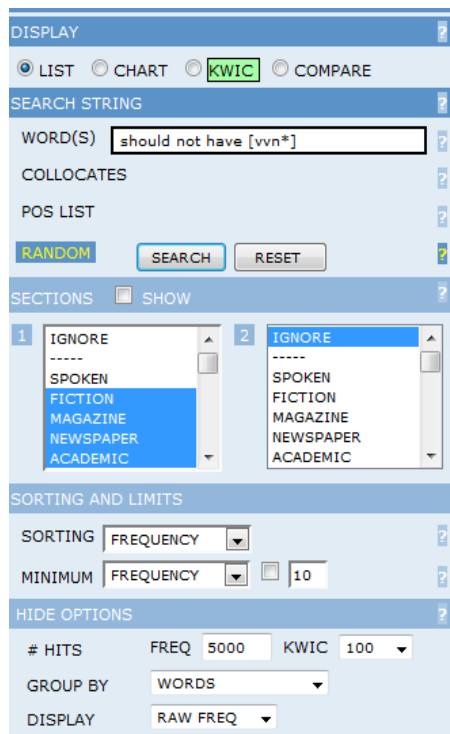
	BNC - written	COCA - written
<i>should not have</i> [vvn*]	151	358
<i>should n't have</i> [vvn*]	285	1184
<i>should have not</i> [vvn*]	0	0
<i>should never have</i> [vvn*]	149	304
<i>should have never</i> [vvn*]	0	31
<i>never should have</i> [vvn*]	4	194

**Table 1.** Various positions of the verb *should*, written English

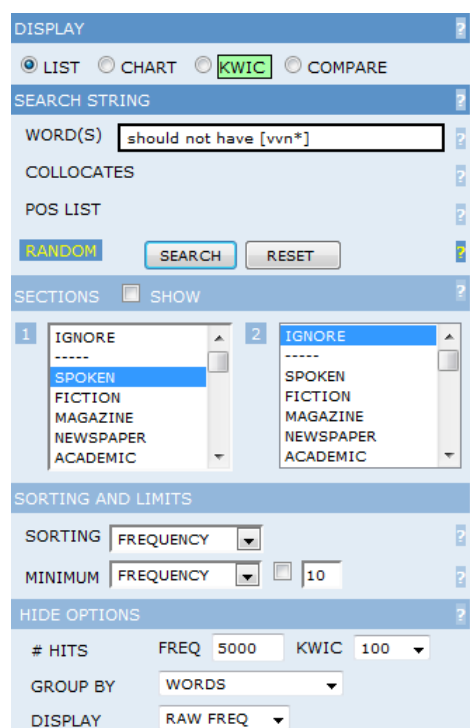
The tag [vvn\*] in table 1 stands for lexical verbs in the past participle excluding the verbs *been*, *had* and *done*, which have their own special tags. I decided to omit these verbs because from a brief preliminary research on the verb *should* I realised I could get enough data only with [vvn\*], what is more, in the case of the verb *been*, there could follow other lexical verbs, which I did not want to happen.

Another tag was needed for the lexical verbs in the present participle: [vvg\*]. This tag also omitted *being*, *having* and *doing*. I chose not to use it from the same reasons like before.

In order to differentiate between the spoken and the written language, I had to set it in the corpora. I picked the spoken register for the spoken language, and I picked everything except *spoken* for the written language:



**Figure 1.** Settings for the written language



**Figure 2.** Settings for the spoken language

These figures 1 and 2 also show other information: on top, the query with a complex verb phrase is seen. This VP contains a lexical verb in the past participle form [vvn\*]. In the

middle section, the registers are picked for searching for the written and the spoken language. In the bottom section, the frequency is increased to 5 000. As I later realised, it was not necessary to increase the frequency because both corpora showed all the results.

It was also necessary to distinguish between the boundaries of words in both corpora. Even if some expressions are normally written together, they must be written separately in a corpus. Special attention had to be paid to the contracted form *n't*:

(58) *should n't have* [vvn\*]

(59) *ca n't have* [vvn\*]

The modal verb *can* and particle *not* must be written separately in the BNC as the example (59) conclusively demonstrates contrary to COCA which accepts the form *cannot* as well, but there was barely one example to be found in all given queries.

When all the data were collected for individual verbs, there were two possibilities how to continue. I could either compare the individual verbs or the positions. I chose that I would compare the positions of all the modal verbs. The reasons were that it would be more transparent for the reader and it would make clearer conclusions for the English negation research.

After making the final set of tables, I had to count the relative frequency because the corpora are not the same size, neither do they have the same ratio between the spoken and the written parts. Simple equations based on the mathematical 'rule of three' such as the one in figure 3 were made:

$$\begin{array}{r}
 \text{tokens of written part: } 2\,320 \dots\dots\dots 90 \text{ million words} \\
 \text{x (number of tokens per 1 million words) } \dots\dots\dots 1 \text{ million words} \\
 \hline
 2\,320 * 1 = 90x \quad / :90 \\
 \hline
 \underline{x = 25,7}
 \end{array}$$

**Figure 3.** Equation for counting frequency per 1 million words, BNC written English

There were found 2320 tokens in the written English, which contains 90 million words. 2320 was divided by 90 in order to get the frequency per 1 million words: 25,7. For spoken language, 90 million words must be changed into 10 million words. The same equation can be used for COCA: there are 450 million words. 80 % is the written part, that is 360 million words. The spoken part is 20%, so that is 90 million words.

Counting the frequency was important because otherwise the numbers could not be compared. This was done in the programme *Microsoft Excel*. After counting the frequency, I rounded all the numbers up to 2 decimal places.

As I went through various examples, I realised that not all items that were supposed to be lexical verbs in the present participle are only verbs, but some of them are also gerunds such as the examples (60) and (61) show:

(60) *I have one regret in my life, and that would be **not telling** the only man that I've ever loved the truth about my past.* [COCA:2011:SPOK:ABC\_20/20]

(61) *The choice that I had would be **not taking** Factor VIII for an everyday bleed, for instance.* [COCA:1992:SPOK:CBS\_Street]

These examples occurred only when the negative particle *not* would precede the lexical verb.

This is one of the reasons I did not use the sentences from the corpora in the questionnaire. What is more, many of the sentences were unclear even for a native speaker from Olomouc with whom I discussed them earlier and asked if he feels they are fully or partially negative. The meaning of the sentences seemed to be the biggest problem. This first subject pointed out his problems with understanding them, so I made semantically clearer sentences in the further research.

### 3.2 The English Negation Questionnaire

Having found that the frequency of the constituent negation in front of a lexical verb, as in the example (57), is essentially negligible, i.e. the writers and speakers indeed have regular internalized grammars, I had to find another method for detecting the true status the constituent negation in front of a lexical verb. The tool I came up with was a questionnaire about a sort of intuitive strength of negation felt by native speakers. If they recognize intuitively the partial negation based on *but not* phrase, will they classify all constituent negation in that way, or will they feel that other constituent negations are actually full negations?

It was necessary to create a questionnaire that would test the grammatical capabilities of the subjects. It also contained distractor sentences and of course the research sentences. The questionnaire included 5 grammatically positive sentences, 5 grammatically fully negative sentences and 4 grammatically partially negative sentences. In the ideal case, the subject should have 12 - 14 out of 14 right, but if there are only few of them, I will also have to accept subjects with 3 mistakes. The subject also should have 3 out of 4 sentences on partial negation right. After the selection, I would go through the 6 sentences that I am really

testing, it means the sentences which have the negator more to the right in a VP. The negators *not* and *never* usually follow the second or the third auxiliary in those sentences. The answers on the last 6 distractor sentences are of no importance to me. These 26 sentences were presented in random order.

This questionnaire was first given to non-native speakers of English, but who are at an advanced level (e.g. teachers) in order to find out if it needed any more corrections such as to removing possible ambiguity of the sentences. It was also given to the native speakers of English that live in Düsseldorf where I was staying during the research. From a couple of detailed questions about the questionnaire, I decided not to put any positive or negative tag questions there because some subjects seemed to be confused by them.

The next step was to give the questionnaire to native speakers of English in Ireland who were students of linguistics. There were two groups of students, each of 10 people. The subjects were given written instruction about how they should fill the questionnaire and they were also asked to do it within 10 minutes, so they would have no time to think about connotations because this questionnaire was only about grammar.

The following figure 4 shows the final version of the questionnaire. I underline the correct answers for positive (P), fully negative (FN) and partially negative (PN) sentences, the sentences with bold numbers are the ones I am examining. The distractor sentences remain unmarked in any way.

### **The English Negation Questionnaire**

The following instructions were given:

I would like your opinions on the *grammar* of negation; this is not about ‘negative connotation’. My questionnaire has 26 grammatical sentences from a native speaker, and they all make sense in some context. For each sentence, there are 3 choices, either positive P (*I am Czech*), fully negative FN (*I am not Czech*) or partially negative PN. Which examples go in which category is your choice. You can change your answers by cross outs, but you must make some choice for every example. You have 10 minutes to do the test, about 20 seconds per example. So there isn’t time to think about paraphrases.

*Please, decide whether you feel that following sentences are*

- i. grammatically fully negative (circle FN) or*
- ii. you feel that only a part of them is negative (circle PN),*
- iii. or they are grammatically positive, that is not negative at all (circle P).*

1. Life is wonderful. FN/ PN/ **P**
2. Mary doesn't like bad movies. **FN**/ PN/ P
3. She brought her novels but not her Bible to the second hand shop. FN/ **PN**/ P
4. David wears only black clothes. FN/ PN/ **P**
- 5.** That boy must have been not finishing his homework on time. FN/ PN/ P
6. Unhealthy people rarely die early. FN/ PN/ P
7. Few friends saw me in the hospital. FN/ PN/ P
- 8.** She must have not been telling the truth. FN/ PN/ P
9. Mary has a terribly negative attitude. FN/ PN/ **P**
10. I would like to visit my parents on Christmas, not on New Year's. FN/ **PN**/ P
11. People don't seem so bad. **FN**/ PN/ P
12. She hardly ever smoked. FN/ PN / P
13. I like most desserts, but not that one. FN/ **PN**/ P
- 14.** James and Mark might have been not joking about having robbed a bank. FN/ PN/ P
15. This chocolate doesn't taste good. **FN**/ PN/ P
16. I can type almost as fast as she can. FN/ PN/ **P**
17. The flowers wilted last week. FN/ PN/ **P**
- 18.** Housework may have been not thought honourable. FN/ PN/ P
- 19.** Her parents must have never been buying them chocolate when they were little. FN/ PN/ P
20. Not John, but Mary and her husband came to the party. FN/ **PN**/ P
21. Scarcely did he visit his grandmother as a child. FN/ PN/ P
22. I never go to the theatre. **FN**/ PN/ P
- 23.** This is being not painted on purpose. FN/ PN/ P
24. She is so not French. FN/ PN/ P
25. She finally didn't do her final exams at the university. **FN**/ PN/ P
26. She looks not happy. FN/ PN/ P

PLEASE HAND IN YOUR QUESTIONNAIRE. THANK YOU VERY MUCH!!

**Figure 4**, The English Negation Questionnaire with marked qualifying question

After filling the questionnaires, the student's results were collected and sent to me via post. When they arrived, I put their answers on my 6 main questions (numbers 5, 8, 14, 18, 19 and 23 in the questionnaire) into tables, each group separate, and at the end, I made one final table for all of them and the percentage for the FN results.

## 4 RESULTS

This part will provide information about the results from both methods of the research. At first, I will show the corpus data, and I will focus on the frequency of the individual positions. I will compare the BNC and COCA data at the same time, and then I will compare the spoken and the written language. In the second part, I will examine the English negation questionnaire and its results from the native speakers of English.

### 4.1 Corpora research

Here I will show the tables with the number of tokens for the BNC and COCA. I made separate parts for the spoken and the written language. The positions are described according to Quirk et al. (1985, 490), example (52). *M* stands for a modal verb, it means the sum of the individual positions for all the modal verbs: *should*, *must*, *would*, *can*, *could*, *may*, *might* and *need*.

#### 4.1.1 Written language

Generally, it can be said that the most overwhelmingly frequent positions were the one where the particle *not* immediately followed the first modal verb. The contracted form *n't* also occurred very frequently. The same position (the M position) was taken by the adverb *never* as the most frequent. The second most frequent position concerning *never* was iM, where *never* precedes the modal verb.

There were also distinctions between the BNC and COCA. Mostly if there were some numbers for less frequent positions in COCA, there were no data in the BNC, or the frequency in the BNC was much lower.

The following table 2 shows the results for modal verbs that are followed by a negator and the bare past infinitive:

	BNC - written	COCA - written	Frequency BNC	Frequency COCA
<i>M not have [vvn*]</i>	1858	5717	20,64	15,88
<i>M n't have [vvn*]</i>	1559	6732	17,32	18,70
<i>M have not [vvn*]</i>	2	33	0,02	0,09
<i>M never have [vvn*]</i>	802	2361	8,91	6,56
<i>M have never [vvn*]</i>	9	243	0,10	0,68
<i>never M have [vvn*]</i>	20	1031	0,22	2,86

**Table 2.** First summary table for the written language



The table 2 clearly demonstrates the number of tokens in the first two numeral columns. British and American English are recorded separately. The other two columns show the frequency per 1 million words. As mentioned before, the most frequent position is the M where the negator immediately follows the modal verb. Less frequent are positions where the negator precedes a lexical verb, where the constituent negation in front of a lexical verb takes place.

	BNC - written	COCA - written	Frequency BNC	Frequency COCA
<i>M not have been [vvg*]</i>	29	100	0,32	0,28
<i>M n't have been [vvg*]</i>	19	82	0,21	0,23
<i>M have not been [vvg*]</i>	0	0	0,00	0,00
<i>M have been not [vvg*]</i>	0	0	0,00	0,00
<i>M never have been [vvg*]</i>	1	2	0,01	0,01
<i>M have never been [vvg*]</i>	0	0	0,00	0,00
<i>M have been never [vvg*]</i>	0	0	0,00	0,00
<i>never M have been [vvg*]</i>	0	2	0,00	0,01

**Table 3.** Second summary table for the written language

The table 3 represents results with very low numbers in general. Half of the positions were not represented in any language, some numbers were very low as the last line suggests. This table does not differ from the above characteristics. The most frequent position is the M position.

	BNC - written	COCA - written	Frequency BNC	Frequency COCA
<i>M not have been [vvn*]</i>	444	1003	4,93	2,79
<i>M n't have been [vvn*]</i>	46	266	0,51	0,74
<i>M have not been [vvn*]</i>	0	8	0,00	0,02
<i>M have been not [vvn*]</i>	0	0	0,00	0,00
<i>M never have been [vvn*]</i>	117	295	1,30	0,82
<i>M have never been [vvn*]</i>	1	31	0,01	0,09
<i>M have been never [vvn*]</i>	0	0	0,00	0,00
<i>never M have been [vvn*]</i>	0	75	0,00	0,21

**Table 4.** Third summary table for the written language

The table 4 does not differ from the above in that sense that the M position is the most frequent one. Here lines 3 and 8 differ, where there were found results in COCA, but not in the BNC. Especially line 8 admits *never* in iM position for 75 tokens.

	BNC - written	COCA - written	Frequency BNC	Frequency COCA
<i>M not be [vvn*]</i>	11873	25769	131,92	71,58
<i>M n't be [vvn*]</i>	1036	7033	11,51	19,54
<i>M be not [vvn*]</i>	2	3	0,02	0,01
<i>M never be [vvn*]</i>	626	1702	6,96	4,73
<i>M be never [vvn*]</i>	0	1	0,00	0,00
<i>never M be [vvn*]</i>	0	54	0,00	0,15

**Table 5.** Fourth summary table for the written language

The table 5 demonstrates again that the most frequent position is the M position for both *not* and *never*. The contracted form *n't* is the second most frequent form of it. Besides, there were always found some tokens in COCA, even for the eM position as the line 5 suggests. The last line with *never* in the iM position was found only in COCA.

	BNC - written	COCA - written	Frequency BNC	Frequency COCA
<i>M not be [vvg*]</i>	382	1235	4,24	3,43
<i>M n't be [vvg*]</i>	256	1486	2,84	4,13
<i>M be not [vvg*]</i>	0	7	0,00	0,02
<i>M never be [vvg*]</i>	2	15	0,02	0,04
<i>M be never [vvg*]</i>	0	0	0,00	0,00
<i>never M be [vvg*]</i>	1	2	0,01	0,01

**Table 6.** Fifth summary table for the written language

The table 6 again demonstrates that the M position is by far the most frequent one. However, the results for the free morpheme *not* and the bound morpheme *n't* differ. This time, *n't* is more frequent in COCA, but *not* in the BNC. Only the eM position for *never* in both corpora and the eM position for *not* in the BNC were not found.

The tables 2 - 6 conclusively demonstrate that the most frequent position is the M position. The results of the corpora show that the subjects put the negators exactly where the hard core grammars say they should put it. There is no symmetry between the individual positions. Some positions such as the mM or the eM position are much less frequent than the others, or they do not appear at all.

In the M position, the contracted form *n't* is much less frequent than *not*. It is caused by the education that people should prefer the long form in the written language. The mM position, which was about to be found in the tables 3 and 4 was actually found only in the table 4. There were 8 tokens with *not* in the mM position in COCA, 31 tokens for *never* in COCA and one position for *never* in the BNC. The eM position was found in tables 2, 5 and 6. The frequency was higher for the negator *not* in tables 5 and 6, but the table 2 showed the

opposite, in which also the COCA numbers were 4,5 times higher for *not* and 6,8 times higher for *never*. The last position to discuss is the iM position with the negator *never*. It occurred in all tables, but the results for BNC were not found in tables 3, 4 and 5, so the iM position is not preferred by the British English speakers. The other results clearly speak for COCA as the dominant corpus for the iM position.

#### 4.1.2 Spoken language

Compared to the written corpora, the spoken corpora did not provide any data for some positions more frequently. There was also a difference in the occurrence in the M position for the particle *not*. In general, the bound morpheme *n't* was more frequent than the free morpheme *not*.

	BNC - spoken	COCA - spoken	Frequency BNC	Frequency COCA
<i>M not have [vvn*]</i>	79	1630	7,90	18,11
<i>M n't have [vvn*]</i>	386	1984	38,60	22,04
<i>M have not [vvn*]</i>	1	64	0,10	0,71
<i>M never have [vvn*]</i>	39	449	3,90	4,99
<i>M have never [vvn*]</i>	3	268	0,30	2,98
<i>never M have [vvn*]</i>	3	360	0,30	4,00

**Table 7.** First summary table for the spoken language

The table 7 shows some results for all given positions. The most frequent is traditionally the M position for both *not* and *never*. The contracted form *n't* occurs more frequently than *not*, especially in the BNC, where the frequency is five times higher compared to the particle *not*. The less frequent position is the eM position for the particle *not* in both corpora.

	BNC - spoken	COCA - spoken	Frequency BNC	Frequency COCA
<i>M not have been [vvg*]</i>	1	25	0,10	0,28
<i>M n't have been [vvg*]</i>	12	44	1,20	0,49
<i>M have not been [vvg*]</i>	0	3	0,00	0,03
<i>M have been not [vvg*]</i>	0	1	0,00	0,01
<i>M never have been [vvg*]</i>	0	2	0,00	0,02
<i>M have never been [vvg*]</i>	0	0	0,00	0,00
<i>M have been never [vvg*]</i>	0	0	0,00	0,00
<i>never M have been [vvg*]</i>	0	0	0,00	0,00

**Table 8.** Second summary table for the spoken language

The table 8 shows very few results compared to the others. Particularly the BNC seems to have only the M position for *not/n't*, but not for *never*. The results in the COCA are a bit higher, but there are only two tokens for *never* in the M position, other positions for

*never* are also empty. Important numbers are shown by the contracted form *n't* in the BNC, which has the highest frequency.

	BNC - spoken	COCA - spoken	Frequency BNC	Frequency COCA
<i>M not have been [vvn*]</i>	10	282	1,00	3,13
<i>M n't have been [vvn*]</i>	15	149	1,50	1,66
<i>M have not been [vvn*]</i>	0	5	0,00	0,06
<i>M have been not [vvn*]</i>	0	1	0,00	0,01
<i>M never have been [vvn*]</i>	12	85	1,20	0,94
<i>M have never been [vvn*]</i>	0	25	0,00	0,28
<i>M have been never [vvn*]</i>	0	0	0,00	0,00
<i>never M have been [vvn*]</i>	1	45	0,10	0,50

**Table 9.** Third summary table for the spoken language

The table 9 indicates more results than the table 8. It includes some results for all the positions except for the eM position for *never* in COCA; the BNC has again lower numbers, and only 4 positions are covered. The most interesting point is the fact that the mM position is more frequent than the eM position for both *not* and *never* in COCA. The same results were also demonstrated by the table 4 for the written language. The most frequent position is the M position, but this time there is a difference between individual corpora for the contracted form. The contracted form *n't* is 1/3 more frequent in BNC compared to *not*, COCA shows two times higher frequency for the free morpheme *not* compared to *n't*. The second highest frequency is the iM position for the adverb *never*.

	BNC - spoken	COCA - spoken	Frequency BNC	Frequency COCA
<i>M not be [vvn*]</i>	202	3057	20,20	33,97
<i>M n't be [vvn*]</i>	351	2158	35,10	23,98
<i>M be not [vvn*]</i>	0	4	0,00	0,04
<i>M never be [vvn*]</i>	597	614	59,70	6,82
<i>M be never [vvn*]</i>	1	0	0,10	0,00
<i>never M be [vvn*]</i>	0	5	0,00	0,06

**Table 10.** Fourth summary table for the spoken language

The table 10 also shows the highest numbers for the M position. *Never* is the most frequent one in the BNC, followed by the contracted form *n't*, particle *not* as a free morpheme is the most frequent in COCA followed by *n't*; *never* stands in the third place in the M position. The iM position occurs only in COCA. The rare eM position is also more frequent in COCA for the particle *not*.

	BNC - spoken	COCA - spoken	Frequency BNC	Frequency COCA
<i>M not be [vvg*]</i>	36	646	3,60	7,18
<i>M n't be [vvg*]</i>	115	1026	11,50	11,40
<i>M be not [vvg*]</i>	1	12	0,10	0,13
<i>M never be [vvg*]</i>	0	10	0,00	0,11
<i>M be never [vvg*]</i>	0	0	0,00	0,00
<i>never M be [vvg*]</i>	0	1	0,00	0,01

**Table 11.** Fifth summary table for the spoken language

The highest frequency in the table 11 is represented by the M position. The contracted form *n't* is more frequent in both corpora. The second highest is the eM position for the particle *not* with slightly higher frequency in COCA. The iM position showed only one token in COCA.

The spoken data differs from the written data especially in the way that the contracted form *n't* is more frequent in the BNC. It seems that language economy works here. The tables 8 and 11 showed lower numbers than the corresponding tables 9 and 10. It means also that the complex verb phrases with a modal verb end more frequently with a verb in a past participle, not in a present participle. The mM position was more frequent than the eM position in the table 9; in general, the iM position was more frequent in the COCA than in the BNC.

To sum up, the tables for both spoken and written language show a big diversity concerning the individual positions for the negators. Some positions are also very rare. This results do not agree with Quirk et al. (1985, 490) who predicted the adverbs are able to appear in all given positions. The native speakers followed the traditional rules that the negator is preferably placed after the first modal verb. Some positions were not found at all, there are especially few data for the eM position. This demonstrates that the constituent negation of the main verb or the verb phrase is essentially so rare as not to show up. Therefore it is presented another part of the research: the questionnaire.

## 4.2 The English Negation Questionnaire

As I mentioned in the methodology chapter, I thought that the corpora research would help me find if the negator in front of a lexical verb in a VP causes clause or constituent negation, but it did not. The research showed how carefully the speakers adhere to the formal patterns of grammar. So I had to find out a new tool to help me find the answer, and I made a questionnaire. It was not perfect, but it went pretty unambiguously in my direction.

This part will demonstrate the results from three groups of native speakers of English: the first group contains native speakers living in Düsseldorf, the other two tables represent Irish students of linguistics, one group are beginners, the other intermediate students. The only way to see the general interest of my results is to put all the test subjects together, but I will first discuss the results for each group separately, to focus on particularities and some interesting details.

There were 6 native speakers in the first group. Those 5 people come from Ireland, one from England, and they live in Düsseldorf nowadays. This was an interesting group because 4 people qualified as informants by successfully understanding the grammatical background examples. Following table 12 shows their results.

Native speakers Düsseldorf		FN	PN	P
5.	<i>That boy must have been not finishing his homework on time.</i>	3	1	0
8.	<i>She must have not been telling the truth.</i>	4	0	0
14.	<i>James and Mark might have been not joking about having robbed a bank.</i>	1	2	1
18.	<i>Housework may have been not thought honourable.</i>	1	3	0
19.	<i>Her parents must have never been buying them chocolate when they were little.</i>	3	1	0
23.	<i>This is being not painted on purpose.</i>	3	1	0

**Table 12**, Native speakers Düsseldorf results

The table 12 contains six sentences from the questionnaire. The numbers on the left show the order of placement in the questionnaire (see figure 4). The last three columns represent the number of people who chose that the sentence is fully negative (FN), part of the sentence is negative (PN), or that the sentence is positive (P).

The sentence 5 contains the negator *not* in front of the lexical verb, but three subjects decided for FN, and only one for PN. The sentence 8 is marked as fully negative by all subjects. The negator *not* is in the mM position, between the second and third auxiliary. That might be the reason to think that a negator in the mM position causes clause negation.

The sentences 14 and 18 show quite different results. The sentence 14 contains not only one positive answer, but only one fully negative and two partially negative answers. The reason might be that the negator *not* precedes the lexical verb *joking* in the eM position, so some subject decided that they feel that it is partially negative for them.

The similar situation can be seen in the sentence 18. Only one subject considered it as fully negative, other three agreed that it is partially negative.

The sentence 19 contains the negator *never* in the mM position. 3 subject out of 4 agreed that it is fully negative, only one decided for PN. From the sentences 8 and 19, it can be suggested that a negator in the mM position is very likely to be marked as clause negator.

The last sentence 23 shows the same result as the previous one. Three subjects marked it as FN, one as PN.

I would also like to mention the distinction between the individual speakers. 2 speakers marked 4 sentences as FN, 2 sentences as PN. One subject decided that all the sentences I was testing are fully negative (FN). One speaker was different because she decided that 4 sentences are PN, one is P and one FN. Generally, the not unanimous meaning prevailed that the sentences are rather fully than partially negative. Only one speaker preferred PN over FN.

The following tables 13 and 14 demonstrate the results of the Irish native speakers. There were 5 - 6 people out of 10 in each group who qualified as subjects.

The table 13 shows the result of the first group of the native speakers of Ireland:

Native speakers Ireland, beginners		FN	PN
5.	<i>That boy must have been not finishing his homework on time.</i>	2	3
8.	<i>She must have not been telling the truth.</i>	4	1
14.	<i>James and Mark might have been not joking about having robbed a bank.</i>	1	4
18.	<i>Housework may have been not thought honourable.</i>	2	3
19.	<i>Her parents must have never been buying them chocolate when they were little.</i>	2	3
23.	<i>This is being not painted on purpose.</i>	3	2

**Table 13**, Native speakers Ireland results, beginners

The sentence number 5 shows higher results for PN than FN. The sentence 8 was marked as fully negative in 4 cases out of 5. The negator in the mM position thus demonstrates to be the one that causes clause negation. This result is the same as the result in table 12 for the sentence 8. FN answers were preferred.

Quite different results are shown by the sentence 14. Four people think that it is partially negative, and only two consider the sentence fully negative. In this case, the negator *not* in the eM position immediately precedes the lexical verb *joking*.

The sentences 18 and 19 demonstrate the same results where PN slightly prevails over FN. The sentence 18 contains the negator *not* which precedes the lexical verb *thought*. The result suggests that the negator in the eM position could be both clause and constituent negator.

The sentence 23 shows 3 answers as fully negative though. Even if the negator appears in the eM position, the sentence is preferred to be fully negative. This result corresponds to the corresponding result in the table 12 where FN was also preferred.

There were also big differences between individual native speakers. One marked all six sentences as FN, other two marked 5 sentences as FN. The last 2 subjects preferred PN in 4 sentences.

The last tested group are intermediate students of linguistics whose results are recorded in the table 14:

Native speakers Ireland, intermediate		FN	PN	P
5.	<i>That boy must have been not finishing his homework on time.</i>	3	3	0
8.	<i>She must have not been telling the truth.</i>	6	0	0
14.	<i>James and Mark might have been not joking about having robbed a bank.</i>	2	4	0
18.	<i>Housework may have been not thought honourable.</i>	2	3	1
19.	<i>Her parents must have never been buying them chocolate when they were little.</i>	4	2	0
23.	<i>This is being not painted on purpose.</i>	5	1	0

**Table 14**, Native speakers Ireland results, intermediate

The sentence 5 shows 3 results for FN and 3 results for PN. The sentence 8, on the other hand, clearly demonstrates 100% of the answers as FN. The negator *not* stands in the mM position, which causes clause negation without any doubt.

The sentence 14 is different in that sense that 4 results against 2 speak for the PN. The similar results were found in the tables 12 and 13. The negator *not* in the eM position precedes the lexical verb *joking*.

The following sentence 18 indicates even more ambiguous results. 2 answers are marked as FN, 3 answers as PN and one answer as P. The speakers chose to prefer PN over FN in this sentence.

The sentence 19 contains 4 FN results and 2 PN results. The negator *never* occurs in the mM position, so it is likely that *never* is a clause negator rather than constituent negator here. The results are not so unanimous as in the sentence 8 where the negator *not* was also in the mM position, but the results for FN still prevail.

The last sentence 23 indicates that the FN answers are more dominant than the PN answers even if the negator *not* precedes the lexical verb *painted*. This result also corresponds with the other two in the tables 12 and 13 which also prefer FN.



If I look back at the individual speakers, three of them preferred FN, results of one speaker showed 3 FN and 3 PN, other two speakers preferred PN. Interesting is the fact, that the speaker whose answer were otherwise marked as FN, circled option P for the sentence 18.

I would like to mention one more thing concerning all the chosen speakers. They all qualified on 100% for qualifying PN sentences 3, 10, 13 and 20. The following table 15 demonstrates the results of all 3 groups.

<b>All native speakers</b>		FN	PN	P
5.	<i>That boy must have been not finishing his homework on time.</i>	8	7	0
8.	<i>She must have not been telling the truth.</i>	14	1	0
14.	<i>James and Mark might have been not joking about having robbed a bank.</i>	4	10	1
18.	<i>Housework may have been not thought honourable.</i>	5	9	1
19.	<i>Her parents must have never been buying them chocolate when they were little.</i>	9	6	0
23.	<i>This is being not painted on purpose.</i>	11	4	0

**Table 15**, summary table for all native speakers of English

The table 15 demonstrates all results in one table. The sentences 8, 19 and 23 show the prevailing FN answers. The sentence 5 shows slightly more FN than PN answers. The sentences 14 and 18 indicate diverse answers for FN, PN and P. The results are not as unambiguous as it was suggested by the literature in the chapter 1.

Here I will present one more table that will show the percentage of the FN answers for each sentence:

<b>Sentence number</b>	<b>Percentage of the FN results</b>
5.	53,3%
8.	93,3%
14.	26,6%
18.	33,3%
19.	60,0%
23.	73,3%

**Table 16**, Percentage of the FN results

The last table 16 conclusively demonstrates that there were 4 sentences that had higher percentage than 50% for the FN results. The sentences 14 and 18 had lower percentage for FN, so only 1/3 of the test sentences are judged as PN, the other sentences are judged as FN. 2/3 of the answers unconsciously disagree with the hard core grammar books' analysis, and

the group of subjects considers not overwhelmingly, but clearly the test sentences to be FN rather than PN.

This part provided results from the two corpora, COCA and the BNC, it examined the frequency of individual positions and compared the spoken and the written language. The questionnaire results continued the research of especially the mM and eM position and examined if the speakers feel that a negator in these positions causes that the sentences are perceived as fully or partially negative.

## 5 CONCLUSION

The aim of this thesis was to find out if there is any difference between clause and constituent negation inside a VP. I focused on the two negators *not* and *never* that were placed in all possible positions within a VP which started with a modal verb, and I searched through two English corpora the COCA and the BNC about their occurrence and frequency. I picked eight modal verbs for the research: *should*, *would*, *must*, *can*, *could*, *might*, *may* and *need*. There were different verb phrases with two or three auxiliaries, lexical verbs were in the past or the present participle.

It appeared that the most overwhelmingly frequent position was the M position, in which a negator follows the first modal/ auxiliary verb. The subjects thus followed the formal grammatical rules. The results also showed that *not* is the most frequent negator in the written English, however, the contracted form *n't* prevailed in the spoken English in both corpora, and especially in the BNC. *Never* occurred in the M position on the third place. The mM position was slightly more frequent than the eM position in tables 3, 4 and 8 and 9; higher frequency occurred in COCA. The eM position in other tables occurred in the American English more frequently than in the British English. There was only one big exception in the tables 2 and 7, when *never* was preceding a lexical verb in the past participle. The frequency of *never* in the eM position was cca 3 - 4x higher than the frequency of *not* which agrees with Veselovská (2009, 58) who describes the eM position for *never* as acceptable compared to *not* which is much more restricted (see the example (51)). The last iM position for the negative adverb *never* occurred much more frequently in the COCA than in the BNC. There were sometimes no data to be found in the BNC. It shows that the American English accepts more varieties and considers them as grammatically admissible.

I was hoping to find some noticeable frequency of partial negation in the corpora, but I found instead that the subjects put the negators *not*, *n't* and *never* in the M position and they adhere to formal patterns of grammars that say that a negator in a VP should follow the first modal/ auxiliary verb. They do not put the negators in all various slots as Quirk (1985, 490) suggested for the adverbs. The research says that the eM position which is the position for the constituent negation in a VP is so rare as to show up not very frequently.

The hypothesis was that clause and constituent negation are not as different from each other in some cases such as in front of a lexical verb. An example (57) *He might be not*

*suffering* supposed that there are two surface structures for clause and constituent negation, but only one deep structure. I proposed that the constituent negation is a special case of the clause negation in this grammatical context.

The questionnaire compared to the corpora research confirmed my hypothesis clearly. Those people who qualified as the subjects preferred FN (the fully negative sentences) over PN (the partially negative sentences) in 4 sentences out of 6; these 4 sentences had more than 50% FN answers, the other 2 sentences had less than 50% FN answers as the table 16 presents:

Sentence number	Percentage of the FN results
5.	53,3%
8.	93,3%
14.	26,6%
18.	33,3%
19.	60,0%
23.	73,3%

**Table 16,** Percentage of the FN results

This agrees with my hypothesis that clause and constituent negation are not as different from each other as they were presented in the literature I studied. The VP constituent negation is in fact just another structure of the clause negation with the same truth value. The results agree with Hajičova (1975, 84) who goes back to the generative grammar and says that a transformation does not change the truth value, and thus constituent and clause negation merge in this case.

Even though the subjects marked all the true constituent negation sentences 3, 10, 13 and 20 as PN in all cases, they did not feel that the sentences 5, 8, 14, 18, 19 and 23 should be the same. So the speakers unconsciously disagree with the analysis on constituent negation that those sentences are PN, and they consider the test sentences to be rather FN than PN, so their answers demonstrate that the feeling for the clause negation is stronger than the one for the constituent negation, and the subjects confirmed the hypothesis of this particular thesis.

## 6 SHRNU TÍ

Tato bakalářská práce se zabývá větnou a částečnou anglickou negací ve slovesných frázích, které obsahují záporny *not* a *never*. Hlavním cílem je prozkoumat, zda se tyto dva typy negace od sebe liší.

První kapitola porovnává různé typy negací. Je zaměřená teoreticky a zkoumá vlastnosti větné a částečné negace, stejně jako rozdíly mezi záporny *not* a *never*. Vychází z několika zásadních zdrojů. Prvním jsou skripta docentky Veselovské *A Course in English Syntax* (2009), které srozumitelně vysvětlují rozdíly mezi jednotlivými typy negací i jejich použití ve větě. Další literaturou jsou gramatiky od Quirka a kol. *A Comprehensive Grammar of the English Language* (1985), Huddlestona a Pulluma *The Cambridge Grammar of the English Language* (2002) a také Bibera a kol. *Longman Student Grammar of Spoken and Written English* (2002). Nejzásadnějším dílem, které podrobně hovoří o částečné negaci, je práce Edwarda S. Klimy "Negation in English" (1964), která se na problematiku negace dívá kriticky i analyticky. Zkoumá částečnou negaci při různých podmínkách jako je inverze, kvantifikátory či doplňkový materiál. Kapitola se rovněž zamýšlí nad dvojí možností chápání negace stojící před významovým slovesem.

Další část kapitoly se zaměřuje na vlastnosti dvou záporů *not* a *never* a na jejich výskyt ve větě i slovesné frázi. Popisuje jejich hlavní rozdíly i podobnosti. Poslední část popisuje jednotlivé pozice adverbii ve větě podle Quirka a kol. (1985, 490).

Druhou kapitolou je hypotéza, která předpokládá, že negace předcházející významovému slovesu ve slovesné frázi může být chápána jako dvě povrchové struktury větné negace a částečné negace. Avšak celková hloubková struktura je jen jedna, tudíž i jedna pravdivostní hodnota. Tyto dvě negace nejsou protiklady s hodnotami 1 a 0 jako kladná a záporná věta, ale mají jen jednu společnou hodnotu 0 a proto by i částečná negace v tomto případě měla splývat s větnou negací. Hypotéza byla uvedena na příkladu (57) *He may be not suffering*.

Třetí kapitola popisuje metodologické postupy. Prvním z nich je kvantitativní výzkum dvou anglických korpusů: *British National Corpus* (BNC) a *Corpus of Contemporary American English* (COCA). Zkoumá výskyt jednotlivých pozic záporů *not* a *never* a jejich frekvenci, přičemž jsou výsledky zapsány do tabulek. Zvlášť je zaznamenán psaný a mluvený jazyk. Druhá metodologická část se zabývá dotazníkem, který má za úkol nejen prověřit

gramatické myšlení subjektů a tím je kvalifikovat jako vybrané subjekty, ale i odhalit, jestli záporny blíže významovému slovesu jsou chápány jako větná nebo částečná negace.

Čtvrtá kapitola popisuje výsledky z obou výzkumů. Uvádí, že nejčastější pozicí v drtivé většině případů pro zápor je M pozice, kde zápor stojí za prvním modálním/ pomocným slovesem. Nejčastějším záporem je *not* v psaném jazyce, v mluveném jazyce je to zkrácená forma *n't*. mM pozice se objevuje častěji než eM pozice v tabulkách 3, 4, 8 a 9. V ostatním tabulkách, kde není mM pozice zastoupena, se eM pozice v malém procentu vyskytuje také, největší výskyt je však u záporu *never* v tabulkách 2 a 7, kde mnohonásobně převyšuje zápor *not*, což souhlasí s Veselovskou (2009, 58), která tyto pozice uvádí jako přijatelné pro adverbium *never*, zápor *not* je pro tuto pozici však značně omezen (viz př. (51)). Bylo zjištěno, že v této pozici COCA svým počtem 3 - 4x převyšoval BNC, z čehož plyne, že americká angličtina připouští více variací.

Výsledky z dotazníku byly rozděleny do tří skupin podle jednotlivých subjektů a následně byla vytvořena tabulka pro všechny subjekty dohromady. Jejich odpovědi na kvalifikační otázky 3, 10, 13 a 20 byly jednomyslně zodpovězeny jako PN, ale testovací otázky 5, 8, 14, 18, 19 a 23 zdaleka nebyly tak jednoznačné. Místo PN ve 4 větách ze 6 převažovala odpověď FN pro úplnou negaci u více než 50% subjektů. Další dvě věty byly zodpovězeny jako FN u méně než 50% subjektů. Z toho vyplývá, že rodilí mluvčí nesouhlasí s tvrzením, že věty obsahující *not* ve větné frázi před významovým slovesem jsou chápány jako částečná negace. Tento výzkum naopak potvrdil moji hypotézu, že tyto dvě negace v tomto případě splývají a jsou chápány většinou rodilých mluvčí jako větná negace.

Anotace

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Název práce: Clausal and Constituent Negation Based on the Negators *Not* and *Never*

Vedoucí bakalářské práce: prof. Joseph Emonds, M.A., PhD.

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Klíčová slova: clausal negation, constituent negation, lexical negation, negative adverb *never*, negative particle *not*, positions of negators within a verb phrase, methodology, BNC, COCA, questionnaire, native speakers, Ireland, modal verbs *should*, *would*, *must*, *can*, *could*, *might*, *may* and *need*, truth value.

Charakteristika bakalářské práce: Tato bakalářská práce se zabývá větnou a částečnou negací ve slovesné frázi se záporny *not* a *never*. První kapitola porovnává tyto dva druhy negace ze sémantického a syntaktického hlediska za použití literatury autorů jako Quirk a kol., Huddleston a Pullum, Edward S. Klima, atd. Dále zkoumá rozdíly a podobnosti mezi záporny *not* a *never*. Druhá kapitola stanovuje hypotézu, že větná a částečná negace ve slovesné frázi splývají. Třetí kapitola se zabývá metodologií získání dat ze dvou korpusů COCA a BNC a popisuje dotazník anglické negace pro rodilé mluvčí. Ve čtvrté kapitole jsou prezentovány výsledky obou částí výzkumu s pomocí tabulek. Pátá kapitola přináší konečný úsudek.

Characteristics of the bachelor thesis: This bachelor thesis deals with clausal and constituent negation in a verb phrase with the negators *not* and *never*. The first chapter compares the two types of negation and their semantic and syntactic properties. It uses literature from Quirk et al., Huddleston and Pullum, Edward S. Klima, etc. It further examines differences and similarities between the negators *not* and *never*. The second chapter defines the hypothesis: clausal and constituent negation merge inside a VP. The third chapter deals with the methodology of getting the data from the two corpora COCA and the BNC and it describes "The English Negation Questionnaire" applied on the native speakers of English. The fourth chapter presents the results from both parts of the research. The fifth chapter brings the final conclusion.

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