

Negation of existential quantification in English and Norwegian

A comparative analysis

Jeanette Birtles



LING4190 – MA thesis in linguistics

Department of Linguistics and Scandinavian Studies
UNIVERSITY OF OSLO

Autumn 2019

Negation of existential quantification in English and Norwegian

A comparative analysis

Jeanette Birtles



LING4190 – MA thesis in linguistics

Department of Linguistics and Scandinavian Studies
UNIVERSITETET I OSLO

Autumn 2019

© Jeanette Birtles

2019

Negation of existential quantification in English and Norwegian – A comparative analysis

Jeanette Birtles

<http://www.duo.uio.no/>

Print: Reprosentralen, Universitetet i Oslo

Abstract

In English and Norwegian, the negation of existential quantification can be expressed through negative quantifiers (e.g. *nothing*) or negation + indefinite quantifiers (e.g. *not + anything*).

The aim of this thesis is to find in what context each of the two types is preferred and what the underlying reasons might be. I compared the two types of negation to each other, and in addition I conducted a cross-linguistic comparison between English and Norwegian.

For the biggest part, the findings in this paper are based on a corpus study and analysis. The source of the main empirical data was the Norwegian – English – German parallel corpus.

This is part of the Oslo Multilingual Corpus and contains original texts from Norwegian, English and German and their translations to the other two languages respectively. Roughly 700 examples containing either of the two negation types were examined which resulted in a list of several syntactic conditions and pragmatic effects.

The syntactic conditions include a restriction/dispreference against negation + indefinite quantifiers in subject position and elliptical constructions; a difference in scope between the two constructions in sentences that contain modals or idioms, and finally, Norwegian (but not English) sentences include a restriction on the use of negative quantifiers in sentences containing modals or auxiliaries and a main verb. I argue that in English, negation + indefinite quantifiers are blocked in subject position altogether whilst in Norwegian, they are highly marked. I argue that the semantics of negative quantifiers and a negation + indefinite quantifier is the same, but there is a difference between the Norwegian negation + indefinite quantifier construction and the English one, in that the English indefinite quantifiers (*anyone/anybody/anything*) are NPIs whilst the Norwegian corresponding quantifiers are not NPIs. In object position, the difference between the two ways of negating existential quantification lies in the pragmatics. Here, negative quantifiers are the marked type, meaning that they carry nonstereotypical M-implicatures, whilst negation + indefinite quantifiers carry stereotypical I-implicatures. I also argue that indefinite quantifiers are more open to contextual restriction of their domain, i.e. they tend to quantify over a limited set, whilst negative quantifiers have a higher tendency to quantify over an unlimited set. Partly anchored in this, negative quantifiers often carry emphasis, negative value, or the lack of hope. I conclude that there are syntactic and pragmatic conditions and that they are similar but not equal in English and Norwegian.

Acknowledgements

This thesis would not have been possible without the support of a number of wonderful and knowledgeable people.

First and foremost, I am extremely grateful to my supervisors Pritty Patel-Grosz and Patrick Grosz. Thank you for your never-ending patience, profound belief in my abilities and unfailing ability to push me forward whenever it was needed. Thank you for always standing by my side with a jump starter for my creativity, good advice and constructive criticism. This thesis would not have been possible without you two.

Many thanks also to my parents who watched the kids whenever they could, so I could read, write and think. Thank you for everything I have learnt and still learn from both of you every day. My mother Eleonore Wunder who has been my biggest supporter since the day I was born. Thank you for sparking my love for literature and language. Thank you for taking my call anytime and discussing world politics, history, literature and knitting problems with me whenever I needed a break from this thesis. My father Roland Wunder, who taught me the real value of ambition. You led me up many towers and stairs through my life, both figurative and literal. You are the reason I never stopped trying, learning and climbing. You always said I can do it. So, I am doing it.

My son Alfred who with his genius 4-year-old ideas makes me laugh and let go. Thank you for hugs, tickle fights and Lego castles. My daughter Amelia who still believes I am the most important person on this planet. Thank you for hugs, snuggles and oh, so much love.

I also wish to thank my mother-in-law Marianne Foss Birtles for always being there for the kids, giving me valuable extra time to spend on this thesis.

Last but certainly not least I must thank my husband Kjetil Birtles. Thank you for being my best friend, critic, informant, teacher, chef, and everything I could ever wish for. Thank you for your unwavering support and your patience over the last few years. Thank you for the figurative kicks in the butt and the most needed cups of tea. Thank you for never making me feel guilty about spending more time on the thesis than with my family. Thank you for always reminding me why I am doing all of this.

Table of contents

Abstract	V
Acknowledgements	VII
Table of contents	IX
1 Introduction	1
1.1 The core puzzle.....	1
1.2 The proposal in a nutshell.....	3
1.3 Methodology.....	4
1.3.1 Collection and selection of material.....	7
1.4 Structure of the thesis	10
2 Background	12
2.1 Syntax and semantics of negation	12
2.1.1 Negative quantifiers	12
2.1.2 Negation + indefinite quantifier	14
2.2 General data overview	17
2.2.1 Empirical data overview.....	17
2.2.2 Quantitative distribution.....	26
3 The syntax of negation	38
3.1 Core proposal for the syntax.....	38
3.2 Observations	38
3.2.1 Elliptical clauses.....	38
3.2.2 Subject position of the sentence	40
3.2.3 Modal auxiliaries and other cases which introduce scopal ambiguity	41
3.2.4 Norwegian: Perfectum and modal constructions require neg + noe/noen	42
3.3 Analysis	44
3.3.1 The syntax of negative quantifiers	44
3.3.2 The syntax of neg + indefinite quantifiers	46
3.3.3 Scope differences	60
4 The semantics of negation.....	64
4.1 Core proposal for the semantics	64
4.2 Observations	64
4.2.1 The semantics of negative quantifiers.....	64

4.2.2	The semantics of neg + indefinite quantifiers	66
4.3	Analysis	69
4.3.1	Are Norwegian noe/noen NPIs?.....	69
4.3.2	Do negative quantifiers mean the same as the corresponding neg + indefinite quantifiers?	72
5	The pragmatics of negation	76
5.1	Core proposal for the pragmatics.....	76
5.2	Observations	76
5.2.2	Quantitative distribution.....	78
5.3	Analysis	79
5.3.1	Subject position.....	80
5.3.2	The object position	82
6	Conclusion.....	95
	References	97

1 Introduction

1.1 The core puzzle

Some languages, like English or Norwegian, have – among other types – two competing ways of expressing the negation of existential quantification. The one is negation with a negative quantifier (NQ) like English *nothing* or Norwegian *ingenting* ‘nothing’ (1) and the other is with negation + indefinite quantifier (neg + indefinite quantifier), like the negative polarity item *anything* in English or *noe* ‘anything’ in Norwegian (2).

In this thesis, I examine the use of these competing types of negation in English and Norwegian. To narrow down the empirical scope I base this thesis on, I will look at the negative quantifiers *nothing*, *no one* and *nobody*, and the corresponding constructions containing a negation and an indefinite quantifier (neg + indefinite quantifier) *not + anything*, *not + anyone* and *not + anybody* in English. In Norwegian, the negative quantifiers examined are *ingenting* ‘nothing’ and *ingen* ‘no one’ and neg + indefinite quantifiers are constructions with *ikke* ‘not’ and *noe* ‘anything’ or *noen* ‘anyone’. An example of the use of negative quantifiers to express the negation of existential quantification is given in (1a) for English and (1b) for Norwegian.

(1) Negation with negative quantifiers:

- a. English: *I see no one.*
- b. Norwegian: *Jeg ser ingen.*
I see nobody
‘I see nobody.’

Both in English and in Norwegian, the negative quantifier can be exchanged with a neg + indefinite quantifier construction in this type of sentence, to express the negation of existential quantification. Example (2a) shows an English sentence with the negation *not* and the NPI *anyone*. Example (2b) shows the Norwegian counterpart, including the negation *ikke* ‘not’ and the pronoun *noen* ‘anyone’.

(2) Negation with neg + NPI / neg + *noe/noen*

- a. English: *I don't see anyone.*

- b. Norwegian: *Jeg ser ikke noen.*
I see not anyone
'I don't see anyone.'

By contrast, German is a language that shows little to no distinction of this type, as in German, the negation of existential quantification is predominantly expressed through negative quantifiers. This is shown in (3), where (3a) shows an acceptable German sentence with a negative quantifier and (3b) shows the same sentence with neg + indefinite quantifier, which is unacceptable. This can be puzzling for L2 learners of English and Norwegian, who are taught these two ways of expressing negative quantification, without any clear explanations for the differences.

(3) German:

- a. *Ich sehe niemanden.*
I see no one
b. **Ich sehe nicht (irgend)jemanden.*¹
I see not anyone/someone

Though English and Norwegian are the two main languages examined here, I bring in German examples whenever it seems helpful throughout this thesis in order to clarify. Based on German not having the distinction between negative quantifiers and neg + indefinite quantifiers, it presented itself as a good choice for the input data in the corpus search, as a German negative quantifier can be translated with a negative quantifier or neg + indefinite quantifier in English and Norwegian.

The main object of research of this thesis is thus to determine the differences between these two types of negation, especially considering syntactic and semantic conditions in their surroundings as well as pragmatic effects of their use. In other words, the research questions I seek to answer are:

1. When do we use negative quantifiers and when do we use neg + indefinite quantifiers in English and Norwegian respectively?

¹ In German, *irgendjemand* is often cited as a counterpart of English 'anyone', and *jemand* would be the counterpart of 'someone'.

2. Why do we use either of the two types in the positions provided by the answer to 1., i.e. how do the two types of negation differ in syntax, semantics and pragmatics in these two languages?
3. Do these two types of negation behave the same in English and Norwegian or differently, and if they behave differently, in what way?

1.2 The proposal in a nutshell

I propose that the difference between negative quantifiers and neg + indefinite quantifiers is anchored in syntax and pragmatics. The syntax restricts the use of neg + indefinite quantifier in specific positions, like in subject position, elliptical clauses and when used in combination with modal auxiliaries or other constructs which can introduce scopal ambiguities. This is due to licensing conditions of the NPI in English and blocking of the structurally more complex neg + indefinite quantifier in subject position. In Norwegian these syntactic restrictions are weaker than in English. I argue *noe/noen* ('something/anything'/'someone/anyone') to not be NPIs, which means that the NPI licensing conditions cease to apply. The blocking of the structurally more complex neg + indefinite quantifier is also much weaker in Norwegian than in English, this seems to be anchored in the fact that in Norwegian the negation and the indefinite quantifier combine into one constituent in subject position, which equates this construction with negative quantifiers. In Norwegian only, constructions with participles or modals which give rise to an additional interfering element between the negation and the object, only seems to allow for neg + indefinite quantifier.

Under conditions where the syntax doesn't restrict the use of negative quantifiers, pragmatic effects will arise when negative quantifiers are used. These pragmatic effects can be sorted into 4 overarching groups: contextual restriction is less prominent, utterances have more emphasis, the utterance is more restricted in terms of hope/expectation and finally, sentences containing a negative quantifier appear more negatively evaluative than sentences containing neg + indefinite quantifier. In this thesis I provide evidence which clearly points to Horn's Division of Labor (Horn 1984) as the main cause for the distinction in use of the two types of negation and the resulting pragmatic effects.

The syntactic structure of negative quantifiers and neg + indefinite quantifiers differs in that, in first, the negation and the quantifier are merged into one word and only occupy one

position in the syntactic tree. In the latter, the negation and the indefinite quantifier are separate and occupy two distinct positions in the tree. As already mentioned above, in English, *neg + NPI* also underly NPI licensing conditions, whilst negative quantifiers do not. In Norwegian, in subject position, the negation and the indefinite quantifier make up one constituent (i.e. one unit) and thereby structurally assimilate to an negative quantifier which allows for their use in subject positions (which English does not).

In terms of semantics, NPIs are known to have domain widening properties. In Norwegian, the indefinite quantifiers *noe/noen* ‘something/anything’/‘someone/anyone’ are not NPIs according to my analysis, and therefore have no domain widening effects. I propose however, that this has no semantic impact in this specific construct and can therefore be disregarded.

1.3 Methodology

In order to make clear assumptions and build a good theory, it is important to work with realistic data and use natural examples. Due to the syntactic, semantic and pragmatic properties of negation, the ideal data to base this analysis on are full sentences with as much information about contextual circumstances and prior utterances as possible. As introduced above, the overarching goal of this thesis is to find out in which surroundings we use negative quantifiers vs negation + indefinite quantifiers, for English and Norwegian respectively. In order to achieve this, the data had to contain both negative quantifiers and *neg + indefinite quantifiers* in both languages, preferably in – at least to some extent – comparable environments.

My method of choice, which seemed to fulfill all my initial data requirements, was to collect data from a corpus. With this method I was able to search directly for relevant keywords (e.g. *nothing*) or combinations of words (e.g. *not + anything*)² and have hardly any irrelevant data to sort out (e.g. sentences which didn’t contain any of the two types of negation I was looking for). Additionally, corpus data is more reliable than for example introspective methods, as the distinction in the use of negative quantifiers and negation + indefinite quantifiers appears to be quite subtle and intuitions are hard to formulate. Follow-up questions can also be answered quite easily, as it is possible to search for very specific types of constructions, completely

² When searching for combinations of words, I was also able to control how many words can stand between the two. I selected max. 5 words and checked all results manually for their relevance (i.e. if *not* really is the licenser of *anything*)

without causing a bias (as tends to be a risk when basing data collection on questionnaires or interviews with informants).

Negation is very common in spoken and written language and there are no indications that the use of the different types of negation varies significantly between spoken and written language, which led me to choose a written corpus for my data collection. Thus, the core data used in this analysis is based on collection from the Oslo Multilingual Corpus (OMC). This corpus contains a range of fictional and non-fictional texts from several different languages as well as their translations whenever available. My research was based on data from the Norwegian-English-German parallel corpus which contains 22 Norwegian original texts (289,230 words), 33 English original texts (432,500 words) and 21 German original texts (287,400 words) at the time of my research³. Most of the sub-corpus texts are fictional, and all of them have translations to the two other languages respectively. The Norwegian-English-German parallel corpus consists of three different databases, the No-En-Ge database, which contains Norwegian original texts and their translations to English and German, the En-Ge-No database which contains English original texts and their translations to German and Norwegian and finally the Ge-En-No database, which contains German original texts and their translations to English and Norwegian.

I chose to base a big part of the research on the Ge-En-No database. My reason for proceeding this way was to ensure that the English and Norwegian data I use are both translations of the same original text with the exact same context. As noted earlier, German doesn't appear to have the distinction between negative quantifiers and neg + indefinite quantifiers (see example (3)). This also means that it is easy to find a large range of examples with different contexts and conditions when searching for negative quantifiers in German, without the translators being influenced by which type of negation was used in the original. When searching for example for the German quantifier *nichts* 'nothing' in the Ge-En-No database, I found the examples in (4) and (5), where (4) is an example, where German *nichts* 'nothing' corresponds to negative quantifiers in English (4b) and Norwegian (4c) and (5) shows an example where German *nichts* 'nothing' (5a) corresponds to neg + indefinite quantifier in the two other languages (5b-c). The two examples are purposefully taken from the same text in order to show that the same translators chose to translate two different instances of *nichts*

³ <https://www.hf.uio.no/ilos/english/services/knowledge-resources/omc/sub-corpora/> (29.9.2019)

‘nothing’ from the same original German text to two different types of negation in Norwegian and English.

(4) *Nichts* corresponding to negative quantifier (OMC: EC1D.1.7.s25⁴)

- a. German: *Er tat **nichts** lieber als Theaterspielen.*
he did nothing rather than play-acting
- b. English: *There was **nothing** he liked better than play-acting.*
- c. Norwegian: *Det var **ingenting** han likte bedre enn å spille teater.*
there was nothing he liked better than to play theatre.

(5) *Nichts* corresponding to neg + indefinite quantifier (OMC: EC1D.1.9.s25)

- a. German: *(...) auch die Mutter fragte ihn dann **nichts**, nicht einmal auf deutsch.*
(...) also the mother asked him then nothing not even in German
- b. English: *Mother herself wouldn't ask him **anything**, not even in German.*
- c. Norwegian: *Heller **ikke** mor spurte ham om **noe** da,*
either not mother asked him about anything then
ikke engang på tysk.
not even in German

The main disadvantage of using a corpus is the lack of “negative evidence” (i.e. judgements on unacceptable/unnatural examples). The corpus shows what is possible and acceptable, but it is not the best tool in judging if something is merely very rare or completely unacceptable. Another disadvantage when using written corpora is that stress or Norwegian tonem is not annotated. This can cause some difficulties when analyzing the data, as the Norwegian neg + indefinite quantifier construction can yield ambiguities which can be resolved through tonem (more on this in section 4.3.3).

To supply more data, this thesis contains several constructed examples, most of them are simple in structure and their purpose is to underline an observation made in (more complex) corpus data. All examples which do not come with a reference to either a corpus or another source have been constructed by me and have been judged acceptable / not acceptable by at least two native speakers. In some cases, the native speakers provided input, for example on

⁴ OMC stands for ‘Oslo Multilingual Corpus’, EC1 is the text ID for this specific text, D states that the text is originally German. The last number shows the page number.

change of meaning in minimal pairs. These are noted throughout the thesis. I personally am a native speaker of German and not of either English or Norwegian, so I have not made any personal judgements which would influence the analysis.

1.3.1 Collection and selection of material

For the first part of the data collection, I extracted an exhaustive list of all sentences that contained German *niemand* ‘no one’ or *nichts* ‘nothing’, from the entire Norwegian-English-German parallel corpus, meaning that the data included originals in all three languages and their translations. I used the German search words to get as many comparable hits in English and Norwegian as possible. German negative quantifiers can be translated with either negative quantifiers or neg + indefinite quantifiers in English and Norwegian, so using German as a search language was the easiest way to get results containing either of the two relevant types of negation. The extracted sentences represented the core data for the qualitative analysis. All in all, there were 1619 matches when searching for German *nichts* ‘nothing’ and 554 matches for the search on German *niemand* ‘no one’. When using *niemand* ‘no one’ as a search word, I included all lexemes which have the same lemma form, as to include instances where the word has a different case⁵ (i.e. nominative: *niemand*, accusative: *niemanden*, dative: *niemandem*). I then listed and marked the sentences as well as their translations, depending on what type of negation (“negative quantifier”, “neg + indefinite quantifier” or “other”) they contained in English and Norwegian. To illustrate, consider the following example (6). Here, what you can see is that German *nichts* ‘nothing’ corresponds to English *nothing* (6b) and Norwegian *ingenting* ‘nothing’ (6c).

(6) Example result (OMC: CF1D.1.s1049)

- a. German: *Aber ich merkte eigentlich überhaupt nichts.*
but I noticed actually absolutely nothing
- b. English: *But actually I noticed absolutely nothing.*
- c. Norwegian: *Men jeg merket egentlig ingenting.*
but I noticed actually nothing

After studying and marking the attested examples, my aim was to define, which surroundings allowed for which type of negation. In order to achieve this, I manipulated the sentences as

⁵ This was not necessary for *nichts* ‘nothing’ as it keeps the same form independent of case: nominative: *nichts*; accusative: *nichts*; dative: *nichts*.

follows. I exchanged the present type of negation with the other one, i.e. I exchanged negative pronouns with neg + indefinite quantifiers and vice versa. This resulted in minimal pairs whereof the one contained a negative quantifier and the other a neg + indefinite quantifier-type negation. (7) shows the manipulated version of the result sentences in (6). As both languages contained a negative quantifier in (6), the manipulated versions in (7) contain neg + indefinite quantifier. (A more detailed explanation of this process is given in section 2.2)

(7) Manipulated example result

- a. English: **But actually I didn't notice absolutely **anything**.*
- b. Norwegian: *Men jeg merket egentlig **ikke noe**.*
but I noticed actually not anything

I then asked native speakers to rate the resulting sentences for acceptability. I did this in order to determine whether there are conditions of any kind which restrict the use of one type of negation over the other. The native speakers judged the sentences on a three-point scale where 1 – “I could use this sentence”, 2 – “I wouldn't use this sentence, but I wouldn't react if another native speaker did” and 3 – “I wouldn't use this sentence and I would react if someone else did”. I decided to use a 3-point scale because I wanted to make answering easier for the informants, especially since the fine-grainedness of a bigger scale wasn't necessary for this purpose. I chose the paraphrases based on their ability to catch all judgements, without giving a “neutral” or “undecided” option. For the manipulated sentences in (7), the judgements were different for Norwegian and English. The English manipulated sentence was unacceptable (score: 3), whilst the Norwegian manipulated sentence was acceptable (score: 1,33).

Afterwards, I categorized the sentences whose minimal-pair counterparts were unacceptable in one of the languages L as either “Only NQ in L” (only negative quantifiers are possible in these surroundings) or “Only neg + indefinite quantifier in L” (only neg + indefinite quantifiers are possible in these surroundings), depending on which type of negation was acceptable.

All new sentences which were deemed acceptable by the native speakers, I then compared to the original sentences. I did this in order to determine the effects which follow from the use of one type of negation over the other. If their meaning was the same, and the type of negation was interchangeable without any side effect, I categorized them as “Anything is possible in

L”. From these sentences I extracted the type of surrounding which allows for unconstrained choice of negation-type. If the meaning changed when interchanging the type of negation, I categorized them as “Change of meaning in L”. These sentences shed light on the effects one type of negation shows, which the other type lacked.

My aim was to be able to generalize the conditions and effects that arise and be able to sort them into which linguistic subfield they belong (syntax, semantics, pragmatics) and thus answer the question as to when negative quantifiers are used and when negation + indefinite quantifiers are used. In order to achieve that, I reviewed and evaluated all original and manipulated minimal pairs according to which conditions and effects they illustrate for each of the two types of negation. This corpus annotation included which position the negation-type takes in the sentence (i.e. subject, object of adjunct), if the negation was absolute or contextually restricted (e.g. absolutely nothing vs. nothing of interest; more on contextual restriction in section 5.3), which grammatical case the quantificational DP stood in, if the sentence included implications which changed or were revoked when the type of negation changed, if it contained any kind of ambiguity, if the sentence is to be considered standard or poetic, what type(s) of verb the sentence had as well as any other properties that might be of importance to the type of negation used.

Based on this annotation, I found that syntactic conditions restricted the use of neg + indefinite quantifier in subject position, elliptical clauses and when used in combination with modal auxiliaries or other constructs which can introduce scopal ambiguities. An example for a syntactic condition is given in (8), namely the restriction of neg + indefinite quantifier in subject position.

(8) Example for a syntactic condition: neg + indefinite quantifier not allowed in subject position

**Not anyone is home.*

Additionally, for Norwegian, negative quantifiers can not be used in constructions containing participles or modals which give rise to an additional interfering element between the negation and the object. An example is given in (9), which contains the participle *sett* ‘seen’ between the auxiliary *har* ‘have’ and the NQ *ingenting* ‘nothing’.

(9) Example for Norwegian: NQ not allowed together with additional interfering element

Jeg har sett **ingenting.*

I have seen nothing

The pragmatic effects which arise when using negative quantifiers include the weakening of contextual restriction, utterances have more emphasis, the utterance is more restricted in terms of hope/expectation and finally, sentences containing NQs appear more negatively evaluative than sentences containing negative quantifiers. An example is given in (10), where in (10a) you can see an acceptable sentence which contains a negation + indefinite quantifier, and in (10b) a sentence which contains a negative quantifier which in this context makes the sentence less acceptable.

(10) Example of a pragmatic effect: expectation

a. *We won't win **anything**, but it can't hurt to try.*

b. *#We will win **nothing**, but it can't hurt to try.*

1.4 Structure of the thesis

In chapter 2, I provide a definition of negative quantifiers and neg + indefinite quantifiers, with an overview over the terminology I use as well as information on the formal background. I also give an overview over the crosslinguistic comparison.

Chapter 3 shows the syntax of negation, including my core proposal, an overview over my observations of the syntactic structure and an analysis. The latter gives a syntactic analysis of negative quantifiers and neg + indefinite quantifiers in both English and Norwegian. Here I compare the syntactic structures of negative quantifiers and negated quantifiers, as well as discuss NPI licensing and scope differences.

Chapter 4 presents the semantics of negation. This chapter is also split into three sections, my core proposal, an overview over the observations and the analysis. The semantic analysis gives the semantic composition of both types of negation in the languages examined. As well as compelling arguments pointing to that Norwegian *noe/noen* 'anything/something'/'anyone/someone' are not NPIs. I also discuss whether negative quantifiers have the same semantic meaning as neg + indefinite quantifiers in English and Norwegian.

Chapter 5 is the heart of this thesis and in this, I present the pragmatics of negation. Section 5.1. contains my core proposal, section 5.2. gives an overview over the observations I made and section 5.3 contains the pragmatic analysis, where I argue that the pragmatic conditions are the most prominent when deciding whether to use a negative quantifier or neg + indefinite quantifier.

2 Background

2.1 Syntax and semantics of negation

In this section I start by defining the most important terms, “negative quantifier” and “neg + indefinite quantifier” used in this thesis. In section 2.2, I give a general data overview, where I show how English and Norwegian relate to each other in the distribution of negative quantifiers and neg + indefinite quantifiers. The general data overview contains a brief introduction to different environments, as well as quantitative data.

2.1.1 Negative quantifiers

English *nothing*, *no one*, *nobody* and Norwegian *ingenting* ‘nothing’ and *ingen* ‘no one’ are negative quantifiers (Heim & Kratzer 1998 p.141; Zeijlstra 2004 p.38). Negative quantifiers are negative elements that in addition to negating a clause also bind a variable, as shown in (11), where the variable *x* is bound. In the two types of negative quantifiers that I am investigating in this thesis, the variable denotes either nonhuman (English: *nothing*, Norwegian: *ingenting*) or human (English: *no one*, *nobody*, Norwegian: *ingen*) individuals.

- (11) Nothing is free.
 $\neg\exists x[x \text{ is free}]$

Negative quantifiers carry negation within them, so neither in English nor in Norwegian it is necessary to have an additional negation in the sentence. The lexical entry for *nothing* in example (12) shows that a negation is included in the negative quantifier. It states that there is a function of type $\langle e,t \rangle$ and there is no individual *x* for which the application of *f* yields a true sentence.

- (12) $[[\text{nothing}]] = \delta f \in D_{\langle e,t \rangle} . \text{ there is no } x \in D_e \text{ such that } f(x) = 1.$
(Heim & Kratzer 1998, p. 141)

In fact, both in Norwegian, and in standard English, an additional negative element will induce double negation, which yields an affirmative reading. Double negation is not very common in everyday language, and it is often used when there is a special pragmatic context (Zeijlstra 2004 p.58), e.g. a previous opinion by the hearer as can be seen in example (13)

which is a book title of a juvenile nonfiction book. Here the standing opinion of the reader is supposedly that “zero is nothing”.

(13) Double negation in standard English

Zero is not nothing. (Sitomer & Sitomer 1978, title)

Like English, Norwegian is also a double negation (DN) language, as argued in Zeijlstra (2004 p.207). Whenever two negative markers appear in a sentence, they cancel each other out and the sentence is interpreted with an affirmative reading instead (14).

(14) Double negation in Norwegian:

Null er ikke ingenting.

Zero is not nothing

‘Zero is not nothing.’

In some varieties of colloquial English however, two negative markers in a sentence don’t yield double negation (i.e. they don’t cancel each other out), but they instead show properties of negative concord⁶ (Zeijlstra 2004) as shown in example (15), extracted from the novel “Huckleberry Finn” by Mark Twain.

(15) Negative concord in colloquial English

*I reckon I was up in the tree two hours; but I didn't see nothing, I didn't hear nothing
– I only thought I heard and seen [sic] as much as a thousand things.*

(Twain 1884, p.63)

In Norwegian this type of reading is not that readily available; according to Zeijlstra (2004) the language is a pure double negation language and two negative markers will always provoke an affirmative reading. However, van Gelderen (2008), following Sollid (2002) shows several examples of Northern Norwegian dialect which yield negative concord. None of my native speaking informants got the negative concord reading in example (16), though none of them is a speaker of this particular dialect either.

⁶ Negative concord is the property of some languages which allows for negative markers and n-words to appear in the same sentence and still only yield a single negation. I will not go further into this as it is out of the scope of this thesis. A good overview can be found in Zeijlstra 2004

- (16) *Eg har ikke aldri smakt sånne brød*
 I have not never tasted such bread
 ‘I haven’t ever tasted that kind of bread.’

(Sollid 2002, extracted from van Gelderen 2008, p. 209)

In the next section I will give an introduction to negation and indefinite quantifiers and define my use of “neg + indefinite quantifier” in this thesis.

2.1.2 Negation + indefinite quantifier

Negative Polarity Items (NPIs) like *anything* or *anyone* can only appear in specific situations and in specific places within a structure, in order to create well-formed sentences, hence they are dependent on a licensing context (cf. Ladusaw 1996). It is generally assumed that NPIs need a licenser which creates a downward entailing environment and the licenser has to c-command the NPI at surface level. I will now discuss each of these two conditions in turn.

Downward entailment

Not only negative elements can license NPI’s, also yes/no questions, conditionals and comparisons among others can do so. According to Ladusaw (1979) a licenser needs to create a downward entailing environment. in order to successfully license an NPI. An environment δ is downward entailing if and only if for all sets X and all sets Y, where X is a subset of Y, the set of propositions $[[\delta]](Y)$ (where a member of Y appears in environment δ) is a subset of the set of propositions $[[\delta]](X)$ (where a member of X appears in environment δ). A formal definition of downward entailment is shown in (17).

- (17) Formal definition of downward entailment (taken from Zeijlstra 2004 p.42):
 δ is downward entailing iff $\forall X \forall Y (X \subseteq Y \rightarrow ([[\delta]](Y) \subseteq [[\delta]](X)))$

In other words, and as summarized by van der Wouden (1994), downward entailment means it is possible to reason from sets to subsets. In the examples in (18), downward entailment is shown by that the first sentence of every line entails the second sentence. (18a) is an example of an environment including negation, here, if Tom doesn’t like vegetables, it follows that he doesn’t like carrots. (18b) shows an example of a conditional, here, if Tom grows strong if he eats vegetables, he will also do so if he eats carrots. (18c) shows an example of a comparison;

if vegetables are healthier than candy, then it follows that carrots are healthier than candy. This is based on that the set of carrots (C) is a subset of the set of vegetables (V).

- (18) Downward entailment:
- a. *Tom doesn't like vegetables* → *Tom doesn't like carrots.*
 - b. *If Tom eats vegetables, he will grow strong* → *If Tom eats carrots, he will grow strong.*
 - c. *Vegetables are healthier than candy* → *Carrots are healthier than candy.*

C-command

One of the most common licensers for NPIs is negation. However, not every type of negation in any position in the sentence will create a licensing context. The example sentences in (19) all contain negation, but *not* can only act as a licenser for the NPI *anything* in (19a). Neither (19b) nor (19c) are acceptable to native speakers of English. As shown by Ladusaw (1979), the requirement is not as easy as that the NPI needs to be preceded by a negative marker either, as in that case (19c) would be acceptable. The requirement thus needs to be more precise than mere word order and has been defined in the following way: the NPI must be c-commanded at surface level by a suitable licenser. C-command is defined as in (20) (using the textbook definition from Carnie 2013).

- (19) English:
- a. *I can't feel anything.*
 - b. **I feel anything, but not now.*
 - c. **Not long ago I felt anything.*

- (20) Node A c-commands node B if every (branching) node dominating A also dominates B, and neither A nor B dominates the other.

(Carnie 2013, p.127)

To elaborate these two conditions, consider the following examples in (21). Sentences which do not contain a possible licenser are unacceptable for native speakers of English. The example sentence (21a) contains a licenser (*n't*) and the licenser c-commands the NPI, thus the sentence is acceptable, the sentences in (21b-d) are unacceptable to native speakers. Sentence (21b) does not contain a possible licenser, and in sentence (21c), the licenser (*not*)

does not c-command the NPI. The unacceptability of sentence (21d) seems more complicated to explain. I will come back to both (21c) and (21d) in section 3.3.2, later in this thesis.

- (21) English:
- a. *I don't feel anything.*
 - b. **I feel anything.*
 - c. **Anything doesn't work.*
 - d. **Not anyone is meeting up today.*

In this thesis I am also looking at negation in Norwegian. The Norwegian counterpart to *not anything* or *not anyone* is *ikke noe* 'not anything' or *ikke noen* 'not anyone' respectively. These Norwegian constructions behave slightly different than the English ones, based on the nature of *noe* 'anything/something' and *noen* 'anyone/someone'. None of these words can be as clearly defined as "true" NPIs, as the English *anything* or *anyone*. They can instead also be used in positive contexts or generally in contexts where no NPI licensing is available. In this case they would be translated with a PPI in English, like *someone* or *something*. The Norwegian example sentences in (22a-d) are translations of the English sentences in (21a-d). Where in sentence (22a), *noe* 'anything/something' is used in an environment which licenses the NPI *anything* in English (21a). In sentences (22b-c), the environment can't license an NPI, so the corresponding English translation is the PPI *something*. In sentence (22d), the negation *ikke* 'not' and the indefinite quantifier *noen* 'anyone/someone' stand in the subject position of the sentence. This construction is not acceptable in English, however in Norwegian the informant's opinion is not as unified, which is the reason for the single quotation mark. This difference between Norwegian and English neg + indefinite quantifier, specifically whether Norwegian *noe/noen* 'anything/something'/'anyone/someone' are NPIs, will be discussed more in the section on semantics (section 4.3.3).

- (22) Norwegian:
- a. *Jeg kan ikke føle noe.*
I can not feel anything
'I can not feel anything.'
 - b. *Jeg føler noe.*
I feel something
'I feel something.'

- c. *Noe fungerer ikke.*
 Something works not
 ‘Something doesn’t work.’
- d. *?Ikke noen møter opp i dag.*
 Not anyone meets up to_day
 ‘No one meets up today.’

In the next section I give an overview over the general data I found on the two types of negation and their distribution in both languages.

2.2 General data overview

This section gives an overview over the initial empirical data I collected. In section 2.2.1, I introduce the four different types of sentences ([i] unconstrained choice of negation type, [ii] change of meaning when changing negation type, [iii] only neg + indefinite quantifier possible and [iv] only negative quantifier possible). Section 2.2.2 gives a general overview over the quantitative distribution of the two types of negation in English and Norwegian respectively. It appears that English and Norwegian have quite similar conditions which allow or restrict the use of either of the two types of negation. However, it seems as if these conditions are weaker in Norwegian.

2.2.1 Empirical data overview

As described in the section on methodology, I started my empirical data collection by extracting all instances of German *nichts* ‘nothing’ and *niemand* ‘no one’ from the Norwegian – English – German parallel corpus. After I had counted all instances, I sorted the data according to which type of negation they contained in English and Norwegian and tested, if the existing type of negation could be exchanged in given linguistic contexts and to what effect. The four possibilities per language were: [i] unconstrained choice of negation type, [ii] change of meaning when changing negation type, [iii] only negation + indefinite quantifier possible and [iv] only negative quantifier possible. In this section I present an overview over the different types of surroundings I encountered, sorted by which type of negation is allowed in which language. In order to get a clearer picture of the cross-linguistic variation, I compared, which type of surrounding either of the two languages has, for one and the same

example and how they correspond to each other. Logically it would follow, that there are 16 different possibilities, they are shown in table 1. The bold numbers show the number of examples I found for this combination; an empty field means that the combination did not exist in my data. All in all, I was able to look at 92 examples. In 12 examples, the negation was translated into something different than negative quantifier or neg + indefinite quantifier in at least one of the languages, and 19 examples were hard to judge, so out of the original 92 examples, only 61 were analyzed.

English to right, Norwegian down	type [i]	type [ii]	type [iii]	type [iv]
type [i]	Context 1: 30		Context 2: 6	
type [ii]		Context 3: 4		
type [iii]			Context 4: 5	
type [iv]				Context 5: 16

Table 1

After I annotated the 61 remaining examples, I was able to define 5 different types of contexts which I will now introduce:

Context 1: Both variants are possible in both English and Norwegian

In the sentences which were sorted into this category, the type of negation could be exchanged freely without any major change of meaning, both in English and in Norwegian. Example (23) came from the No-En-Ge database, meaning that the Norwegian sentence was the original sentence, and the English and the German sentences are translations. In this and the following examples to the different contexts, I kept the order of the languages the same, with the German search result in (a), the English version in (b) and the Norwegian one in (c). The original language is written in bold font⁷.

⁷ As mentioned above, these examples were taken from the Norwegian – English – German parallel corpus, meaning that they were mixed according to which language was the original. The purpose of an example is to clarify a point, and I tried to choose examples which were quite simple in structure and easily understandable, independent of which language was the original.

(23) presents the German search result with the negative quantifier *niemanden* ‘no one’ in (23a), the English translation with the negative quantifier *no one* in (23b) and the Norwegian original, which contains the neg + indefinite quantifier *ikke noen* ‘not + anyone’ in (23c). This also means that the Norwegian neg + indefinite quantifier construction was translated to NQ both in English and in German. For German this is to be expected, as NQ is the most prominent type. For English, however, it is more puzzling, I assume that the NQ was used in order to make the sentence more poetic or formal.

(23) Example (OEL1TD.1.s121)

a. German:

Er kannte niemanden, der so dekorativ und geduldig warten konnte wie Helen.

he knew no one that so decoratively and patiently wait could like Helen

b. English:

He knew no one who was able to wait as decoratively or as patiently as Helen.

c. **Norwegian:**

Han kjente ikke noen som kunne vente så dekorativt og tålmodig som Helen.

he knew not anyone that could wait so decoratively and patient as Helen

After exchanging the existing type of negation with the other one – I exchanged the existing negative quantifier in English with neg + NPI and the existing neg + *noe/noen* in Norwegian with a negative quantifier – I found that in both languages this change was possible and does not reveal a change of interpretation as shown in (24). (24a) shows the English sentence with neg + indefinite quantifier (*n't + anyone*) and (24b) shows the Norwegian sentence with the negative quantifier (*ingen* ‘no one’).

(24) Modified version

a. English:

He didn't know anyone who was able to wait as decoratively or as patiently as Helen.

b. Norwegian:

Han kjente ingen som kunne vente så dekorativt og tålmodig som Helen.

he knew no one that could wait so decoratively and patient as Helen

In section 5.3, I give an analysis of the pragmatic effects which one type of negation has over the other. As I argue there, one of the main differences between negative quantifiers and neg + indefinite quantifiers is their ability to incorporate contextual restriction, i.e. they tend to quantify over a limited set only, whilst negative quantifiers tend to quantify over the set of all individuals. In example (23) vs (24), contextual restriction was not affected, because the context already restricted the domain of quantification through the relative clause.

Context 2: Both variants are possible in Norwegian, only negative quantifier in English

In this third type of surrounding, the type of negation could be exchanged freely and without any significant change of meaning in Norwegian. In English only negation by negative quantifier was possible. The example in (25) is part of the Ge-En-No database, which means that the sentence is originally German, and the English and Norwegian versions are translations. In (25a) is the German search result containing the negative quantifier *nichts* ‘nothing’, the English translation with the negative quantifier *nothing* can be seen in (25b) and the Norwegian translation, containing the negative quantifier *ingenting* ‘nothing’ is shown in (25c).

(25) Example (HME1D.2.s59)

- a. **German:** *Vom heroischen Heiligenschein der Partisanen, Rebellen
of.the heroic halo the.GEN partisans rebels
und Guerrilleros ist nichts übriggeblieben.
and guerrilla is nothing left.over*
- b. **English:** *Nothing remains of the guerrilla’s heroic halo.*
- c. **Norwegian:** *Det er ingenting igjen av helteglorien til partisanene,
there is nothing left of hero.glory.the of partisans.the
opprørerne og geriljasoldatene.
rebels and guerrillas.the*

When changing the negation type in this example I found that the modified English version, which contains neg + indefinite quantifier, shown in (26a) was unacceptable whilst Norwegian (26b) with neg + indefinite quantifier was acceptable, thus Norwegian seemed to have unconstrained choice of negation type in this sentence.

(26) Modified version

- a. English: **Not anything remains of the guerrilla's heroic halo.*
- b. Norwegian: *Det er ikke noe igjen av helteglorien til partisanene,*
there is not anything left of hero.glory.the of partisans.the
opprørerne og geriljasoldatene.
rebels and guerrillas.the

The unacceptability of the modified English version is mainly due to the condition, which blocks neg + indefinite quantifier constructions in subject position. The Norwegian sentence is acceptable, because the neg + indefinite quantifiers is not in the subject position, as the sentence has a cleft-type construction. I give a more detailed discussion of the blocking of neg + indefinite quantifiers in section 3.3.

Context 4: Change of meaning both in English and Norwegian

This fourth type of surrounding yielded acceptable modified versions in both languages, however both included a change of meaning compared to the original. This change of meaning could have different effects and I discuss it more closely in the chapter on pragmatics (chapter 5). The sentence shown in (27) is part of the En-Ge-No database, meaning that English was the original language and the German and Norwegian are translations. The sentence in (27a) shows the German search result, containing the negative quantifier *niemanden* 'no one'. (27b) shows the English original containing the negative quantifier *no one* and example (27c) shows the Norwegian translation with the negative quantifier *ingen* 'no one'. The example in (27) is long and complex, however, it yielded one of the most interesting changes in meaning, namely that the preferred antecedent for the pronoun in the last sub-ordinate clause (in bold font) changes, when the type of negation is changed. In the sentence containing the negative quantifier (27 and 28), it is 'Fibich' who is worse off, whilst in the sentence with neg + indefinite quantifier, it could be either 'Fibich' or 'Hartmann'. In German the only possible antecedent is 'Fibich', as he is the only person named in the sentence. For easier understanding, I include a shortened version of the English sentence in (28).

(27) Example (AB1TD.1.s75)

- a. German:

Ihn rettete nur das Wissen, dass sich in den Erfahrungen eines anderen auch
 him saved only the knowledge that self in the experiences a.GEN other.GEN also
die seinen spiegelten, auch wenn Fibich_i —; doch darüber konnte man geteilter
 the his reflected also when Fibich but that.about could one seperated
Meinung sein —; schlimmer dran war, denn er kannte niemanden_i in England.
 opinions be worse on was because he knew no one in England

b. English:

*Only the knowledge that someone else 's experience reflected his own reality saved him, although Fibich_i was arguably worse off even than Hartmann_k, for **he_{i/*k}** knew no one.*

c. Norwegian:

Det var kun vissheten om at en annens opplevelse gjenspeilet hans egen
 that was only knowledge about that a other.GEN experience reflected his own
virkelighet, som reddet ham, selv om Fibich utvilsomt var verre stillet enn
 reality that saved him even if Fibich without.doubt was worse stood than
*Hartmann, for **han** kjente ingen.*

Hartmann for he knew no one

(28) (...) *Fibich_i was arguably worse off than Hartmann_k, for **he_{i/*k}** knew no one.*

Both the English version with neg+NPI in (29a) and the Norwegian sentence with neg + *noe/noen* (29b) have a different reading than the sentences with negative quantifiers, thus both languages allow for a change of negation type with change of meaning in this type of surrounding.

(29) Modified version

a. English:

*Only the knowledge that someone else's experience reflected his own reality saved him, although Fibich was arguably worse off even than Hartmann, for **he** didn't know anyone.*

b. Norwegian:

Det var kun vissheten om at en annens opplevelse gjenspeilet hans egen
 that was only knowledge about that a other.GEN experience reflected his own

virkelighet, som reddet ham, selv om Fibich utvilsomt var verre stillet enn
 reality that saved him even if Fibich_i without.doubt was worse stood than
*Hartmann_k, for **han**_{?i/k} kjente ikke noen.*
 Hartmann for he knew not anyone

In the rephrased sentences, it is not clear anymore who the antecedent for the personal pronoun is (the personal pronoun is typed bold in the example sentences). I argue that this is rooted in the negative quantifiers inability to account for contextual restriction in object position, i.e. ‘knowing no one’ has a tendency to be interpreted somewhat more absolute than ‘not knowing anyone’ and conveys that the subject ‘knows no one in the whole world’, whilst ‘not knowing anyone’, could be more contextually restricted and have a meaning corresponding to ‘doesn’t know anyone in town’ or the like. The “weaker” meaning of the neg + indefinite quantifier construction is not as negatively evaluative (as not knowing people in town is not as “bad” as knowing no one in the world). I give a more thorough analysis of this example in section 5.3.

Context 5: Only negation + indefinite quantifier in both languages

In this fifth type of surrounding, the only possible type of negation was neg + indefinite quantifier both in English and Norwegian. Example (30) is taken from the En-Ge-No database, which means it is originally English. (30a) shows the German search result containing the negative quantifier *nichts* ‘nothing’, the English original, which contains neg + indefinite quantifier in (30b) and the Norwegian result with neg + indefinite quantifier in (30c).

(30) Example (JSM1TD.1.2.s2)

a. German:

(...) als ich Loren Clark zufällig in der Bank von Pike traf und er mir erzählte,
 when I Loren Clark randomly in the bank of Pike met and he me told
dass Harold zur Feier von Jess’ Rückkehr ein Spanferkel rösten würde, ob
 that Harold to Celebration of Jess’ homecoming a pig roast would if
wir alle kämen, mitzubringen bräuchten wir nichts.
 we all came.SUBJ bring need.SUBJ we nothing

b. **English:** (...) *I ran into Loren Clark at the bank in Pike and he said that Harold was giving a pig roast for Jess' homecoming, would all of us come, no need to bring anything.*

c. Norwegian:

Da traff jeg Loren Clark utenfor banken i Pike, og han sa at Harold skulle then met I Loren Clark outside bank.the in Pike and he said that Harold should steke en gris i anledning Jess' hjemkomst, alle var velkommen, ikke nødvendig å roast a pig in occasion Jess' homecoming all were welcome not necessary to ha med seg noe.
have with self anything

When exchanging negation type in this type of surrounding, the result was odd at best. The modified sentence doesn't negate the necessity anymore, instead asserts the necessity to bring nothing. Example (31a) shows the modified version with negative quantifier in English, example (31b) shows the modified version with negative quantifier in Norwegian.

(31) Modified version

a. English:

(...) *I ran into Loren Clark at the bank in Pike and he said that Harold was giving a pig roast for Jess' homecoming, would all of us come, need to bring nothing.*

b. Norwegian:

#*Da traff jeg Loren Clark utenfor banken i Pike, og han sa at Harold skulle then met I Loren Clark outside bank.the in Pike and he said that Harold should steke en gris i anledning Jess' hjemkomst, alle var velkommen, nødvendig å roast a pig in occasion Jess' homecoming all were welcome not necessary to ha med seg ingenting.*
have with self anything

The unacceptability of these modified sentences looks to have two reasons. *No need to bring anything* can not be paraphrased with *need to bring nothing*, as firstly, the construction is idiomatic and secondly, the negation has a different scope in the two versions. In the sentence containing neg + indefinite quantifier, the negation scopes over the necessity, whilst in the

sentence containing the negative quantifier, the necessity scopes over the negation. More on the scope of negation in section 3.3.

Context 6: Only NP in English and Norwegian

The sixth and last type of surrounding shows examples which can only contain negative quantifiers and not English neg + NPI or Norwegian neg + *noe/noen*. This example is extracted from the Ge-En-No database, meaning, it is originally German. Example (32a) shows the German original which contains the negative quantifier *nichts* ‘nothing’. Example (32b) shows the English translation containing the negative quantifier *nothing* and (32c) shows the Norwegian translation with the negative quantifier *ingenting* ‘nothing’, both of which also contain a negative quantifier which corresponds to the German one.

(32) Example (ME1D.4.s110)

a. German:

*Und dahinter lag nichts mehr, absolut nichts. (Es war keine kahle Stelle,
And behind lay nothing more, absolutely nothing it was no bare location
keine Dunkelheit, es war auch keine Helle,...).
no darkness it was also no light*

b. English:

*And farther still there was nothing, absolutely nothing. (There was no clearing,
no darkness, there was no light either, ...)*

c. Norwegian:

*Og bakenfor der igjen var det ingenting, absolutt ingenting.
And behind there again was that nothing absolutely nothing
Det var ikke snakk om en snauhogst eller et nakent eller øde område , vanlig
That was not talk about a clearing or a naked or bare area normal
mørke var det ikke , heller ikke noe slags lys .
darkness was that not either not any type light*

When changing the type of negation in this type of surrounding, I found that the modified version was way less acceptable than the original containing negative quantifiers. This was true for both languages. Example (33a) shows the modified version in English, example (33b) the one in Norwegian, both now with neg + indefinite quantifier.

(33) Modified version

a. English:

?And farther still there was not anything, absolutely not anything. (There was no clearing, no darkness, there was no light either, ...)

b. Norwegian:

?Og bakenfor der igjen var det ikke noe, absolutt ikke noe.

And behind there again was that not anything absolutely not anything

Det var ikke snakk om en snauhogst eller et nakent eller øde område , vanlig

That was not talk about a clearing or a naked or bare area normal

mørke var det ikke , heller ikke noe slags lys .

darkness was that not either not any type light

I believe that the unacceptability of the sentences in (33) is due to the absoluteness which the sentence is originally conveying. The modified versions, with English neg + NPI and Norwegian neg + *noe/noen* (which are more prone to contextual restriction, as I argue for in section 5.3), seem to almost contradict the *absolutely* within the sentence. I will give a more thorough discussion on this matter in section 5.3.

In the next chapter I will give an overview over the quantitative distribution I found when searching for negative quantifiers and negation + indefinite quantifiers in English and Norwegian.

2.2.2 Quantitative distribution

This section gives an overview over the quantitative distribution of negative quantifiers vs neg + indefinite quantifiers.

The goal was to see, which type of negation, negative quantifier or neg + indefinite quantifier appears to be used more frequently and if there is a difference in quantitative distribution between the two languages examined in this thesis. This can give insight to matters like for example if either type of negation is clearly preferred in any or both of the two languages.

I used the OMC to find examples of negation in the two languages. I searched the Ge-En-No database, i.e. the corpus containing German original texts and its English and Norwegian

translations for instances of German negative quantifiers *nichts* ‘nothing’ and *niemand* ‘nobody’. I chose to only use texts which were German in the original, as to lower the chance that translators could have been influenced by the type of negation included in the original sentence. As German negative quantifiers correspond to both types of negation in English and Norwegian, the risk of the translators being biased was quite low. I then annotated the translations of the German negative quantifiers according to how it was translated, sorted and eventually counted all instances which would belong to one group.

First, I searched for all instances of German *nichts* ‘nothing’ and checked how they were translated to English and Norwegian respectively. The search resulted in a total number of 375 hits. After filtering out results which were translated without the use of negation in either language and/or which were idioms, there were 278 relevant results.

When translated into English, *nichts* ‘nothing’ was predominantly translated to *nothing* with 160 out of 278 instances. Neg + *anything* was only used 40 times. The sentential negation *not* was used 38 times and *no* + (another) DP was used 30 times. Table 2 shows the English translations of German *nichts*:

English correspondences of <i>nichts</i>	Amount	Percentage (approx.)
<i>nothing</i>	160	57,5%
neg ⁸ + <i>anything</i>	40	14,4%
<i>not</i>	38	13,7%
<i>no</i>	30	10,8%
neg + <i>any</i>	3	1,1%
<i>not a thing</i>	2	< 1%
<i>never</i>	2	< 1%

⁸ In some of the groups, I used “neg” instead of ‘not’. This was done in order to also account for similar negative markers (e.g. *n't*)

<i>none</i>	2	< 1%
neg + <i>something</i>	1	< 1%
Total	278	100%

Table 2

The four most frequent translations of the negative quantifier *nichts* ‘nothing’ are exemplified in (34-37), with the German original sentence in (a). and the English translation in (b).

Example (34) shows an English translation containing *nothing* in (34b). Example (35) shows an English translation containing neg + *anything*. In (36) an example of translation with *not* can be seen and finally (37) shows an example for translation with *no*.

(34) Nothing (OMC: CW1D.1.s600)

a. German: *Ich sah nichts.*
I saw nothing

b. English: *I saw nothing.*

(35) Neg + anything (OMC: CF1D.2.s15)

a. German: *Ich wollte Christiane zu nichts zwingen.*
I wanted Christiane to nothing force

b. English: *I did not want to force Christiane into anything.*

(36) Not (OMC: EC1D.1.3.s82)

a. German: *Meine Eltern untereinander sprachen deutsch, wovon ich
my parents among.themselves spoke German of.which I
nichts verstehen durfte.
nothing understand may*

b. English: *To each other, my parents spoke German, which I was not
allowed to understand.*

(37) No (OMC: DW1D.3.s317)

a. German: *Hier verdient man nichts.*
here earns one nothing
‘Here, one doesn’t earn anything.’

b. English: *There's no money in it.*

In Norwegian, German *nichts* ‘nothing’ was most often translated with *neg + noe* with 112 out of 278 instances. *ingenting* ‘nothing’ was used 70 times and *intet* (which is an older word for ‘nothing’) was used 22 times. The negative adverb *ikke* ‘not’ was used 57 times (by without an indefinite quantifier). Table 3 shows the Norwegian translations of German *nichts*:

Norwegian correspondences of <i>nichts</i>	Amount	Percentage (approx.)
<i>neg</i> ⁹ + <i>noe</i> (‘neg + anything’)	112	40,3%
<i>ingenting</i> (‘nothing’)	70	(25,2%)
<i>ikke</i> (‘not’)	57	(20,5%)
<i>intet</i> (‘nothing’)	22	(7,9%)
<i>neg + noen</i> (‘neg + anyone’)	7	(2,5%)
<i>neg + noenting</i> (‘neg + anything’)	5	(1,8%)
<i>ingen</i> (‘no one’)	4	(1,4%)
<i>neg + verdens ting</i> (‘neg + thing in the world’)	1	(0,4%)
Total	278	(100%)

Table 3

By comparing the Norwegian translations to the English ones, an interesting pattern can be seen. In English, the relationship of negative quantifier (*nothing*) to *neg + indefinite quantifier* (*neg + anything*) is 160:40, whereas it is 92:112 in Norwegian (*ingenting* and *intet* ‘nothing’ to *neg + noe* ‘neg + anything’). Ergo, in English, the negative quantifier is used four times as often as *neg + indefinite quantifier*, whilst in Norwegian, *neg + indefinite quantifier* is used more often than negative quantifiers. This is a quite different pattern and I assume, that this pattern has two reasons. [i] Norwegian has a syntactic constriction which disallows for negative quantifiers, which English doesn’t have (sentences including a modal or participle

⁹ Here, also, I have used “neg” instead of *ikke* ‘not’, in order to include other negative markers, e.g. *uten* ‘without’.

between the negation and the object, a more thorough explanation in section 3.2); and [ii] the syntactic constrictions on neg + *noe* ‘anything’ in subject position and the one on neg + *noe* ‘anything’ in elliptic clauses is weaker in Norwegian (though negative quantifiers are preferred in these positions, neg + *noe* ‘anything’ still yield acceptable constructions, more in section 3.3). The first disallows negative quantifiers in a specific position and the second allows for neg + *noe* ‘anything’ in a position that is unacceptable in English. On the other hand, I was not able to find any rules which would restrict the use of neg + *noe* ‘anything’ in Norwegian in positions where English allows for them. With this as background, it seems reasonable that Norwegian uses neg + indefinite quantifiers more often.

I also searched for all instances of German *niemand* ‘no one’ in order to find out if the distribution varies significantly. It is important to notice here that *niemand* ‘no one’ is the nominative form of the word and thus typically appears in subject position. The numbers for *niemanden* ‘no one’ (accusative) and *niemandem* ‘no one’ (dative) are shown further down. The search yielded altogether 134 results. After filtering out idioms and translations to either language without negation, there were 102 results remaining.

73 out of the 102 results were translated with *no one* and 20 were translated with *nobody*. That means that 93 out of 102 results were translated with negative quantifiers. *None* was used 6 times and neg + NPI (neg + *anyone* and neg + *any*) was used altogether 3 times. Table 4 shows the English translations for German *niemand*:

English correspondences to <i>niemand</i>	
<i>no one</i>	73
<i>nobody</i>	20
<i>none</i>	6
neg + <i>anyone</i>	2
neg + <i>any</i>	1
Total	102

Table 4

As mentioned above, *niemand* ‘no one’ (nominative) tends to stand in subject position due to its nominative form. It seems thus interesting, that there were corresponding English sentences with neg + *anyone* at all. One of the examples had the nominative form in the object position of the sentence (which I personally didn’t find acceptable as a German native speaker). In example (38), I show another example, in which *niemand* ‘no one’ was translated into neg + *anyone*. Here, the German original actually includes a passive construction, which was rebuilt into an active construction in English.

- (38) Neg + *anyone* (OMC: ERH1D.2.s97)
- a. German: *Niemand müßte entlohnt werden.*
no one needs paid will
‘No one will need to be paid.’
- b. English: *It would not be necessary to pay anyone.*

For Norwegian the results are somewhat similar. The negative quantifier *ingen* ‘no one’ was used 90 times, neg + *noen* ‘neg + anyone’ was used 9 times and the negative adverb *ikke* ‘not’ was used 3 times (without *noen*). This supports the hypothesis that neg + indefinite quantifier is dispreferred in subject position in both languages. Of all the translated sentences containing neg + indefinite quantifier, both in English and Norwegian, not one had the neg + indefinite quantifier in the subject position. All of these sentences were restructured. An example for a restructured Norwegian sentence can be seen in (39).

Table 5 shows the Norwegian translations for German *niemand*:

Norwegian correspondences to <i>niemand</i>	
<i>ingen</i> ‘no one’	90
neg + <i>noen</i> ‘neg + anyone’	9
<i>ikke</i> ‘not’	3
Total	102

Table 5

(39) Neg + indefinite quantifier as translation for *niemand* ‘no one’ (nominative)

a. German: *Hier schien niemand an seine eigenen Interessen zu denken.*

here seemed no one on his own interests to think
 ‘Here, no one seemed to think of their own interests.’

b. English: *No one appeared to be thinking of his own interests.*

c. Norwegian: *Det så ikke ut til at noen tenkte på egne interesser.*

It saw not out to that anyone thought of own interests
 ‘It didn’t seem as if anyone thought of their own interests.’

(OMC: HME3D.1.1.s73)

When searching for the accusative form *niemanden* ‘no one’, I found 14 results. Five of which used constructions without negation in the translation. In English, six of the remaining 9 were translated with the negative quantifier *no one*, and three with neg + indefinite quantifier (neg + *anyone*). For *niemandem* ‘no one’ (dative), I found 6 results; three were translated with *no one* and three with neg + *anyone/anybody*. Table 6 shows these results.

English correspondances	<i>niemanden</i> (accusative)	<i>niemandem</i> (dativ)
<i>no one</i>	6	3
neg + <i>anyone</i>	3	3
Total	9	6

Table 6

In Norwegian, the results were slightly different from the English ones, with the negative quantifier *ingen* ‘no one’ being used five times for *niemanden* ‘no one’ (accusative) and one time for *niemandem* ‘no one’ (dative). *Ikke noen /aldri noen* ‘not anyone’/‘never anyone’ was used four times for the German accusative and five times for the German dative (table 7).

Whilst the distribution between negative quantifier and neg + indefinite quantifier was balanced for the dative counterpart, in Norwegian neg + indefinite quantifier was used more often than the negative quantifier. For the translation of the accusative, Norwegian held more balance between the two types of negation and English preferred the negative quantifier.

However, as there were so few examples, these numbers can not be interpreted as representative.

Norwegian correspondences	<i>niemanden</i> (accusative)	<i>niemandem</i> (dative)
<i>ingen</i> ‘no one’	5	1
neg + <i>noen</i> ‘neg + anyone’	4	5
Total	9	6

Table 7

My next step was to search the EN – GE – NO parallel corpus for instances of negative quantifiers and neg + indefinite quantifiers, sorted by original language. I concentrated on the texts that were either English or Norwegian in original and excluded the German ones. The input used for negative quantifiers was the quantifier itself, i.e. “no one”, “nobody”, “nothing” for English and “ingen” and “ingenting” for Norwegian. The input for negation + indefinite quantifier was lemma of the negation¹⁰ + indefinite quantifier with maximum 5 words in between. In English I searched for “not + anything”, “not + anyone”, “not + anybody”; in Norwegian, I searched for “ikke + noe” and “ikke + noen”. Here it is important to mention that I explicitly searched for *noe* and *noen* in pronoun form, as to exclude irrelevant results. The neg + indefinite quantifier-type results were manually checked for all instances where the two words didn’t belong together in given sentence but appeared near another by mere coincidence. I also filtered the remaining search results for instances with translations that lack negation as they wouldn’t provide any relevant insight. Sentences where the negation was included in an idiom were also eliminated, as the use of negation in those might be different from the actual use in modern everyday language. I also excluded examples with a very complex structure, in order to have a lower risk of misinterpretations. I provide an example for a translation lacking negation in (40). Here, the English original in (40a) contains the negative quantifier *nobody*. The Norwegian translation in (40b) lacks a negation corresponding to the nobody in (40a), and instead, the proposition is paraphrased with an affirmative. Further, I will call all examples which I kept due to the above-named reasons “relevant” examples.

(40) Translation lacks negation:

a. **English:** *No, there are two pregnant, but nobody due soon.*

¹⁰ I used the “lemma of negation” here, because it caught both *not* and *n’t* in English.

- b. Norwegian: *Nei, to er gravide, men det er lenge til noen fødsel.*
no, two are pregnant but it is long to any birth
‘No, two are pregnant, but it will be a long time before any of them gives birth.’

The translations of all sentences which contained the input word in the original text were then counted based on which words/what type of negation was used. For instance, all sentences that contained Norwegian *ingen* ‘no one’ in the Norwegian original were counted based on which translation was used in English (namely *no one* vs. *nobody*, vs. *neg + anyone* etc.) The numbers were then analysed by calculating the percentage of instances of each type per language and sorted after which input it was based on.

Table 8 shows the corresponding English translations for the Norwegian *ingenting* ‘nothing’ and the Norwegian *ikke + noe* ‘not + anything’. The percentage is shown in brackets after the number. The relationship between translations to *nothing* and *not + anything* corresponding to the Norwegian negative quantifier *ingenting* ‘nothing’ are 88:16, whilst it is 19:25 when corresponding to the Norwegian negation + indefinite quantifier (*ikke + noe* ‘not + anything’).

English correspondences	<i>ingenting</i> ‘nothing’	<i>ikke noe</i> ‘not anything’
<i>nothing</i>	88 (81,5%)	19 (22,9%)
<i>not + anything</i>	16 (14,8%)	25 (30,1%)
<i>not</i>	3 (2,7%)	16 (19,3%)
<i>no</i>	0	14 (16,9%)
<i>other</i>	1 (0,9%)	9 (10,8%)
Total	108	83

Table 8

In table 9, I show the corresponding English translations for the Norwegian *ingen* ‘no one’ and the Norwegian *ikke + noen* ‘not + anyone’. Again, the percentage is shown in brackets after the number. *Ingen* ‘no one’ had initially 150 results, of which 105 were relevant. *Ikke + noen* ‘not + anyone’ yielded 52 results, and 44 of them were not suited for this analysis (as the

translations were completely different constructions. I include the distribution of the remaining seven in the table below, but I don't include percentages as the numbers are too low.

English correspondences	<i>ingen</i> 'no one'	<i>ikke noen</i> 'not anyone'
<i>no one</i>	68 (64,8%)	
<i>nobody</i>	30 (28,6%)	
not + <i>anyone</i> not + <i>anybody</i>	4 (3,8%)	5
not + <i>any</i>	3 (2,9%)	1
<i>none</i>		1
Total	105	7

Table 9

For the Norwegian negative quantifiers, the preferred correspondence in English was also a negative quantifier. For neg + indefinite quantifier, the preferred translation was also with neg + indefinite quantifier in English. These results go in line with the assumption, that the conditions under which each of the two types occurs are similar in the two languages.

When looking at sentences which are original English and which have been translated to Norwegian, we get the following numbers. English *nothing* was most often translated to the Norwegian negative quantifier *ingenting* 'nothing' with 51,4%. The second most often used form is the Norwegian neg + indefinite quantifier *ikke + noe* with 33,3%. Not + *anything* was most often translated to *ikke + noe* 'not + anything', namely 30 out of 51 times. (I didn't include percentages in the right column, due to the small numbers.) The numbers are given in table 10.

Norwegian correspondences	<i>nothing</i>	<i>not + anything</i>
<i>ingenting</i> 'nothing'	108 (51,4%)	9

<i>ikke + noe</i> 'not + anything'	70 (33,3%)	30
<i>ikke</i> 'not'	15 (7,1%)	9
<i>intet</i> 'nothing'	5 (2,4%)	
other	12 (5,7%)	3
Total	210	51

Table 10

Finally, I also annotated the correspondences to English *no one* and *not + anyone*. Again, the negative quantifier was most often translated with a negative quantifier, namely in 60 out of 73 sentences for *no one* and in 24 out of 30 instances for *nobody*. There were too few relevant results (13) for *not + anyone* to be able to draw any conclusions. The numbers are shown in table 11.

Norwegian correspondences	<i>no one</i>	<i>nobody</i>	<i>not + anyone</i>
<i>ingen</i> 'no one'	60 (82,2%)	24	3
<i>ikke + noen</i> 'not + anyone'	8 (11,0%)	4	3
<i>ikke</i> 'not'	2 (< 3%)		6
other	3 (< 3%)	2	1
Total	73	30	13

Table 11

In summary, this overview over the quantitative distribution has shown us that in Norwegian, *neg + noe* 'neg + anything' (40,3%) seems to be used more frequently in translating German *nichts* 'nothing', than *ingenting* 'nothing' (25,2%). In English it's the opposite, with the negative quantifier *nothing* being on the top with 57,5% and *neg + anything* in second place with 14,4%. German *niemand* 'no one' was preferably translated with negative quantifiers in both languages.

When looking at translations between English and Norwegian, a tendency, that negative quantifiers are most often translated with negative quantifiers was seen, whilst neg + indefinite quantifiers were generally more likely to be translated with neg + indefinite quantifiers.

Based on these numbers, I assume that Norwegian and English have similar conditions which allow or restrict the use of a specific type of negation, however, those conditions seem to have a stronger hold in English and thus negative quantifiers are all in all more common in English than in Norwegian.

3 The syntax of negation

3.1 Core proposal for the syntax

There appear to be some syntactic/semantic conditions which restrict the use of English neg + NPI and Norwegian neg + *noe/noen*. The use in subject position and the use in elliptical clauses only allows for negative quantifiers in English and prefers negative quantifiers in Norwegian. Specific idioms or modal auxiliaries give rise to scope ambiguities and the meaning of a sentence changes depending on whether negative quantifiers or English neg + NPI or Norwegian neg + *noe/noen* are used. Additionally, in Norwegian only, negative quantifiers can not be used in constructions with participles or modals which give rise to an additional interfering element between the negation and the object. Only neg + *noe/noen* seem to be allowed in this position.

3.2 Observations

With a closer look at the data I had collected and created during the exchange-negation test, I found several syntactic and semantic conditions which called for the use of negative quantifiers over neg + indefinite quantifiers. In this section I give a summary on those conditions. My interpretation of these conditions can be found in section 3.3.

3.2.1 Elliptical clauses

It appears as if elliptical sentences, i.e. sentences which don't contain a verb are more likely to be negated with negative quantifiers than with a neg + indefinite quantifier construction. Example (41) shows one of these elliptical clauses. (41a) shows the German search result, (41b) shows the English version and sentence (41c) shows the Norwegian version. In this example, Norwegian was the original language, with German and English being the translated version. All three sentences consist of only a negative quantifier.

(41) Elliptical clauses

a. German:

Ja, ja, er hatte nicht viele Freunde, der Hans Georg. Nicht einmal eine Familie.

Yes yes he had not many friends the Hans Georg not even a family

Niemanden!

no one

a. English:

Yeah, he didn't have many friends, Hans Georg. No family either. No one.

b. Norwegian:

Ja, han hadde ikke mange venner, Hans Georg. Ikke familie, engang. Ingen.

yes he has not many friends Hans Georg not family either no one

(LSC2TD.5.s185)

The unacceptability of neg + indefinite quantifier is true for English and appears to be the case in many Norwegian examples, however the rule is by far not as strict. A search in the Leksikalsk Bokmålskorpus (LBK) yielded 10 results for sentences containing solely the two words “Ikke noe.” (followed by a full stop). One example is shown in (42). Note that the source did not contain punctuation, this has been added by me for better readability.

(42) Example of *ikke noe* in elliptical clause

Hva betyr arktisk ørken i titusen år for jorda? Ikke noe.

What means arctic desert for ten thousand years for earth.the? not anything

Naturen er den store regulatoren

nature is the big regulator

‘What do ten thousand years of arctic desert mean for the earth? Nothing. Nature is a great regulator.’

(LBK: SK01GaAi01.1436)

A search for “Ingenting.” gave 123 results, so even though it is possible to use neg + *noe/noen* in sentences which don't contain a verb in Norwegian, it is less common than a negative quantifier in the same setting.

A related syntactic condition is described in the following section, namely the use of negative quantifiers in subject position, a place where it is rather hard to find neg + indefinite quantifier.

3.2.2 Subject position of the sentence

If the negation appears related to the subject position of the sentence, negative quantifiers are the required type in English and the preferred type in Norwegian.

The examples in (43a-b) show sentences with a negative quantifier in subject position. This is acceptable in both languages. Sentences (43c-d) show the same sentences modified to contain neg + indefinite quantifiers instead of the negative quantifiers. The English sentence (43c) seems deviant as none of my native speaking consultants found it acceptable. Sentence (43d) contains the Norwegian modified sentence. It seems better than the English version, but my native speaking consultants preferred the version with the negative quantifier.

(43) Negative quantifier in subject position

a. English negative quantifier:

Nothing could be heard , not the distant screaming and shrieking of the bathers , only the murmuring of the little wave at the woman's feet .

b. Norwegian negative quantifier:

Intet var å høre, ikke fjerne skrik og skrål fra de badende, bare bruset
nothing was to hear not distant scream and shriek from the bathing only sound
fra den lille bølgen som gled ut i skum rundt kvinnens føtter.
from the little wave which slid out in foam around woman.the.GEN feet

c. English neg + anything:

**Not anything could be heard , not the distant screaming and shrieking of the bathers, only the murmuring of the little wave at the woman's feet .*

d. Norwegian neg + noe/noen:

?Ikke noe var å høre, ikke fjerne skrik og skrål fra de badende, bare bruset
nothing was to hear not distant scream and shriek from the bathing only sound
fra den lille bølgen som gled ut i skum rundt kvinnens føtter.
from the little wave which slid out in foam around woman.the.GEN feet

(DW1TE.2.s370)

Though in the case of (43) the Norwegian version with the negative quantifier is preferred over the version with neg + *noe/noen*, it is still possible to find instances where native speakers utter a sentence starting with neg + *noe/noen*. The sentence in (44) was uttered by a Norwegian native speaker and overheard by the author.

(44) Norwegian:

Ikke noe gjør meg mer sint enn bananfluer.

not anything makes me more angry than fruit flies

‘Nothing makes me angrier than fruit flies.’

The next section is on surroundings which can have scope ambiguities and in which the scope changes depending on if a negative quantifier or neg + indefinite quantifier is used.

3.2.3 Modal auxiliaries and other cases which introduce scopal ambiguity

Some surroundings give rise to different scopes for negative quantifiers and English neg + NPI and Norwegian neg + *noe/noen*. These surroundings include among others, sentences with modal auxiliaries like *can*. (45) is a sentence containing the modal auxiliary *can* and a negative quantifier with its possible scope orders; (46) is the same sentence with neg + NPI and its respective scope orders. In sentence (45) with the negative quantifier, only scope orders where negation scopes over the existential quantifier are possible, whilst in (46) only scope orders where the negation scopes over the existential quantifier and the modal auxiliary are possible.

(45) He can do nothing.

a. $\neg > \exists > \text{CAN}$

It is not the case that there is something such that it is possible for him to do it.

b. $\neg > \text{CAN} > \exists$

It is not the case that it is possible that there is something such that he does it.

c. $\text{CAN} > \neg > \exists$

It is possible that it is not the case that there is something such that he does it.

d. $*\text{CAN} > \exists > \neg$

It is possible that there is something such that it is not the case that he does it.

e. $*\exists > \text{CAN} > \neg$

There is something such that it is possible for him not to do it.

f. $*\exists > \neg > \text{CAN}$

There is something such that it is not possible for him to do it.

(46) He can't do anything.

a. $\neg > \exists > \text{CAN}$

It is **not** the case that there is **something** such that it is **possible** for him to do it.

b. $\neg > \text{CAN} > \exists$

It is **not** the case that it is **possible** that there is **something** such that he does it.

c. $*\text{CAN} > \neg > \exists$

It is **possible** that it is **not** the case that there is **something** such that he does it.

d. $*\text{CAN} > \exists > \neg$

It is **possible** that there is **something** such that it is **not** the case that he does it.

e. $*\exists > \text{CAN} > \neg$

There is **something** such that it is **possible** for him **not** to do it.

f. $*\exists > \neg > \text{CAN}$

There is **something** such that it is **not possible** for him to do it.

In sentences of this kind, the scopal possibilities with neg + indefinite quantifiers are a subset of the ones with negative quantifiers, but don't include all possibilities (a,b,c vs. a,b).

Sentences containing a negative quantifier and a modal of this kind have thus an ambiguity, which sentences with neg + indefinite quantifier and modal don't have. This leads to a change of meaning in this type of sentence, when one type of negation is replaced by the other.

In Norwegian, a different condition can be found when it comes to negation and modals and other auxiliaries, namely that as soon as a sentence has one, neg + *noe/noen* is the preferred type of negation. This phenomenon is subject to the next section, 3.2.4.

3.2.4 Norwegian: Perfectum and modal constructions require neg + noe/noen

A comparison for the scope like it was done for English above is not possible in Norwegian. In Norwegian, negative quantifiers can usually be used in object positions, but only under the condition that no other element is positioned between the position for negation and the object. Modals or auxiliary verbs tend to take position right there, which then disallows for negative quantifiers. An example for a modal interfering is given in (47). These sentences are the direct translations of the sentences in (45) and (46). (47a) shows the acceptable sentence containing neg + indefinite quantifier and sentence (47b) shows the same, but with a negative quantifier. Sentence (48) shows an example of a how the negative quantifier is acceptable in present

tense but not in perfectum, which naturally includes an auxiliary in Norwegian. (48a) has neg + *noe/noen*, sentence (48b) has a negative quantifier instead. Both are acceptable. In (48c) the participle *sett* ‘seen’ appears between the negation and the object, which makes (48d) unacceptable (Johannessen 1998).

- (47) Modal:
- a. *Han kan ikke gjøre noe*
he can not do anything
 - b. *?Han kan gjøre ingenting.*¹¹
he can do nothing

- (48) Auxiliary:
- a. *Jeg ser ikke noe.*
I see not anything
 - b. *Jeg ser ingenting*
I see nothing
 - c. *Jeg har ikke sett noe.*
I have not seen anything
 - d. **Jeg har sett ingenting.*
I have seen nothing

This is a clear difference between English and Norwegian, as the sentences in English, corresponding to the ones in (47) and (48) are fully acceptable in English. The English counterpart to (47) was shown in (46) and the English counterpart to (48) is shown in (49), with present tense and neg + indefinite quantifier in (49a), present tense and negative quantifier in (49b), perfectum and neg + indefinite quantifier in (49c) and finally, perfectum and negative quantifier in (49d).

- (49) English with auxiliary
- a. *I don't see anything.*
 - b. *I see nothing.*
 - c. *I have not seen anything.*

¹¹ One of my native speaking informants found this sentence acceptable, but only with the reading CAN > ¬ > ∃. It is **possible** that it is **not** the case that there is **something** such that he does it. And not with a reading where negation scopes over the modal.

d. *I have seen nothing.*

In summary, the syntactic conditions which I observed were the restriction on negative quantifiers in elliptical clauses and in subject positions. The difference in scope when negative quantifiers vs. neg + indefinite quantifiers appear with modals and for Norwegian, the restriction on negative quantifiers in sentences in which an interfering element is placed before the quantifier. In the next section I will give an analysis of these different conditions.

3.3 Analysis

In this chapter I first provide an overview over the syntactic structure of negative quantifiers and neg + indefinite quantifiers, where I also show that the structure between English and Norwegian *not*-type negation is quite different. Afterwards I provide evidence that in English neg + indefinite quantifiers are not allowed in subject position because of NPI licensing and blocking. I argue that in Norwegian this is possible, [i] because Norwegian *noe/noen* ‘anything/something’/‘anyone/someone’ are not NPIs and thus don’t follow NPI licensing and [ii] in Norwegian *ikke* ‘not’ and *noe* ‘anything’ make up a constituent when appearing in subject position. Finally, in section 3.3.3 I discuss the differences in semantic scope between the two types of negation and what the reasons for this might be.

3.3.1 The syntax of negative quantifiers

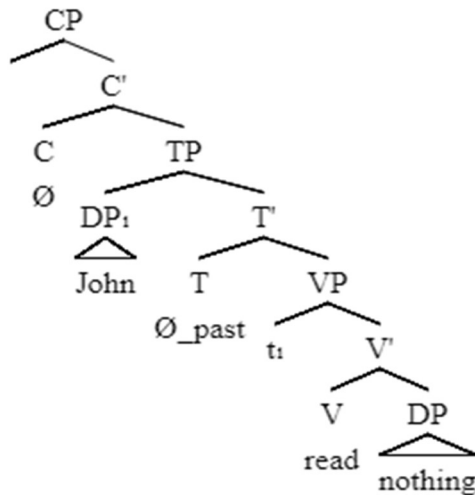
The syntax of negative quantifiers is simple and straightforward. Syntactically they are DPs and can take any position which can be occupied by a DP within the sentence (50), where (50a) shows a simple English sentence containing a subject, a predicate and an object. In (50b), the subject position is occupied by the negative quantifier and in (50c) the object position is occupied by the negative quantifier. All three sentences are acceptable.

- (50) English:
- a. *John saw a tree.*
 - b. *Nobody saw a tree.*
 - c. *John saw nothing.*

The syntactic tree for a simple sentence containing a negative quantifier is shown in (51). The two arguments are base generated in the VP, the verb stays in position in V and the external argument moved up to SpecTP.

(51) English:

John read nothing.

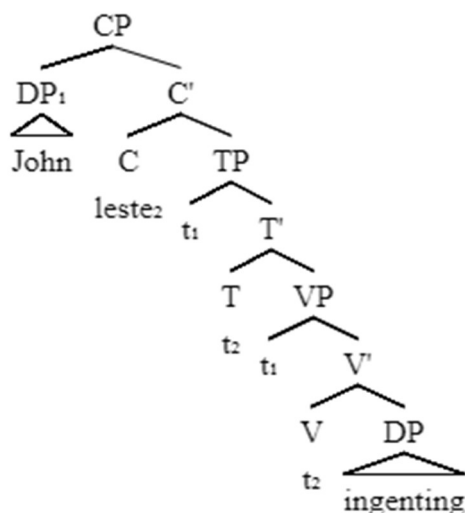


The syntactic structure of a Norwegian sentence containing a negative quantifier is slightly different than in English. This is because Norwegian is a verb second language and thus has V-to-T-to-C movement of the main verb in main clauses (Wiklund et al. 2007). The tree in (52) shows the base structure of a Norwegian sentence containing a negative quantifier.

(52) Norwegian:

Jon leste ingenting.

John read nothing



Thus, the syntactic structures of sentences main clauses differ between English and Norwegian, as in English, the subject is in the SpecTP and the verb in V, whilst in Norwegian, the subject is in SpecCP and the verb has moved up to C. However, there is no evidence that the syntax of the negative quantifiers differs between the two languages, and I therefore assume that they are the same.

In the next section I will take a closer look at the syntax of sentences containing neg + indefinite quantifiers.

3.3.2 The syntax of neg + indefinite quantifiers

I will start by looking at the syntax of *not*-type negations, before I look at the structure of the indefinite quantifiers in English and Norwegian. Afterwards, I will take a closer look at NPI licensing and which syntactic requirements must be fulfilled to create well-formed sentences containing neg + indefinite quantifiers.

In order to find out whether English and Norwegian have the negative marker in a Spec or head position, the “why not”-test can be applied. Merchant (2006) developed the test, which reveals whether a negative marker is phrasal and therefore in a Spec position. In languages which have phrasal negation, it is possible to ask the “why not” question, whilst languages where negation is a head, don’t allow for this type of question. (53a) shows that this type of question is available in Norwegian, (53b) shows it for English and (53c) for German. Thus, sentential negation in Norwegian, English and German is phrasal, i.e. an adverb.

(53) Norwegian: *Hvorfor ikke?*

English: *Why not?*

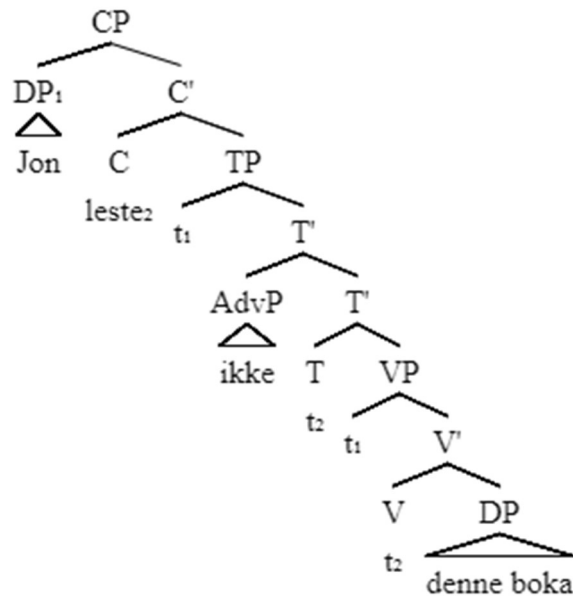
German: *Warum nicht?*

Áfarli & Eide (2008) argue that in Norwegian, because the negation *ikke* ‘not’ behaves like a standard sentence adverbial, it should thereby also be syntactically analyzed the same way. They argue that it is a left-hand side adjunct to T’ or to TP. Example (54) shows the structure of the syntactic tree for a sentence containing a negation and a DP, according to Áfarli & Eide (2008).

(54) (Åfarli & Eide 2008 p.98)

Jon leste ikke denne boka.

John read not this book.



In English, the negation stands between the TP and the VP, creating a barrier between the verb and the inflection and thus requiring do-support, meaning the insertion of a dummy verb to carry inflection as shown in (55) (Carnie 2013). The sentence in (55a) which contains do-support and the sentence in (55d) which contains an auxiliary are acceptable. The sentence in (55b) is unacceptable, and the sentence in (55c) shows what a sentence could look like if English had V-to-T movement, however, this type of construction is not acceptable to all native speakers, and is, if accepted, judged as archaic or poetic.

(55) English:

- a. *Amy did not speak.*
- b. **Amy not spoke.*
- c. *?Amy spoke not.*
- d. *Amy has not spoken.*

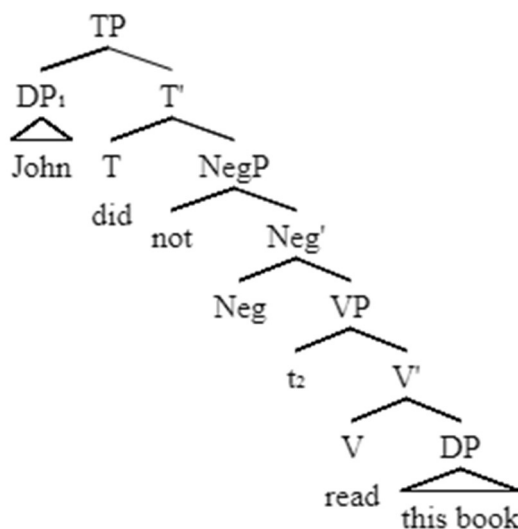
For comparison, I give the Norwegian sentences which correspond to the English ones above in (56). Sentence (56a) shows that in Norwegian do-support is not acceptable. The subordinate clause in (56b) shows that the negation can stand between the subject and the verb in a sub-ordinate clause, which means the negation does not create a barrier between the inflection and the verb as it does in English. Example (56c) shows a verb second main clause,

in which the main verb has moved above negation (which is not possible in English anymore) and finally, (56d) shows a sentence with an auxiliary, which has a similar structure as the English sentence in (56d).

- (56) Norwegian
- a. **Amy gjorde ikke snake*
Amy did not speak
 - b. ...*at Amy ikke snakket.*
that Amy not speak
 - c. *Amy snakket ikke.*
Amy spoke not
 - d. *Amy har ikke snakket.*
Amy has not spoken

The difference shown in (55) and (56) implies that English can not operate with the negation being an Adv head, like Norwegian does. Instead, negation has its own phrase-projection in English, which is placed between the TP and the VP, namely NegP (cf. Pollock 1989, Zeijlstra 2004). Example (57) shows the basic structure of a verb phrase negated sentence in English with a NegP.

- (57) English: *John did not read this book.*

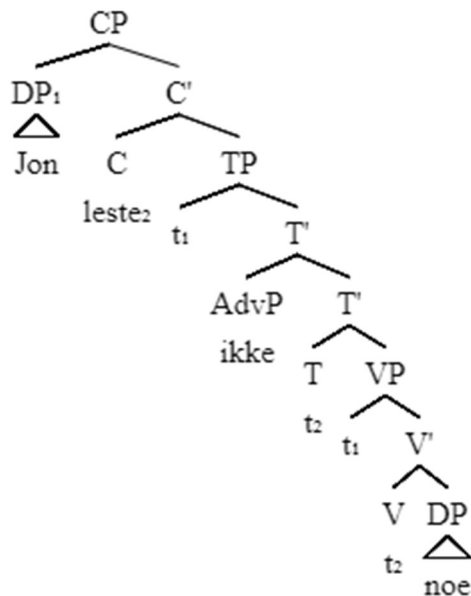


In this section it was shown that *not*-type negative markers are phrasal in English and Norwegian, but they have different positions in the syntactic structure, so they behave slightly differently. The biggest difference between them is that English *not* requires do-support or an

auxiliary, whilst Norwegian *ikke* ‘not’ doesn’t. Let us now look at the syntax of indefinite quantifiers.

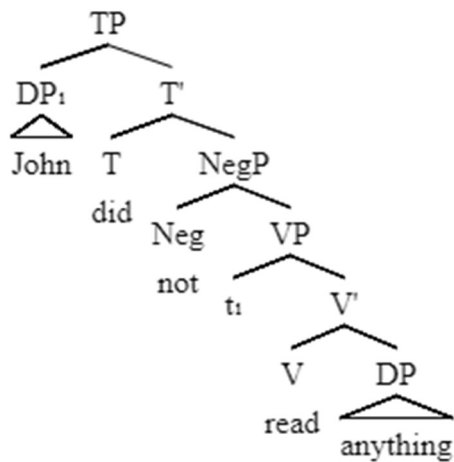
In Norwegian and English, the syntactic structure of neg + indefinite quantifier seems to be the same as the syntactic structure of a standard sentential verb phrase negation with any other DP. In Norwegian, *noe* ‘anything’ and *noen* ‘anyone’ can also be translated with ‘something’ and ‘someone’, though the interpretation is usually context dependent (cf. Norsk referansegrammatikk p.220ff); more on this ambiguity and a discussion on whether Norwegian *noe/noen* are NPIs in section 5.2.2. The example in (58) shows a syntactic tree for a sentence containing neg + indefinite quantifier in Norwegian. It has the same structure as (54), with an indefinite quantifier.

- (58) Norwegian:
Jon leste ikke noe.
 John read not anything.
 ‘John didn’t read anything.’



The syntactic structure for an English sentence containing neg + indefinite quantifier is given in (59). Also in English, it seems to be the case that the sentence has the same syntactic structure, when containing neg + indefinite quantifier as it has when it contains neg + a neutral DP (57).

- (59) English:
John didn't read anything.



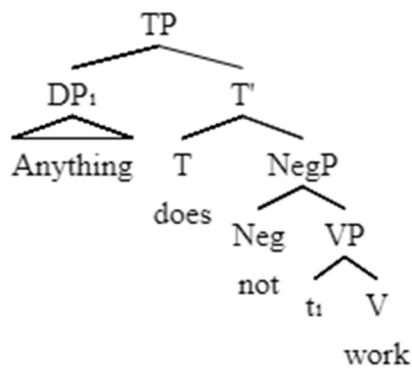
In chapter 2.1, I have shown that NPIs need a licenser and a licensing environment which is rooted in that the NPI is c-commanded by the licenser at surface structure and that the licenser has to create a downward entailing environment. I repeat example (21) in (60) below.

- (60) English:
- a. *I do not feel anything.*
 - b. **I feel anything.*
 - c. **Anything doesn't work.*
 - d. **Not anyone is meeting up today.*

As already mentioned in section 2.1, sentence (60a) fulfills all requirements, whilst sentences (60b-d) don't seem acceptable to native speakers. In (60b) the licenser is missing. For sentence (60c), the syntactic structure in (61) shows, that the NPI (*anything*) is not c-commanded by its licenser (*not*) at surface structure. The NPI is c-commanded by the licenser in its base position (t_i) before movement, but this appears to be insufficient, as the sentence is unacceptable to native speakers of English. In order to c-command the NPI, every branching node which dominates *not* would also have to dominate the NPI. As can be seen in the structure, there are branching nodes which do not fulfill this condition (NegP, T').

(61) English (syntactic structure for sentence (60c)):

**Anything does not work.*



The problem with sentence (60d) seems less straight forward. In that example, *not* does, in fact, c-command *anyone*, because *anyone* is the sister of *not*. What is noteworthy here is that constructions where another word is inserted between the negation and the NPI (62b) as well as constructions with a non-negative quantifier instead of the NPI like in (62c) are acceptable to some native speakers.

(62) English:

- a. **Not anyone came.*
- b. *?Not just anyone came. (It was the king of Norway and his family.)*
- c. *Not everyone came. (Some people were on holiday.)*

So how come (62a) is unacceptable when (62b-c), which seem to have the same structure, are acceptable? I argue that there is nothing structurally wrong with sentence (62a), instead this type of construction is blocked in subject position due to the much simpler and more economic construction containing *no one*. It is important to note that I argue for the blocking in subject position only, and not in object position. I discuss the object position more detailed in section 5.3.2. This analysis which assumes neg + indefinite quantifiers to be blocked in subject position is along the lines of Zeijlstra's (2012) analysis of the unacceptability of German constructions with *nicht ein* 'not one' as opposed to the acceptable constructions with *kein* 'no', exemplified in (63). He argues that the simpler construction with *kein* 'no' conveys an unmarked reading as shown in (63b), whilst the construction with *nicht ein* 'not one' can not be interpreted that way, as shown in (63a). The construction with *nicht ein* 'not one'

cannot yield a simple sentential negation, but only a marked constituent negation as shown in (63c).

- (63) German:
- a. **Tom hat nicht einen Hund.*
Tom has not one dog
Int. 'Tom doesn't have a dog.'
 - b. *Tom hat keinen Hund.*
Tom has no dog
'Tom doesn't have a dog.'
 - c. *Tom hat nicht EINEN Hund, er hat zwei.*
Tom has not one dog he has two
'Tom doesn't have one dog, he has two.'

The English sentence initial *not anyone*-problem can be analysed parallel to the German negation described above. Example (64a) is the unacceptable attempt to express a sentential negation. Example (64b) shows the acceptable way with a simpler and more economic construction (*no one*) and sentence (64c) shows that *not anyone* might be used sentence initially in order to convey a constituent negation. This is acceptable for some, but not all native speakers.

- (64) English:
- a. **Not anyone came.*
 - b. *No one came.*
 - c. *?Not just ANYone came, but the king and his family.*

The English examples in (64) thus show strong parallels to the German construction and I assume that the sentence initial neg + NPI is blocked in an unmarked reading which yields sentential negation. I was able to find one instance of *not anyone* used sentence initially, coming from a published book on logic. The example is shown in (65). This could indicate that it is indeed a possible construction in English. On the other hand, and as it is only a single example of this construct, it might also be a constructed meta-language example as written by a logician. This assumption seems plausible, as none of the native speaking informants found this sentence acceptable.

(65) *Not anyone is rich.*

(Gensler 2002 p.117)

In Norwegian, the closest translation to *anything* and *anyone* is *noe* and *noen* respectively. These words also turn out to be the translation for *something* and *someone*. Which would point towards the fact that *noe* and *noen* are – unlike *anyone* and *anything* – not to be analysed as NPIs and hence can appear in contexts which don't license NPIs (66b). And in contexts in which neg + indefinite quantifiers are blocked in English. The most interesting case however is (66d) which can only be translated with a negative quantifier in English, as neither the NPI *anyone* nor the PPI *someone* can be used in this position.

(66) Norwegian:

a. *Jeg kan ikke føle noe.*

I can not feel anything/something
'I can't feel anything.'

b. *Jeg føler noe.*

I feel anything/something
'I feel something.'

c. *Noe er ikke riktig.*

Anything/something is not right
'Something isn't right.'

d. *Ikke noen møter opp i dag.*

Neg anyone/someone meets up today
'No one is showing up today.'
(lit. 'Not anyone/someone is meeting up today.')

One reason to why Norwegian neg + *noe/noen* behave differently than the English counterpart could be that in English, neg + NPI is exactly that, a negative marker and a negative polarity item which needs licensing. If the negative marker is "not", it negates the entire proposition, as shown in example (67).

(67) English:

I *don't see anyone.*

Meaning: \neg [there is someone who I see]

or more precisely: $\neg\exists x$ [I see x]

It is not the case that I see anyone.

In Norwegian on the other hand, it seems as if *ikke noe* ‘not anyone’ can be analyzed as a one syntactic constituent in at least some circumstances. This would explain, why this construction can appear in elliptic clauses and in subject position, where the English neg + indefinite quantifier can not. The easiest method to find out if this is the case is through constituency tests. Some of the most commonly used constituency tests are movement, clefting, passivization and answer fragment (e.g. Carnie 2013, p.98f).

In the movement constituency test, a group of words is moved, usually fronted, within the sentence. If fronting of the group of words is possible, that speaks for the group making up one constituent. Examples (68ab) show how the movement constituency test works. In order to show that the English neg + NPI construction is not a constituent, we can apply the movement constituency test to an English neg + NPI, as is done in (68c-d). In (68d) we see that the result sentence is not acceptable in English, thus, English not + anything does not make one constituent.

(68) Movement constituency test:

- a. *The cat ate [the big green fish].*
- b. *[The big green fish], the cat ate.*
- c. *The cat didn't eat anything.*
- d. **[Not anything], the cat ate.*

In the clefting test for constituency, a group of words is fronted, with the use of *it was ... that-* type constructions. If the result sentence is acceptable and gives the same meaning than the original sentence with emphasis on whatever is fronted, it points toward the group of words forming a constituent. (69ab) show how the clefting test for constituency works and (69cd) show it applied to English *not anything*. Here it is worth noting, that the result of the test is not unacceptable per se, but the acceptability of the sentence can be accounted to that *not* in (69d) may not be part of the clefted constituent to begin with.

(69) Clefting constituency test:

- a. *The cat ate [the tuna].*
- b. *It was [the tuna] that the cat ate*
- c. *The cat didn't eat anything.*
- d. *?It was [not anything], that the cat ate.*

In the passivization constituency test, the original sentence is being passivized. In English, the passivization of a sentence denotes the subject to an optional adjunct, whilst the object of the sentences is promoted to the nominative subject position (Carnie 2013). If a group of words in subject or object position are moved together when passivizing a sentence, this would point to constituency. In this test, like in the previous ones, English neg + NPI constructions don't give acceptable results (70c-d).

(70) Passivization constituency test:

- a. *The cat ate [the tuna].*
- b. *[The tuna] was eaten by the cat.*
- c. *The cat didn't eat anything.*
- d. **Not anything was eaten by the cat.*

And lastly, the answer fragment constituency test constructs a question from the sentence which can be answered with a fragment of the sentence. If the group of words which is being tested for constituency can stand alone in a fragment answer, it would point to constituency. When applied to an English sentence containing a neg + NPI construction, we see that they don't give a felicitous outcome (71c-d).

(71) Answer fragment constituency test:

- a. *The cat ate [the tuna].*
- b. *What did the cat eat? – The tuna.*
- c. *The cat didn't eat anything.*
- d. *What did the cat eat? *Not anything.*

When applied to an English sentence with a neg + NPI construction, out of the four results of the application of constituency tests, three were judged unacceptable by all five native speakers that were asked for judgements. The judgements on the clefting constituency test

gave slightly more diverse judgements, with one person judging it as unacceptable, one was not sure and two people thought it acceptable when given a specific context (but, as was mentioned above, the result sentences of the clefting constituency test could have a different underlying structure). However, the first important property of a constituent is proximity within the structure. In the English example sentence, this requirement was not fulfilled, as the main verb is placed between the negation and the NPI. And even if the base-generated sentence was *The cat was eating not anything*, the constituency tests still give the same results. Thus, English *not + anything* can not be interpreted as one constituent.

In Norwegian however, the negation and the NPI are usually placed right next to each other, which makes it much harder to judge if there is constituency before applying the tests. I applied the constituency tests to Norwegian sentence with *ikke noe* ‘not anything’, through the constituency tests, as it could bring new insights in the matter of constituency. In (72b-e) all the tests which were introduced here are applied to the sentence in (72a). Here, I specifically tested if [*ikke noe*] was one constituent. In (72b) the result of the movement constituency test is shown, in (72c) you can see the result of the clefting constituency test, in (72d) is the result of the passivization constituency test and finally in (72e) you see the result of the answer fragment constituency test. All four tests gave acceptable results in Norwegian

(72) Norwegian neg + indefinite quantifier

- a. *Katta spiste ikke noe.*
 Cat.the ate not anything
 ‘The cat didn’t eat anything.
- b. Movement constituency test: *Ikke noe, spiste katta.*
 Not anything ate cat.the
 ‘Nothing, the cat ate.’
- c. Clefting constituency test: *Det var ikke noe som katta spiste.*¹²
 it was not anything that cat.the ate
 ‘It was nothing, the cat ate.’
- d. Passivization constituency test: *Ikke noe ble spist av katta.*
 not anything was eaten by cat.the

¹² It is important to note here that the result of the clefting constituency test could be judged acceptable due to the possible confound which is that *ikke* here is a standard sentential negation, and negates the entire proposition, along the lines of: *It was not the case that there was something that the cat ate.*

‘Nothing was eaten by the cat.’

- e. Answer fragment constituency test: *Hva spiste katta? - Ikke noe.*
What ate cat.the - Not anything
‘What did the cat eat? – Nothing.

Now, after having shown that [*ikke noen*] can make up a constituent in (72), I will argue that Norwegian *noe(n)* are not polarity items, but instead they are neutral quantifiers. To argue for this, I compare them to English *everything*, which is a universal quantifier and is not polarity sensitive. In (73), I give examples, that *everything* can appear in the same surroundings as *noe*, including the object position in a negated sentence (73a), the object position in an affirmative sentence (73b), the subject position in a negated sentence, without proximity to the negative marker in (73c) and finally, the subject position, with the negation in close proximity.

(73) English:

- a. *I can't feel everything.*
- b. *I feel everything.*
- c. *Everything isn't right.*
- d. *Not everyone is meeting up today.*

I now use the same tests which I have applied as constituency tests above, however, as they are not testing for constituency anymore, I will call them “modifications” from here on. I apply these modifications in order to show that *noe* and *everything* behave the same way – considering their scope – when the surroundings are changed. Namely, when the modifications are applied to neg + quantifier, the scope is $\neg\exists$ for *noe* and $\neg\forall$ for *everything*, whilst, when the modifications were applied to the quantifier alone, the scope was $\exists\neg$ and $\forall\neg$, respectively. This is to be expected for *noe*, since it is ambiguous between ‘anything’ (in a negative polarity environment) and ‘something’ (in a positive polarity environment), which means that taking *noe* out of a polarity environment changes its scope. First, I apply the modifications to [*noe*] in (74). (74a) shows the base sentence. (74b) shows the movement modification, which was not fully acceptable to all native speakers. In (74c) you can see the clefting modification, which also resulted in an acceptable sentence, and in (74d) the passivization modification can be seen, which, just like the ones before also yielded an

acceptable sentence. Finally, in (74e) the answer fragment modification can be seen, which again led to an acceptable result.

- (74) Norwegian *noe*
- a. *Katta spiste ikke noe.*
 Cat.the ate not anything
 ‘The cat didn’t eat anything.’
- b. Movement modification: *?Noe, spiste ikke katta.*
 anything ate cat.the not
 ‘Something, the cat didn’t eat.’
 Int: *‘The cat didn’t eat anything.’
- c. Clefting modification: *Det var noe som katta ikke spiste.*
 there was anything that cat.the not ate
 ‘There was something, the cat didn’t eat.’
 Int: *‘There was nothing the cat ate.’
- d. Passivization modification: *Noe ble ikke spist av katta.*
 anything was not eaten by cat.the
 ‘Something wasn’t eaten by the cat.’
 Int: *‘Nothing was eaten by the cat.’
- e. Answer fragment modification: *Hva spiste katta ikke? - Noe.*
 What ate cat.the not - anything
 ‘What didn’t the cat eat? – Something.’
 Int: *‘What didn’t the cat eat? – Anything.’

Sentence (74b) is not acceptable by some of the native speakers I asked, all the others are. As was to be expected, once *noe* ‘anything’ is split from *ikke* ‘not’, its scope changes from being $\neg\exists$ in the result sentences in (72) (cf. ‘There is no such thing that the cat ate’) to $\exists\neg$ in the result sentences in (74) (cf. ‘There is a thing such that the cat did not eat it’).

To be able to compare *noe* with *everything*, I now apply the same modifications to the neutral universal quantifier. This shows, that the scope difference between *everything* and *not + everything* is the same as for *noe* vs. *ikke + noe*. In (75) *not + everything* undergoes the modifications, whilst in (76) *everything* undergoes them on its own. (75a) and (76a) show the base sentences, (b) shows the movement modification, (c) the clefting modification, (d) the

passivization modification and finally (e) shows the answer fragment modification. As expected, *everything* has the same pattern for scope as *noe/noen*. The scope is $\neg\forall$ when tested with negation (75) and $\forall\neg$ when tested without (76). (*Noe/noen* was $\neg\exists$ when tested with the negation (72) and $\exists\neg$ when tested without (74)). Note that (76c) was acceptable to only half of the native speakers I consulted.

(75) English neg + neutral quantifier [not everything]

- a. *The cat didn't eat everything.*
- b. Movement modification: *Not everything, the cat ate.*
Meaning: The cat ate some
- c. Clefting modification: *It was not everything, that the cat ate.*
Meaning: The cat ate some.
- d. Passivization modification: *Not everything was eaten by the cat.*
Meaning: The cat ate some.
- e. Answer fragment modification: *What did the cat eat? – Not everything.*
Meaning: The cat ate some.

(76) English neutral quantifier [everything]

- a. *The cat didn't eat everything.*
- b. Movement modification: *Everything, the cat didn't eat.*
Meaning: The cat ate nothing.
- c. Clefting modification: *?It was everything, the cat didn't eat.*
Meaning: The cat ate nothing.
- d. Passivization modification: *Everything was not eaten by the cat.*
Meaning: The cat ate nothing.
(but: Inverse scope possible!)
- e. Answer fragment modification: *What didn't the cat eat? – Everything.*
Meaning: The cat ate nothing.

Whilst English *anything* and *anyone* are true NPIs and need to be licensed under special conditions and with a licenser which c-commands them, the Norwegian *noe* and *noen* merely require a context which can disambiguate between the two forms. In the following section I

will show differences in scope between English neg + NPI, Norwegian neg + *noe/noen* and negative quantifiers.

3.3.3 Scope differences

In English, sentences which contain a universal quantifier and *not*-type negation can be ambiguous (77) (Zeijlstra 2004 p.5). Either the universal quantifier scopes over the negation, meaning that “For every person *y* it is not the case... “ or the negation scoping over the universal quantifier, meaning that “It is not the case for every person *y*, ... “

(77) Everyone doesn't drink

$\forall > \neg$: For every person *y* it is the case that *y* doesn't drink.

$\neg > \forall$: It is not the case for every person *y*, that *y* drinks.

I will now proceed to show that the scope differences stated above also apply to sentences which contain a universal quantifier, negation and an existential quantifier. In the following examples (78-82), the lines (a-f) show different scope orders, in (b), the universal quantifier scopes over the NPI which in turn scopes over negation; (c) shows a scope order where the negation scopes over the universal quantifier which scopes over the NPI; (d) shows a scope order where the negation scopes over the NPI which scopes over the universal quantifier; (e) shows a scope order where the NPI scopes over the universal quantifier which scopes over negation and finally (f) shows a scope order where the NPI scopes over the negation which in turn scopes over the universal quantifier.

Example (78) shows a sentence with a universal quantifier in subject position, a negative marker, and an NPI in object position. In (78a), the universal quantifier scopes over the negation, which in turn scopes over the NPI. This is the only available reading for the type of sentence shown. (79) shows that the available scope orders contrast when the NPI is replaced by a PPI. All the orderings which are not available with NPIs at surface structure are available with PPIs at surface structure, and the one scope order which was available for the sentence containing the NPI is unavailable for the sentence containing the PPI.¹³

¹³ A note on the judgements of acceptability: Scope judgements seem to be rather difficult to make, even for native speakers. I gave a context for each of the different scope possibilities and asked the native speakers if each sentence is acceptable in given scenario. It was still difficult to reach unified results. All scope orders which I marked as acceptable were acceptable to at least one of my consultants. All scope orders which I marked as unacceptable were unacceptable to all of them.

(78) *Everyone didn't see anything.*

- a. $\forall > \neg > \text{NPI}$: For every person y it is not the case that there is some x such that y saw x.
- b. $*\forall > \text{NPI} > \neg$: For every person y there is some x such that y did not see x
- c. $*\neg > \forall > \text{NPI}$: It is not the case that for every person y there is some x such that y saw x.
- d. $*\neg > \text{NPI} > \forall$: It is not the case that there is some x such that every person y saw x.
- e. $*\text{NPI} > \forall > \neg$: There is some x such that every person y didn't see x.
- f. $*\text{NPI} > \neg > \forall$: There is some x such that not every person y saw x.

(79) *Everyone didn't see something.*

- a. $*\forall > \neg > \text{PPI}$: For every person y it is not the case that there is an x such that y saw x.
- b. $\forall > \text{PPI} > \neg$: For every person y there is some x such that y didn't see x.
- c. $\neg > \forall > \text{PPI}$: It is not the case for every person y that there is some x such that y saw x.
- d. $\neg > \text{PPI} > \forall$: It is not the case that there is some x such that every person y saw x.
- e. $\text{PPI} > \forall > \neg$: There is some x such that every person y didn't see x.
- f. $\text{PPI} > \neg > \forall$: There is some x such that not every person y saw x.

So, what does the ambiguity look like with sentences containing a universal quantifier in subject position and a negative quantifier in object position? As the negative quantifier consists of a negation and an existential quantifier ($\neg > \exists$), the strongly preferred scope order has the negation scope over the existential quantifier (80). The only scope order that was acceptable to my native speaking informants was where the universal quantifier scoped over the negation, which scoped over the existential quantifier (80a). There are instances where split scope readings can be available in English (cf. Zeijlstra 2016, p.245), however, not all native speakers accept it.

- (80) *Everyone saw nothing.*
- a. $\forall > \neg > \exists$: For every person y it is not the case that there is an x such that y saw x.
 - b. $*\forall > \exists > \neg$: For every person y there is some x such that y did not see x.
 - c. $*\neg > \exists > \forall$: It is not the case that there is some x such that every person y saw x
 - d. $*\neg > \forall > \exists$: It is not the case that for every person y there is some x such that y saw x.
 - e. $*\exists > \forall > \neg$: There is some x such that every person y didn't see x.
 - f. $*\exists > \neg > \forall$: There is some x such that it is not the case that every person y saw x.

In Norwegian sentences with universal quantifiers and standard verb-phrase negation, the inverse reading ($\neg > \forall$) is the only possible one according to Zeijlstra (2004, p.141). His example is repeated in (81). However, my native speaking informants did not have that intuition and thought both readings to be acceptable, and some in fact preferred $\forall > \neg$.

- (81) *Alle drikker ikke.*
all drink not

$\forall > \neg$: For every person y it is the case that y does not drink.

$\neg > \forall$: It is not the case that every person y drinks.

(Zeijlstra 2004, p.141)

As it thus seems as if Norwegian sentences containing a universal quantifier and a negative marker also yield ambiguity, the same test for scope orders can be made as for English above. As expected, given the discussion in section 3.3, sentences containing neg + *noe/noen* in Norwegian have all the readings of English universal quantifier + *anything* (78) and universal quantifier + *something* (79) combined, and that is due to the fact that *noe* doesn't require licensing in the same way as English *anything* and because *noe* itself is ambiguous and can be translated with English *anything* or *something*, depending on the context (82).

- (82) *Alle så ikke noe.*

all saw not anything/something

- a. $\forall > \neg > \exists$: For every person y it is not the case that there is some x such that y saw x.

- b. $\forall > \exists > \neg$: For every person y there is some x such that y did not see x.
- c. $\neg > \forall > \exists$: It is not the case for every person y that there is an x such that y saw x.
- d. $\neg > \exists > \forall$: It is not the case that there is some x such that every person y saw x.
- e. $\exists > \forall > \neg$: There is some x such that every y did not see x.
- f. $\exists > \neg > \forall$: There is some x such that it is not the case that every person y saw it.

In Norwegian, sentences with a universal quantifier and a negative quantifier have the same reading as in English, with $\forall > \neg > \exists$ being the only possible one. These sentences are not ambiguous (83).

(83) *Alle så ingenting.*

everyone saw nothing

- a. $\forall > \neg > \exists$: For every person y it is not the case that there is some x such that y saw x.
- b. $*\forall > \exists > \neg$: For every person y there is some x such that y did not see x.
- c. $*\neg > \forall > \exists$: It is not the case for every person y that there is an x such that y saw x.
- d. $*\neg > \exists > \forall$: It is not the case that there is some x such that every person y saw x.
- e. $*\exists > \forall > \neg$: There is some x such that every y did not see x.
- f. $*\exists > \neg > \forall$: There is some x such that it is not the case that every person y saw it.

This section on scope differences has shown that Norwegian as well as English can have scope ambiguity in sentences which contain a universal quantifier in subject position, a negative marker, and an indefinite quantifier in object position. The English sentence containing the NPI *anything* in object position has the same range as the sentence with the negative quantifier *nothing* in object position and is unambiguous. The English sentence containing the PPI *something* in object position has all the possible readings which the NPI-sentence didn't have. As the Norwegian indefinite quantifier is ambiguous between *something* and *anything*, it came as no surprise that it has all readings of the NPI-sentence and the PPI-sentence combined.

4 The semantics of negation

In the first section, 4.1, I will introduce my core proposals for the semantics of negative quantifiers and neg + indefinite quantifiers. In section 4.2, I give an overview over my observations which relate to the semantics and in section 4.3, I provide an analysis and discussion the semantic.

4.1 Core proposal for the semantics

This section contains two main proposals. The first is that Norwegian *noe/noen* ‘anything/something’/ ‘anyone/someone’ correspond both to the English NPIs *anything* and *anyone* as well as the PPIs *something* and *someone*. However, when it comes to constituency and scope, they differ. I also provide evidence that Norwegian *noe/noen* are not NPIs, but neutral.

My second proposition for the semantics of negative quantifiers and neg + indefinite quantifiers is, that the semantics of the two types are so similar that there is no difference in meaning. One semantic component which NPIs are known to have is that of domain widening. I argue, however, that the domain widening effect is not relevant for the distinction between negative quantifiers and neg + indefinite quantifiers, as both denote the negation of existential quantification, which in itself is so elemental, that the domain can’t be widened either way.

4.2 Observations

4.2.1 The semantics of negative quantifiers

The semantic contribution of negative quantifiers like *nothing* has received much attention in the literature. It is well-known that they do not denote individuals or sets of individuals, but rather, they express relations between two sets (Heim & Kratzer 1998, p. 141).

In (84), it is shown that the quantifiers express a relation between the set of all people and the set of all individuals who did their homework. In (84a), the set of all people is a subset of all the people who did their homework. In (84b) the intersection between the two sets (all people/

people who did their homework) is not empty. And in (85c) the intersection of the two sets (all people / people who did their homework) is empty ((Heim & Kratzer 1998, p. 148f)

(84) Quantifiers express relation between sets:

a. Everyone did their homework.

$$\{X \mid \{x \mid x \text{ is a person}\}, \{Y \mid \{y \mid y \text{ did their homework}\}: X \subseteq Y\}$$

b. Someone did their homework.

$$\{X \mid \{x \mid x \text{ is a person}\}, \{Y \mid \{y \mid y \text{ did their homework}\}: X \cap Y \neq \emptyset\}$$

c. No one did their homework.

$$\{X \mid \{x \mid x \text{ is a person}\}, \{Y \mid \{y \mid y \text{ did their homework}\}: X \cap Y = \emptyset\}$$

I define the lexical entry for negative quantifiers along the lines of Heim & Kratzer's (1998 p.141) definition (85). The difference being that (86ab) also include the restriction to make space for the difference between the non-human-denoting quantifier *nothing* (86a) and the human-denoting quantifiers *no one / nobody* (86b). No one and nobody are synonyms and have the same lexical entry.

(85) Lexical entry

a. $\|\text{nothing}\| = \lambda f \in D_{\langle e, t \rangle} . \text{there is no } x \in D_e \text{ such that } f(x) = 1.$

(Heim & Kratzer 1998 p. 141)

(86) Redefined lexical entry

a. $\|\text{nothing}\| = \lambda f_{\langle e, t \rangle} . \text{there is no } x \text{ such that } x \text{ is a thing and } f(x) = 1.$

b. $\|\text{nobody}\| = \lambda f_{\langle e, t \rangle} . \text{there is no } x \text{ such that } x \text{ is a person and } f(x) = 1.$

Negative quantifiers can be formulated as either $\neg\exists$ or $\forall\neg$. The first of them can be described as “there is no x that...” and the second as “for all x, they don't...” Both are truth conditionally equal and it is therefore not possible to distinguish between them (87).

(87) No one drinks

$$\neg\exists x \text{drinks}(x) = \forall x \neg \text{drinks}(x)$$

(de Swart 2016 p.468f)

In Norwegian the semantics of negative quantifiers behave in the same way as in English as is shown in (88).

- (88) Norwegian:
- a. $\| \text{ingenting} \| = \lambda f_{\langle e, t \rangle} . \text{there is no } x \text{ such that } x \text{ is a thing, } f(x) = 1$
 - b. $\| \text{ingen} \| = \lambda f_{\langle e, t \rangle} . \text{there is no } x \text{ such that } x \text{ is a person, } f(x) = 1$

Now, that the semantics of negative quantifiers are set, let us consider the semantics of neg + indefinite quantifiers in the next section.

4.2.2 The semantics of neg + indefinite quantifiers

Let us first look at the distributional conditions for NPIs. In section 3.3 it was shown that NPIs in English need to be c-commanded by their licenser and that the licenser has to create a downward entailing environment. I repeat the formal definition of downward entailment¹⁴ in (89).

- (89) The formal definition of downward entailment:
- δ is downward entailing iff $\forall X \forall Y (X \subseteq Y) \rightarrow ([[\delta]](Y) \subseteq [[\delta]](X))$

In other words, downward entailment means it is possible to reason from sets to subsets (Van der Wouden 1994) (90). In sentence (90a), the first sentence “No one snores” entails the second sentence “No one snores loudly” based on the idea that if there is not a person that snores at all, then there cannot be a person that snores loudly. In other words, if there is no person in the set of snoring people, then it is impossible for any person to be in the set of loudly-snoring people, as the second is a subset of the first. In example (90b), “Tom doesn’t like vegetables”, the sentence “Tom doesn’t like carrots” is entailed. If Tom doesn’t like anything that is part of the set of all vegetables, then he can not like carrots (as the set of carrots is a subset of the set of vegetables).

- (90) Downward entailment:
- a. *No one snores.* \rightarrow *No one snores loudly.*
 - b. *Tom doesn’t like vegetables* \rightarrow *Tom doesn’t like carrots.*

With an NPI’s requirements for the context met, this still doesn’t answer the question of why NPIs occur. Neg + NPIs consist of a *not*-type sentential negation and a negative polarity item.

¹⁴ For a more thorough explanation of downward entailment, see section 2.2.

In order to find out what the semantic contribution of NPIs is, the first step is to find out what the semantic contribution of negation is. *Not*-type sentential negations reverse the truth conditions of a sentence, as shown in (91) (de Swart 2016). Sentence (91a) is true in a world where Tom drinks coke and sentence (91b) is true in a world where Tom doesn't drink coke.

- (91) English:
- a. *Tom drinks coke.*
 - b. *Tom doesn't drink coke.*

With the meaning of standard negation being known, what is the purpose of NPIs? NPIs act as domain wideners, meaning, the domain in which the listener would usually look for fitting candidates is widened and thereby includes a larger domain of individual candidates (Kadmon & Landsmann 1993; from Haida & Repp 2013). This strengthens a statement in a downward entailing environment. Example (92) shows the domain widening effect with *any*-type NPIs. The discourse in (92) seems coherent. The mother first answers that they don't have bread and the child interprets it as there might still be some crumbs. In (92b), the mother answers that they don't have any bread, which implies that there are not even a few crumbs in the house. Thus, the child's further inquiry doesn't seem as acceptable as in (92a). (However, some of the native speakers, I consulted thought this discourse to be fine as well, so the domain widening effect in this sentence might be small enough to still exclude *crumbs*.)

- (92) Domain widening:
- a.
Child: *Can I have bread?*
Mother: *We don't have bread.*
Child: *I only need a few crumbs for my hamster.*
Mother: *We don't have any bread.*
 - b.
Child: *Can I have bread?*
Mother: *We don't have any bread.*
Child: *?# I only need a few crumbs for my hamster.*

So, using NPIs is a way of strengthening a negative assertion. Using NPIs can be a strategy to overanswer explicit or implicit polar questions. To overanswer means to give more

information than is actually relevant to the person asking. By overanswering they also in some cases tend to put a barrier to further inquiries. (93) shows an English example, (94) a Norwegian one.

(93) English:

Do we have chocolate cake? – No, we don't have any cake.

(94) Norwegian:

Har vi sjokoladecake? – Nei, vi har ikke noen kake.

Have we chocolate.cake - No we have not any cake

'Do we have chocolate cake? – No, we don't have any cake.'

(95) *Noe vs. Noen*

a. *Nei, vi har ikke noen kake*

No, we have not any cake

b. **Ja, vi har noen kake.*

yes we have any cake

c. *Ja, vi har noe kake.*

Yes, we have some cake.

d. *Nei, vi har ikke noe kake.*

No, we have not any cake

So, NPIs are domain widening and strengthen a negative assertion. They can be used strategic and give a certain emphasis to the utterance. So, what about the Norwegian *noe/noen*? I have already presented some arguments against their NPI status, so how come that the sentence in (94) still includes domain widening? The answer seems to be lying in their form. I believe that *noen*, when used as pure quantifiers (which correspond to 'any' or 'some' in determiner function) can have NPI status, and when used with a singular DP they must be. According to the Norwegian reference grammar (Norsk referansegrammatikk, p.220ff), the form *noen* 'any' as a quantifier (without bound variable) can only appear in negative sentences or interrogative sentences when combined with a singular DP. The corresponding affirmative sentence can not contain *noen* if the DP is singular.

On the other hand, *noe/noen*, used as a quantifying DP (which can be translated with 'anything'/'anyone') and which bind a variable can be used in all types of surroundings, and

they don't change their meaning, they might only change their scope. So, I argue that they are not NPIs. I will provide further examples in the next section.

4.3 Analysis

4.3.1 Are Norwegian *noe/noen* NPIs?

Note that in this section I only talk about *noe/noen* in DP form, which bind a variable (corresponding to 'anything/something' 'anyone/someone') and not *noe/noen* which correspond to English 'any' or 'some' in determiner function. In order to find out if *noe/noen* are NPIs or not, it is important to first define which requirements must be met before a phrase can be called NPI. There seem to be two different kinds of NPIs (Johannessen 2003, p.34).

1. Either an NPI can **only** appear in NPI licensing environments, rendering the sentence containing the NPI unacceptable if the licensing requirements are not met.

The English, *anyone* is an NPI which can only appear in NPI licensing environments. Sentences which contain *anyone* and don't have a licenser or the licensing conditions between the licenser and the NPI are faulty, are deemed unacceptable by native speakers as shown in (96).

- (96) Anything
- a. *I don't have anything.*
 - b. **I have anything.*

2. Or an NPI can appear in an NPI licensing environment, and the NPI drastically changes its meaning when used in a non-licensing environment, giving it a completely different interpretation.

In (97a) *red dime* has the same interpretation as *anything*. The sentence can be paraphrased with *I have nothing*. In (97b) *red dime* is not an NPI, and the only possible interpretation is the literal one, namely that it denotes a coin which is of red color.

- (97) a red dime
- a. *I don't have a red dime.*
 - b. *I have a red dime.*

I argue that *noe/noen* don't fall in either of the two categories described above. They can be used within and outside of NPI licensing environments and their interpretation does not undergo drastic changes from one to the other (98).

- (98) *noe/noen*
- a. *Jeg har ikke noe.*
 I have not anything/something
 'I don't have anything'
- b. *Jeg har noe.*
 I have anything/something
 'I have something.'

What does change, depending on the context, is their scope. In a negative context, *noe/noen* can either scope under negation $\neg\exists$ (e.g. 'not anything') or $\exists\neg$ (e.g. 'something not'). This scope change is not sufficient to call any word an NPI, as for example the (neutral) universal quantifier everything has the same scope possibilities in combination with negation ($\neg\forall$ e.g. 'not everything' or $\forall\neg$ e.g. 'for everything it is not the case'). But the scope change alone is not sufficient for classification as an NPI (as else, many more words would be classified as NPIs).

In environments which can either be downward entailing and thereby NPI licensing or not, the use of an NPI vs a PPI can disambiguate the sentence. In English that means that either anyone or someone can be used and depending on which one is used, the sentence's meaning changes (99). In sentence (99a), for all people *x*, Tom ate more than them, and in sentence (99b), there is at least one person *x* who ate less than Tom (and presumably some who ate more).

- (99) English:
- a. *Tom ate more than anyone* (he won the eating contest)
 For every *x*, Tom ate more than *x*.
- b. *Tom ate more than someone* (but less than others)
 There is some *x* such that Tom ate more than *x*.

In Norwegian *noe* would be used in both cases, so the sentence is ambiguous. This however is only the case in written language. In spoken language the difference in scope is embedded in a difference in tonem (100) (cf. Sveinbjørnsson 2017, p.85). It is however important to

mention here, that for most native speakers this tonem difference only seems to appear in ambiguous contexts. This is an interesting observation and deserves to be examined further. Unfortunately, I discovered this difference too late in the timeline of this thesis and there was no time to reflect on it with the attention I feel it deserved.

- (100) Norwegian:
- a. *Tom spiste mer enn ²noen.*
Tom ate more than anyone
'Tom ate more than anyone.'
 - b. *Tom spiste mer enn ¹noen*
Tom ate more than someone.
'Tom ate more than someone.'

In addition to this, Norwegian *noe/noen* can appear in positions which in English only can be taken by neutral quantifiers and not by either NPIs or PPIs (101).

- (101) Neutral position
- a. **Not anyone snores.*
 - b. **Not someone snores.*
 - c. *Not everyone snores.*
 - d. *Ikke noen snorker.*
Not anyone snores
'No one snores.'

Finally, in the last section I pointed out that NPIs involve domain widening in their contexts. If we assume a context, where the child asks the mother for bread (closely related to the one in (92)), we see that there is no NPI-like domain-widening involved. The discourse in (102) is coherent, and the child can fine inquire about crumbs, even though the mother used *ikke noe* ('not anything') in her answer. This shows that Norwegian *noe* 'anything' does not induce domain-widening like it was shown for the English NPI *any* in (92).

- (102) Noe/noen domain-widening
- Child: *Kan jeg få noe å spise?*
can I get something to eat
- Mother: *Vi har ikke noe (å spise).*
we have not anything (to eat)

Child: *Men jeg trenger bare noen smuler til hamsteren min.*

but I need just some crumbs for hamster.the mine

These arguments, meaning the scope changes, the ability to appear in all kinds of contexts, all point to *noe/noen* being neutral in their NP-included form, and not an NPI.

In the next section I will discuss if negative quantifiers and negation + *anything*-type constructions mean the same semantically.

4.3.2 Do negative quantifiers mean the same as the corresponding neg + indefinite quantifiers?

In order to find out whether negative quantifiers and neg + indefinite quantifiers have the same semantic meaning, I first show that the domain widening effect of NPIs don't make a semantic difference between NPIs and negative quantifiers before I argue that neg + indefinite quantifiers and negative quantifiers are semantically equal by showing that both follow the laws of negation of Aristotelian logic and thus have the same truth-value-reversing properties.

First, since it is known that neg + NPI constructions involve domain widening, we can ask whether negative quantifiers completely lack a domain widening effect. In what follows, I argue that domain widening is irrelevant for the semantics of the types of negation I look at, based on them already negating existential quantification, and this domain they quantify over is already extensive.

In (103) I provide an example where person A states that they don't have food (which in this case leaves room for e.g. crumbs), to which person B states he only needs crumbs. In (103a) person A then answers that they don't have anything to eat, whilst in (103b) person A answers that they have nothing to eat. Both answers have the same effect, namely letting Person B know that there are not even crumbs in the house. If anything, the statement in (103b) is stronger, though that I would attribute to the pragmatic effect of contextual restriction in neg + indefinite quantifiers, which I discuss in section 5.3.

- (103) Not anything vs. nothing
- a. A: *We don't have food.*
 - B: *I only need crumbs for my hamster.*

A: *We don't have anything to eat.*

b. A: *We don't have food.*

B: *I only need crumbs for my hamster.*

A: *We have nothing to eat.*

In classical logic, negation (\neg) reverses the truth value of an utterance. If we consider the laws of Aristotelian logic once again, as repeated in (104), we see that in English, both negative quantifiers and neg + NPIs follow them, meaning that both types of negation contradict their affirmative counterparts (de Swart 2016).

(104) Aristotelian laws:

a. Law of Contradiction

Only one of the two utterances, either the assertion or the negation can be true at any given time.

b. Law of Excluded Middle

One of the two utterances must be true at any given time.

(de Swart 2016, p.468)

In English, neg + NPI follows both rules (105). The affirmative sentence (105a) is true if and only if the negative sentence (105b) is false as is shown in the unacceptability of (105c). One of them has to be true at all times, which is shown in sentence (105d), where both utterances are negated.

(105) English neg + NPI:

a. *I see somebody.*

b. *I don't see anybody.*

c. **I see somebody, and I don't see anybody.*

d. **It is not the case that [I see somebody] and it is also not the case that [I don't see anybody].*

The same is true for negative quantifiers in English (106) Sentence (106a) is true if and only if sentence (106b) is false and vice versa as shown in (106c). One of them has to be true at any given time, as shown in (106d).

(106) English, negative quantifier:

- a. *I see somebody.*
- b. *I see nobody.*
- c. **I see somebody and I see nobody.*
- d. **It is not the case that [I see somebody] and it is also not the case that [I see nobody].*

In Norwegian, the same laws are obeyed, again, this is true for both types of negation. Example (107) shows neg + *noe/noen* in Norwegian. Sentence (107a) is the affirmative, sentence (107b) the negation with neg + NPI, sentence (107c) shows that both cannot be true at the same time and sentence (107d) shows that one of them has to be true at any given time.

(107) Norwegian, neg + *noe/noen*

- a. *Jeg ser noen.*
I see someone
'I see someone.'
- b. *Jeg ser ikke noen.*
I see not anyone
'I don't see anyone.'
- c. **Jeg ser noen og jeg ser ikke noen.*
I see someone and I see not anyone
'I see someone and I don't see anyone.'
- d. **Det er ikke tilfellet at [jeg ser noen] og heller ikke at [jeg ikke ser noen].*
It is not the case that I see some one and neither that I not see someone
'It is not the case that [I see someone] and it is also not the case that [I don't see anyone].'

Finally, example (108) shows a sentence with negative quantifier in Norwegian. Here as well, sentence (108a) is affirmative and sentence (108b) is the negation of (108a). Sentence (108c) shows that they can't be true at the same time and sentence (108d) shows that they can't be false at the same time.

(108) Norwegian, negative quantifier.

- a. *Jeg ser noen.*
I see someone

- ‘I see someone.’
- b. *Jeg ser ingen.*
 I see no one
 ‘I see no one.’
- c. **Jeg ser noen og jeg ser ingen.*
 I see someone and I see no one
 ‘I see someone and I see no one.’
- d. **Det er ikke tilfellet at [jeg ser noen] og heller ikke at [jeg ser ingen].*
 It is not the case that I see some one and neither that I see no one
 ‘It is not the case that [I see someone] and it is also not the case that [I see no one].’

This shows, that according to their behavior concerning the Aristotelian laws of negation, neg + indefinite quantifiers and negative quantifiers have the same semantic properties. The affirmative sentence that they negate is the same for both, meaning, they are contradictory negations (cf. Law of Contradiction in (103a)) to the same sentence, which again means that they have the same truth-conditional value.

When assuming that quantifiers express a relation between sets, we can see that neg + NPI / neg + *noe/noen* and negative quantifiers here have the same properties as well. For negative quantifiers, the intersection of the set of all ‘x’ and the set of all ‘y’ is empty. For an existential quantifier like *someone*, the intersection of the set of all ‘x’ and the set of all ‘y’ is not empty. When now negating the existential quantifier *someone*, we get *not anyone*, (or *no one*) and thereby reversed truth conditions. These reversed truth conditions make exactly the same set relation as negative quantifiers: the intersection of the set of all ‘x’ and the set of all ‘y’ is empty.

So, I conclude with that negative quantifiers and neg + indefinite quantifiers are semantically equal both in English and in Norwegian. They carry the same truth value reversal compared to their affirmative counterparts and express the same set relations. This would point towards that the difference between them is not anchored in the semantics, but much rather a question of pragmatics, which will be subject in the next section.

5 The pragmatics of negation

5.1 Core proposal for the pragmatics

The pragmatic conditions show a pattern where negative quantifiers give rise to additional pragmatic information, which doesn't follow the neg + indefinite quantifier type negation. I divided the pragmatic effects into four kinds. Contextual restriction, which is weaker in negative quantifiers, as well as emphasis, (lack of) hope and negative value which is conveyed more readily when negative quantifiers are used. I will give a clearer picture of these effects in the next section of this thesis.

5.2 Observations

Based on the patterns in the corpus, there seem to be four overarching pragmatic effects: Contextual restriction, emphasis, expectation and negative value. This section only gives a short overview over the findings, as each of the pragmatic effects will be discussed more thoroughly in the analysis part (section 5.3).

Contextual restriction

Based on the corpus data, sentences containing negative quantifiers seem to be less open to contextual restriction than sentences containing neg + indefinite quantifiers. Sentences in which the negation of existential quantification is expressed through negative quantifiers have a wider domain, and it has a tendency to mean 'nothing at all' or 'absolutely nothing'. Sentences containing neg + indefinite quantifiers on the other hand are open for contextual restriction, and the negated DP can be paraphrased with for example 'not anything of relevance'. Thus, neg + indefinite quantifiers seem somewhat "weaker" in the meaning they convey and more based on what's actually of relevance in given context. An example for clarification is given in (109). In (109a), the mother answers the child that she can't see anything, which in this case implies that she is not able to see the butterfly. In (109b), the mother answers that she can see nothing, which seems like an unsterotypical utterance in this case and conveys a stronger implicature, namely in this case, that the mother is unable to see anything at all.

(109) Contextual restriction

a. Child: *Come and look at the butterfly!*

Mother: *Where is it? I can't see anything.*

+>_I¹⁵ I am currently not able to see a butterfly

b. Child: *Come and look at the butterfly!*

Mother: *?Where is it? I can see nothing.*

+>_M I am unable to see anything at all; my eyes are not working.

In section 5.3.2, I provide evidence that the difference in implied contextual restriction between negative quantifiers and neg + indefinite quantifiers is the most important pragmatic effect and the most prominent reason to use negative quantifiers in object position is to avoid the contextual restriction and imply absoluteness.

Emphasis

When a negative quantifier is used in surroundings where English neg + NPI and Norwegian neg + *noe/noen* would be allowed, the utterance often seems to become harsher, more imperious and more “dramatic”.

(Lack of) Hope

Sentences with neg + indefinite quantifiers seem to have more space for other possibilities and don't appear as final and determined as sentences with a negative quantifier. They also appear to more frequently include e.g. hope, wishes or the expectation of non-negative outcomes.

Negative evaluativity

Negative quantifiers seem to carry a more negatively evaluative component than neg + indefinite quantifiers. When talking about the knowledge and abilities of other people, using English neg + indefinite quantifier can be uttered as a neutral declaration which is not valued. When using a negative pronoun this becomes much harder and what was a neutral declaration can quickly become weighted and even offensive. An example for clarification is given in (110). The sentence in (110a) contains neg + indefinite quantifier, whilst sentence (110b)

¹⁵ I use “+>_M” to mark the nonstereotypical M-implicatures and +>_I to mark stereotypical I-implicatures. More on the two types in section 5.3.

contains a negative quantifier and implies that the fact, that the new colleague has no knowledge about accounting, is a negative thing.

(110) Negative evaluativity

a. *My new colleague doesn't know anything about accounting.*

+>_I e.g. my new colleague is not an accountant

b. *My new colleague knows nothing about accounting.*

+>_M my new colleague should have knowledge about accounting (e.g. because he is an accountant)

+>_M I would be happier if the new colleague knew something about accounting

5.2.2 Quantitative distribution

In this section I give an overview over the quantitative distribution of negative quantifiers and negation + indefinite quantifiers in the subject and object position of a sentence.

English

I used the En-Ge-No database of the OMC corpus and looked for all occurrences of *nothing*. The search yielded 318 results of which 11 were adjuncts 109 were in the subject position of the sentence and the remaining 198 occupied an object position. The distribution in object position is shown in table 12.

Cleft sentences	Idioms	Negative concord	Standard sentences	Total
38 (19,2%)	23 (11,62%)	5 (2,53%)	132 (66,67%)	198 (100%)

Table 12

Out of the 198, 38 were cleft sentences as shown in example (111).

(111) Cleft sentences

There was nothing I could do. (OMC: BO1E.1.3.s97)

A further 23 were idioms in which the use of negative quantifier is the preferred one, due to the nature of the idioms. The idioms include 'to have nothing to do with sthg' (112a), 'to be/to have nothing but' (112b) and 'nothing to hide' (112c).

(112) Idioms

c. *Mallabar, needless to say, protested everywhere that the interests of scientific research **had nothing to do** with politics, but to little avail.*

(OMC: WB1E.1.3.s97)

d. *But then and since she had complained she was **nothing but** a servant, wasting her life on other people.*

(OMC: DL2E.1.s379)

e. *Why would a man who had **nothing to hide** refuse to lie?*

(OMC: JH1E.1.4.s147)

5 of the 198 occurrences of nothing in object position were instances of colloquial speech with negative concord, meaning two negative markers which combined give a negative reading. An example for this is shown in (113), which includes both the particle *n't* and the negative quantifier *nothing*.

(113) *Papa, you ain't done **nothing** wrong.* (OMC: GN1E.1.2.s53)

5.3 Analysis

In this chapter I will address the pragmatics of negation. According to Horn's (1984) division of labour, unmarked / default expressions express the stereotypical, whilst marked expressions are generally used to convey less stereotypical, marked expressions. (Horn 1984; Levinson 2000). Levinson's (2000) I-Principle states that the speaker should "produce the minimal linguistic information sufficient to achieve [his] communicational ends" (p.114), i.e. the speaker should not say any more than necessary to convey the message. The M-Principle states that the speaker should "[i]ndicate an abnormal, nonstereotypical situation by using marked expressions that contrast with those [he] use[s] to describe the corresponding normal, stereotypical situation" (Levinson 2000, p.136), i.e. the speaker should use an uncommon expression to convey an uncommon message.

The example in (114a), taken from Horn (1984) shows an unmarked way of conveying a message and thus carries an I-implicature and the example in (114b) shows a marked way of conveying the same message and thus carries an M-implicature. Both messages have the same basic semantic meaning and could be considered true under the same circumstances.

However, sentence (114b) is more complex and less frequent and thereby a listener would be

likely to interpret more into the marked message, namely that Black Bart didn't kill the sheriff in a stereotypical way, but because the utterance is nonstereotypical, that the incident also was unstereotypical.

(114) (Horn 1984, p.27)

a. *Black Bart killed the sheriff.*

+>_I He did so in a stereotypical way.

b. *Black Bart caused the sheriff to die.*

+>_M He did so in a non-stereotypical way. (e.g. by accident)

My working hypothesis is, that negative quantifiers are unmarked in subject position and marked in object position, whilst neg + indefinite quantifiers are marked in subject position and unmarked in object position. For subject position, this is based on the observation that neg + indefinite quantifiers are unacceptable in subject position in English and less preferred in Norwegian. For object position, it seems as if negative quantifiers carry more pragmatic information than neg + indefinite quantifiers and thus convey more additional information. I give a more detailed discussion in the following sub-sections.

5.3.1 Subject position

In section 3.3, I provided arguments for neg + indefinite quantifiers being blocked in subject position in English. Also, in Norwegian, negative quantifiers are the preferred type in subject position. So, I assume that neg + indefinite quantifier is the marked option in subject position and negative quantifiers are the unmarked. I base this analysis on the following observations:

When looking at the quantitative distribution, negative quantifiers are much more frequently found in subject position than English neg + NPI or Norwegian neg + *noe/noen*. I repeat the relative frequencies in table 13 below (cf. also section 2.2 on the quantitative distribution of negative quantifiers vs. English neg + NPIs and Norwegian neg + *noe/noen*; note, that these numbers are based on the translation of German *niemand* in nominative (subject), dative and accusative (object) case, so these numbers are no proof that any neg + indefinite quantifier constructions were found in subject position at all).

	In subject position	In object position ¹⁶
English <i>nobody/no one</i>	91,2%	60%
Norwegian <i>ingen</i>	88,2%	40%
English <i>not anybody/not anyone</i>	2,0%	40%
Norwegian <i>ikke noen</i>	8,8%	60%

Table 13

In fact, in English, it is hard to impossible to find any instances where neg + NPI is acceptable in subject position, as shown in (115).

- (115) English:
- a. ?*Not anyone is coming tomorrow.*
 - b. **Anyone is not coming tomorrow.*
 - c. *Who is coming tomorrow?* – ?*Not anyone.*

In Norwegian it is more available, cf. (116), but the preferred and therefore more frequently used form in subject position is still the negative quantifier (88,2%). It is important to note that sentence (116b) is ungrammatical if *noen* ‘anyone’ is interpreted as $\neg\exists x$ (x will come tomorrow). If *noen* takes scope over the negation it is grammatical and would have the meaning “Someone will not come tomorrow”.

- (116) Norwegian:
- a. *Ikke noen* *kommer i morgen.*
Neg anyone/someone comes in tomorrow
‘No one will come tomorrow.’ (lit. Not anyone will come tomorrow.)
 - b. *Noen* *kommer ikke i morgen.*
Anyone/someone comes neg in tomorrow.
int: *‘No one will come tomorrow.’ ($*\neg > \exists$)
But ‘Someone will not come tomorrow.’ ($\exists > \neg$)
 - c. *Hvem så du?* – *Ikke noen.*
Who saw you? – Not anyone/someone

¹⁶ Note that the numbers for the object position were quite small.

‘Who did you see?’ – ‘No one.’ (lit. ‘Not anyone.’)

Also, as negative quantifiers consist of one word only, I argue that their syntactic structure is simpler and thus more economic than the structure of neg + indefinite quantifier.

In the next section I will discuss the object position and that it seems as if the roles of marked vs. unmarked are reversed compared to the subject position.

5.3.2 The object position

The “division of labor” in object position seems to have a different starting point than in subject position. I argue that in object position, neg + indefinite quantifiers are the unmarked default and negative quantifiers are marked and appear only in specific circumstances.

As already mentioned in section 5.2, when negative quantifiers are used, they seem to carry pragmatic effects, which neg + indefinite quantifiers lack in the same position. Negative quantifiers add for example emphasis, negative value or the lack of hope. All of which I will analyze in more detail in this chapter. The examples in (117), (118) and (119) show minimal pairs of sentences, where the sentences in (a) contain neg + indefinite quantifiers and the sentences in (b) contain negative quantifiers. In summary, the sentences in (a) have I-implicatures, i.e. standard, stereotypical implicatures, and the sentences in (b) carry M-implicatures, i.e. nonstereotypical implicatures. In the unmarked (117a), it (unmarked) implicature is that Tom is unable to understand any of the people around him, and in the marked (117b) the implicature is also marked and in this case stronger: he is unable to understand anyone in the world, i.e. the negation of existential quantification in this example is not contextually restricted.

(117) English:

a. *Tom doesn't understand anyone.*

+>_I in the situation this expression is uttered, Tom is unable to understand any of the people present

b. *Tom understands no one.*

+>_M there is no person in the world which Tom understands (this expression is not contextually restricted)

In (118a), the set of things which Bill doesn't feel only contains things which are "relevant" in this situation, e.g. pain. If for example a doctor asks him if he is ok, whilst giving him an injection, the answer would simply mean that Bill doesn't feel pain. If Bill uttered the marked (118b) on the other hand, the implicature is more nonstereotypical and "dramatic" and the doctor might well believe that Bill is in a very bad state and feels nothing at all.

(118)

a. *Bill doesn't feel anything.*

+>_I Bill doesn't feel anything within the contextual restriction (e.g. pain)

b. *Bill feels nothing.*

+>_M Bill feels absolutely nothing, no pain, no touch, no love, no joy,...

In the unmarked sentence in (119a), it is implied that Mary is satisfied with what she has and has no wish for anything additional. In a situation, where her husband is about to go to the store, it would be completely acceptable to say that she doesn't want anything. (119b), however, is marked and a nonstereotypical way of conveying this message, which thus implies more negative feelings, and is more likely to be used in a situation that is nonstereotypical.

(119)

a. *Mary doesn't want anything.*

+>_I Mary is satisfied either way

b. *Mary wants nothing.*

+>_M Ann is not satisfied

The examples above show that neg + indefinite quantifiers in object position tend to carry I-implicatures and negative quantifiers carry M-implicatures in the same position. In chapter 3.3, I argued that neg + indefinite quantifiers are blocked in subject position in English, so a naturally occurring question now would be, why neg + indefinite quantifiers are not also blocked in object position. I argue that even though neg + indefinite quantifiers are structurally more complex than negative quantifiers, they are more easily interpretable for the listener and blocking them would not conform with making conversation as economic as possible.

As already established, negation reverses the truth value of a sentence, it is thus a very important part in the meaning a negated sentence conveys. If the negation is misunderstood or

overheard, the understood meaning is the opposite of what the speaker intended. Let's assume a context where two people A and B meet. Person A had been on a walk in the park the day before. Person B knows about it and inquires if Person A met anyone of interest. If person A answers with an utterance like (120a), the hearer receives the negation earlier on and can thus follow the course of the sentence more easily. When hearing (120b), the hearer needs to wait until the end of the sentence, before the negation is revealed, thus, the hearer might already have an expectation as to which meaning this sentence might convey. Trueswell, Tanenhaus and Kello (1993) provide evidence that the interpretation of a message starts as soon as the listener has identified the first word, and then continues throughout the sentence (found in Taylor 2012, p.168). In sentences with negative quantifiers in object position, the affirmative interpretation is suddenly falsified. Here, parallels to parsing can be drawn, as garden path sentences also end differently than the hearer would expect and thus the hearer needs to rethink and reorganize the structure of the utterance (cf. Taylor 2012). As an answer to the question if Person A met anyone interesting, with (120a), already after *I didn't* can the hearer correctly interpret the outcome of the sentence. In most cases, the continuation of this sentence will be in line with what the listener expects (namely negation of meeting someone). With (120b), after hearing *I met...*, the hearer could wrongfully expect an affirmative sentence with a name following as the object.

(120)

- a. *I didn't meet anyone*
- b. *I met no one.*

Based on the evidence that sentence interpretation starts immediately, it would suggest that messages are more quickly and easily interpreted if important parts come early on, sentences in the form of (120a) are easier to interpret than (120b) because in English, the sentential negation is communicated even before the verb of the sentence, making the listener understand that the message is negative and not affirmative. In Norwegian V2 main clauses, the negation comes after the verb, so this argument doesn't hold here. However, in sentences which contain an additional element (auxiliary or modal), negative quantifiers are completely unacceptable. This is discussed more detailed in section 3.1. In sentence (120b), up until and including the verb, the sentence is still affirmative with no sign of negation. This also means that from the listener's point of view, it is reasonable to assume that the speaker saw someone

(affirmative) through the utterance, until eventually the object brings clarity. The listener's assumption will be 'it is the case that the speaker saw ...'.

This is in fact also true for the example sentence in (121) which is repeated from example (113). Sentence (121a) reveals whatever happened much earlier than sentence (121b). In sentence (121a) the listener will know that a "killing" happened already after the second word, whilst in sentence (121b) the listener has to wait until the entire sentence is spoken.

(121)

a. *Black Bart killed the sheriff.*

b. *Black Bart caused the sheriff to die.*

The observation that important parts of a sentence construction should be mentioned early on fits with Jespersen's observation of the preference "to place the negative first, or at any rate as soon as possible, very often immediately before the particular word to be negated (generally the verb)" (Jespersen, 1924, p. 4). He argues that that helps the communication between individuals and clarifies what is (going to be) said. Dryer (1988) found that in 70% of the languages he examined (227 out of 345) the negative marker is positioned before the main verb. Horn (1989) describes this tendency to place the negative marker before the verb as NegFirst and states that it makes communication more efficient.

So, I conclude that a negation + indefinite quantifier expression is easier to interpret in the object position and that that explains why it is the preferred and thus unmarked form. Let us now consider some circumstances in which the marked/unmarked distinction makes a difference. In chapter 4, where I introduced the empirical data, I have shown that there are some pragmatic circumstances which influence the choice between negative quantifiers (marked) and neg + indefinite quantifier (unmarked). In the following section I will analyze the data from section 5.3 and I will attempt to explain this data based on the marked/unmarked distinction and how this distinction works between negative quantifiers and neg + indefinite quantifiers.

Contextual restriction

As explored in some detail by von Stechow (1994), quantifiers seem to embed context-dependency. This context-dependency or contextual restriction narrows the scope of the quantifier to a more suitable and less universal one. When considering a sentence like in

(122), it is safe to assume that a speaker of this utterance did not mean that every person in the whole world is awake, as it is to be expected that at any given point in time there is someone who is sleeping.

(122) *No one is asleep.*

+>_I No one in this house is asleep

Instead of quantifying over the set of all things, quantifiers which underly contextual restriction only quantify over a limited set of things. In object position, neg + indefinite quantifiers are more likely to apply at a lower, more context-dependent scope, whilst negative quantifiers tend to keep the scope of their negation wide and more “absolute”. Example (123), (124) and (125) show a sentence where the negation conveys an absolute emptiness. Sentence (123) is the German original, sentences (124) and (125) are the English and the Norwegian translation respectively.

(123) German:

Und dahinter lag nichts mehr, absolut nichts. (Es war keine kahle Stelle, And behind lay nothing more, absolutely nothing it was no bare location keine Dunkelheit, es war auch keine Helle, ...).
no darkness it was also no light

(124) English:

And farther still there was nothing, absolutely nothing. (There was no clearing, no darkness, there was no light either, ...)

(125) Norwegian:

Og bakenfor der igjen var det ingenting, absolutt ingenting.
And behind there again was that nothing absolutely nothing
Det var ikke snakk om en snauhogst eller et nakent eller øde område, vanlig
That was not talk about a clearing or a naked or bare area normal
mørke var det ikke, heller ikke noe slags lys.
darkness was that not either not any type light

+>_M There was complete emptiness.

(OMC: ME1D.4.s110)

When the negative quantifier in (124) is replaced by neg + indefinite quantifier, the sentence becomes unacceptable, as can be seen in (126).

(126) Modified example

#And farther still there was not anything, absolutely not anything. (There was no clearing, no darkness, there was no light either, ...)

To make this matter clearer, I show a number of constructed examples in (127). (127a) shows the base sentence containing the negative quantifier *nothing*, the modified sentences in (127b-d) all contain the adverb *absolutely* and the negative quantifier *anything*. None of the example sentences (127b-d) are acceptable, which can be seen as evidence that *absolutely* is preferably used with a negative quantifier over neg + indefinite quantifier.

(127) Absolutely + not anything

- a. *They know absolutely nothing.*
- b. *#They absolutely don't know anything.*
- c. *#They don't absolutely know anything*
- d. *#They don't know absolutely anything.*

On the other hand, example sentences (128-130) show sentences in German, English and Norwegian, where the negation takes scope only over a contextually restricted domain. The example is extracted from the En-Ge-No database and is originally English, with German and Norwegian being translations. The German search result in (128) contains a negative quantifier, whilst the English (129) and Norwegian (130) sentences both contain neg + indefinite quantifier. The question which is uttered is contextually restricted to the domain relevant for the patient's cure. The meaning is thus not, if there isn't anything at all in the world, but the actual information the speaker wants to receive, is if there is anything that can be done in order to help the patient.

Context: A family member talks to a doctor about a cure for a patient's disease.

(128) German:

Gibt es denn gar nichts? Kein Mittel, das...?
Exists it then (really) nothing No aid that

(129) English:

Isn't there anything? Some drug which could ...?

(130) Norwegian:

Er det ikke noen ting å gjøre? En eller annen medisin som kunne ...?

Is that not any thing to do one or other medicine which could

+>_I Exists there not anything of relevance which could help the patient?

(OMC: AH1TD.2.1.s22)

This contrast of how readily available contextual restriction is for negative quantifiers vs English neg + NPI and Norwegian neg + *noe/noen* seems to be a very important one when trying to define their differences. In fact, it could be interpreted as that several of the other pragmatic effects which arise when using negative quantifiers in object position are due to their “absoluteness”. The pragmatic effects that I found in the empirical data were emphasis, expectation and negative value. The effect of contextual restriction on negative value can be seen in (131) where (131a) is repeated from (117a) and (131b) is repeated from (117b). The unmarked sentence in (131a) is more contextually restricted, i.e. the indefinite quantifier only quantifies over a limited set of people and thus it is less negatively evaluative than marked sentence (130b). If Tom doesn’t understand any of the people in the room, it is still a better position to be in, than not understanding anyone in the world. I will come back to negative value later in this chapter.

(131) Negative value through contextual restriction:

a. *Tom doesn’t understand anyone.*

+>_I in the situation this expression is uttered, Tom is unable to understand any of the people present

b. *Tom understands no one.*

+>_M there is no person in the world which Tom understands (this expression is not contextually restricted)

Emphasis

The absence of contextual restriction which comes with negative quantifiers can also account for a contrast in emphasis and make expressions more dramatic than the same sentence containing unmarked negation.

Example (132) was overheard on the streets of Oslo and carries a certain amount of aggression towards said girl. The sentence seems to be formulated in this way in order to emphasize the message and express the dislike towards this girl.

(132) Norwegian:

Jenta vet virkelig INGENTING!
girl.the knows really nothing
'The girl really knows nothing'

If now the same person was to utter the same sentence in the same situation, with the difference that it contains neg + *noe/noen*, it would still be considered rude and offensive (cf. 133). It would also still contain a certain emphasis; however, I believe that the emphasis in that case would be anchored in the *virkelig* 'really' and not in the quantifier. In (133a), the sentence containing a negative quantifier, the *ingenting* 'nothing' is stressed. In (133b) the neg + *noe/noen* can in this case not be stressed, instead the *virkelig* 'really' would be.

(133) Norwegian neg + *noe/noen*

- a. #*Jenta vet virkelig IKKE NOE!*
girl.the knows really not anything
int: 'The girl really doesn't know anything'
- b. *Jenta vet VIRKELIG ikke noe!*
girl.the knows really not anything
'The girl really doesn't know anything'

Emphasis which comes with negation of existential quantification seems to be another side of the effect of negative value, which negative quantifiers carry. This type of pragmatic emphasis which negative quantifiers carry as supposed to neg + indefinite quantifiers seems to emphasize in a negative way only. Example (134) shows that when taking a sentence where the negation negates something of negative value and thereby expresses something positive, the negative quantifier doesn't actually make the entire sentence sound more positive. In the constructed example in (134) the (negative) incident of being stolen anything is negated, thus the sentence would be a positively evaluative utterance. However, the marked sentence in (134b) which contains the negative quantifier actually seems more negative, as if the sentence

was incomplete and the speaker is about to add something even worse (e.g. *They stole nothing, but they destroyed all our family possessions.*) This addition would also be possible with unmarked sentence in (134a) which contains neg + NPI but it is not necessarily expected. In other words, (134b) raises a negative expectation, which is not the case in (134a).

- (134) Positive emphasis?
- a. *They didn't steal anything.*
+>_I They left the house without taking anything of value
 - b. *They stole nothing.*
+>_M They stole nothing, but they did something even worse
+>_M I would be happier if they had stolen something.

If the same sentences from (134) were uttered in a different context, were “not stealing anything” is considered a negative thing, then we also get the reading of (134b) being more emphasized and negatively evaluative. I will discuss negative value in the next section.

Negative value

As I have already argued for above, the use of negative quantifiers in object position has a tendency to be interpreted more negatively evaluative than neg + indefinite quantifier. When talking about the knowledge and abilities of other people, using neg + indefinite quantifier can be uttered as a neutral declaration which is not specifically valued. When using a negative quantifier, this becomes much harder and what was a neutral declaration can quickly become weighted and even offensive.

The contrast of negative value was, in line with the other examples in this thesis, also evaluated by native speakers. This example in fact had a special status and was presented at a poster session and thus judged by even more native speakers than the usual 4-5 (approximately 30 people). All of the English native speakers I asked, had the same intuition, namely that sentence (135b) was ambiguous whilst (135a) was not.

In the example (135a) taken from an originally English book, we read that person A, Fibich, is worse off than Person B, Hartmann. The personal pronoun in the last clause of the sentence, *he*, takes Fibich as antecedent. This also makes sense, as ‘*knowing no one*’ is generally considered a bad thing, and thus making it understandable that based on this, one would be worse off than another person (who does know someone). When exchanging the negative

quantifier with neg + NPI, one gets sentence (135b) Person A, Fibich, is still worse off than person B, Hartmann, but now the antecedent for the personal pronoun in the last clause is not clear anymore (based on native speakers judgement). The difference in the pronoun's reference follows if 'not knowing anyone' is interpreted to be less bad than 'knowing no one'. The person who doesn't know anyone could be worse or better off, thus the personal pronoun in the last clause *he* can also refer to Hartmann. This is a very interesting intuition, native speakers have, as this ambiguity in (135b) proves that there clearly is a value difference between the two types of negating existential quantification.

(135) English

a. *Only the knowledge that someone else's experience reflected his own reality saved him, although Fibich_i was arguably worse off even than Hartmann_k, for he_i knew no one.*

+>_M He knew no one and that's a bad thing.

b. *Only the knowledge that someone else's experience reflected his own reality saved him, although Fibich_i was arguably worse off even than Hartmann_k, for he_{i/k} didn't know anyone.*

+>_I He didn't know anyone around here and that is a bad thing

Or:

+>_I He didn't know anyone around here and that is a good thing (e.g. because people could recognize him)

(OMC: AB1E.1.s73)

In Norwegian, the same contrast appeared between the use of negative quantifiers and the use of neg + *noe/noen*. The actual translation of the English original used a negative quantifier and yielded an unambiguous sentence, as shown in (136a). The sentence which I modified to contain neg + *noe/noen* showed a tendency to ambiguity (136b).

(136) Norwegian:

a. *Det var kun vissheten om at en annens opplevelse gjenspeilet hans egen virkelighet, som reddet ham, selv om Fibich_i utvilsomt var verre stillet enn realitet som reddet ham, selv om Fibich_i utvilsomt var verre stillet enn Hartmann_k, for han_i kjente ingen.*

Hartmann for he knew no one

+>_M He knew no one and that's a bad thing.

- b. *Det var kun vissheten om at en annens opplevelse gjenspeilet hans egen virkelighet, som reddet ham, selv om Fibich i utvilsomt var verre stillet enn Hartmann_k, for han_{i/k} kjente ikke noen.*

Hartmann for he knew not anyone

+>_I He didn't know anyone around here and that is a bad thing

Or:

+>_I He didn't know anyone around here and that is a good thing (e.g. because people could recognize him)

Expectation / Hope

Sentences with neg + indefinite quantifiers seem to be more open for other possibilities and are less final and determined than sentences with a negative quantifier. They are more likely to include for example hope or the expectation of non-negative outcomes. The (marked) sentence in (137a) is very straightforward in its statement. The utterer has no hope or believe in the possibility of finding anything at all. The (unmarked) sentence in (137b) seems less hopeless. A sentence like in (137c) seems like an acceptable thing to say, as the neg + indefinite quantifier construction allows for more possibilities, but the sentence in (137d) seems much less acceptable, due to the strengths and finiteness of the negative quantifier.

(137) English:

- a. *We will find nothing.*

+>_M We are definitely not going to make a discovery

- b. *We won't find anything.*

+>_I we are most likely not going to make a discovery

- c. *We won't find anything, but it can't hurt to look.*

+>_I we are most likely not going to make a discovery

+> we might find something after all

d. *?We will find nothing, but it can't hurt to look.*

+>_M We are definitely not going to make a discovery

+> we might find something after all

In Norwegian, the same distinction can be made as well. Neg + indefinite quantifier allows for more hope and can be revised more readily (138). (138a) is a strong and marked sentence containing a negative quantifier, sentence (138b) is unmarked and less assertive. In (138c) is the combination of the sentence containing neg + indefinite quantifier and the expression of hope (to find something after all), which is fully acceptable, and finally in (138d) is the less acceptable sentence where the negative quantifier is combined with an expression of hope.

(138) Norwegian:

a. *Vi kommer til å finne ingenting.*

we come to to find nothing

'We are going to find nothing.'

+>_M We are definitely going to make no discovery

b. *Vi kommer ikke til å finne noe.*

we come not to to find anything

'We are not going to find anything.'

+>_I we are most likely not going to make a discovery

c. *Vi kommer ikke til å finne noe, men det skader ikke å se.*

we come not to to find anything but it hurts not to see

'We are not going to find anything, but it doesn't hurt to look.'

+> we might find something after all

d. *?Vi kommer til å finne ingenting, men det skader ikke å se.*

we come to find nothing but it hurts not to see

'We are going to find nothing, but it can't hurt to look.'

+>_M We are definitely not going to make a discovery

+> we might find something after all

Also the lack of hope, or in other words, the determination in what is said, can be led back to the point of contextual restriction, as neg + indefinite quantifiers quantify over a limited set, it is very well possible that e.g. borderline cases fall outside of this limited set (i.e. there is hope), whilst negative quantifiers don't allow for this.

In this section I have argued that negative quantifiers are unmarked in subject position and marked in object position, in direct contrast to neg + indefinite quantifiers. In object position, the main difference between the two types of negation is their differing ability to include contextual restriction, where the unmarked neg + indefinite quantifier quantifies over a limited set and the marked negative quantifier is stronger and tends to quantify over an unlimited set. When negative quantifiers are used in object position, there are several pragmatic effects that can arise. The main ones are emphasis, negative value and expectation.

All in all, I assume that the pragmatic effects are all rooted in the contextual restriction differences. Negative quantifiers give less possibilities for exceptions, which makes the utterance more emphasised, more negative and removes hope.

In the next chapter I give a short summary and conclude.

6 Conclusion

This conclusion summarizes the findings in this thesis and answers the initial research question as defined in the introduction to this thesis. The research question consisted of three sub questions. Each of them is repeated below, with a summary of the findings which answer given sub question.

1. Where do we use negative quantifiers and where do we use neg + indefinite quantifier in English and Norwegian respectively?

Negative quantifiers can be used in any position in a sentence which also can be occupied by any other DP. In object position, negative quantifiers are marked, whilst neg + indefinite quantifiers are the unmarked default. In subject position and elliptical clauses, negative quantifiers are preferred over neg + indefinite pronouns in Norwegian. In English neg + indefinite quantifiers as a means of negating existential quantification are unacceptable in English. In Norwegian, negative quantifiers can not appear in object position in sentences which contain a modal or auxiliary and a main verb.

2. Why do we use either of the two types in the positions provided by the answer to 1., i.e. how do the two types of negation differ in syntax, semantics and pragmatics in these two languages?

I argue that in English, the use of neg + indefinite quantifiers in subject position and elliptical clauses is blocked by the existence of the structurally simpler negative quantifier. It is thus not structurally impossible, but so highly marked that native speakers judge it unacceptable. In Norwegian it is marked in these positions for the same reasons, but yet available. In sentences containing idioms, modals, etc., the choice of negative quantifiers or neg + indefinite quantifiers is anchored in their different possibilities when it comes to scope of the negation. In object position, neg + indefinite quantifiers are preferred due to the general preference in human language to convey negation as early as possible in a sentence (Jespersen 1924). I argue that the two types of negation are semantically equal, and that all differences in interpretation are buried in the pragmatics. Neg + indefinite quantifiers show more contextual restriction, i.e. they tend to quantify over limited sets, whilst negative quantifiers tend to quantify over unlimited sets. This tendency of negative quantifiers leads to the rise of several pragmatic effects, including emphasis, lack of hope and negative value.

3. Do these two types of negation behave the same in English and Norwegian or differently, and if they behave differently, in what way?

In the quantitative analysis, I found that in Norwegian, the use of neg + indefinite quantifiers are more frequent than in English. I attribute this to two different mechanisms: [i] in Norwegian, the use of negative quantifiers is unacceptable in sentences containing an auxiliary or modal and a main verb. Negative quantifiers are allowed in this type of surrounding in English. [ii] neg + indefinite quantifiers are allowed in subject position and elliptical clauses in Norwegian. In English, both of these surroundings are unacceptable for neg + indefinite quantifiers. And finally, the last difference I found between English and Norwegian was that in English, the indefinite quantifiers which I examined in this thesis, *anything* and *anyone* are NPIs, whilst the corresponding Norwegian indefinite quantifiers *noe* ‘anything/something’ and *noen* ‘anyone/someone’ are not.

References

Corpora

The Oslo Multilingual Corpus (1999-2008), the Faculty of Humanities, University of Oslo.

The OMC is a product of the interdisciplinary research project Languages in Contrast (SPRIK), directed by Stig Johansson and Cathrine Fabricius-Hansen, and compiled by the OMC corpus team (<https://www.hf.uio.no/ilos/english/services/omc/team/>).

Leksikografisk Bokmålskorpus: The Text Laboratory, Department of Linguistics and Scandinavian Studies, University of Oslo (<https://tekstlab.uio.no/glossa2/bokmal>)

Reference grammar

NRG: Faarlund, J. T; Lie, S. and Vannebo, K. I. (1997) *Norsk referansegrammetikk*. Oslo: Universitetsforlaget

Literature

Carnie, A. (2013). *Syntax: A generative introduction* (3rd edition). Oxford: Blackwell

de Swart, H. (2009). *Expression and interpretation of negation: an OT typology* (Vol. 77). New York City: Springer Science & Business Media.

de Swart, H.E. (2016). Negation. In Maria Aloni & Paul Dekker (Eds.), *The Cambridge Handbook of Formal Semantics* (pp. 467-489) (25 p.). Cambridge UK: Cambridge University Press.

Dryer, M. S. (1988). Universals of negative position. *Studies in syntactic typology*, 17, 93.

Garbacz, P., & Østbø, C. B. (2014). Tags and Negative Polarity Items. *Nordic Atlas of Language Structures Journal*, 1(1).

Gensler, H. (2002). *Introduction to logic*. Abingdon, Oxon: Routledge

Kratzer, A., & Heim, I. (1998). *Semantics in generative grammar* (Vol. 1185). Oxford: Blackwell.

- Haida, A., & Repp, S. (2013). Disjunction in wh-questions. In *Proceedings of NELS (Vol. 40, pp. 128-144)*.
- Horn, L. (1984). Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. *Meaning, form, and use in context: Linguistic applications, 11, 42*.
- Horn, L. (1989). *A natural history of negation*. Chicago: University of Chicago Press
- Jensen, B. (2001). On sentential negation in the Mainland Scandinavian languages. *Oxford University Working Papers in Linguistics, Philology and Phonetics, 6, 115-137*.
- Jespersen, O. (1917). *Negation in English and other languages*. København: Høst. Reprinted in 1966, København: Munksgaard.
- Jespersen, O. (1924). *The philosophy of grammar*. [Reprinted New York: Norton 1976]
- Johannessen, J. B. (1998). Negasjonen ikke: kategori og syntaktisk posisjon. *MONS 7, 80-94*.
- Johannessen, J. B. (2003). Negative polarity verbs in Norwegian. *Working papers in Scandinavian syntax, 71, 33-73*.
- Kadmon, N. & Landmann, F. (1993). Any. *Linguistics and Philosophy 15: 353-422*.
- Ladusaw, W. (1979). *Negative polarity items as inherent scope relations*. Unpublished Ph. D. Dissertation, University of Texas at Austin.
- Ladusaw, W. A. (1980). On the notion affective in the analysis of negative-polarity items. *Formal semantics: The essential readings, 457-470*.
- Ladusaw W.A. (1996). Negation and polarity items. In *The Handbook of Contemporary Semantic Theory, ed. S. Lappin, pp. 321-41*. Oxford, UK: Blackwell
- Levinson, S. C., Stephen, C., & Levinson, S. C. (2000). *Presumptive meanings: The theory of generalized conversational implicature*. Cambridge: MIT press.
- Merchant, J. (2006). Why no (t)? *Style, 40(1-2), A Festschrift for John Robert (Háj) Ross, pp. 20-23*. <https://www.jstor.org/stable/10.5325/style.40.1-2.20>
- Pollock, J. Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic inquiry, 20(3), 365-424*.

- Sitomer, M. & Sitomer, H. (1978). *Zero is not nothing*. Springfield: Crowell
- Sollid, H. (2002). *Features of Finnish in a northern Norwegian dialect*. Unpublished manuscript. <http://www.joensuu.fi/fld/methodsxi/abstracts/sollid.html>
- Sveinbjørnsson, W.H. (2017). *Noe om et eller annet – En kontrastiv analyse av ubestemte pronomer i norsk og russisk* (MA-thesis) University of Oslo. <http://urn.nb.no/URN:NBN:no-59941>
- Taylor, J. (2012-05-03). Frequency. In *The Mental Corpus: How language is represented in the mind*.: Oxford University Press. Retrieved 6 Nov. 2019, from <https://www-oxfordscholarship.com.ezproxy.uio.no/view/10.1093/acprof:oso/9780199290802.001.0001/acprof-9780199290802-chapter-7>.
- Trueswell, J. C., Tanenhaus, M. K., & Kello, C. (1993). Verb-specific constraints in sentence processing: separating effects of lexical preference from garden-paths. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19(3), 528.
- Twain, M. (1884). *The adventures of Huckleberry Finn: (Tom Sawyers Comrade)*. London: Chatto & Windus
- van der Wouden, T. (1994). Polarity and ‘illogical negation’. *Dynamics, Polarity and Quantification*, 17, 16-45.
- van Gelderen, E. (2008). Negative cycles. *Linguistic Typology*, Volume 12, Issue 2, Pages 195–243, DOI: <https://doi.org/10.1515/LITY.2008.037>.
- von Fintel, K. (1994). *Restrictions on quantifier domains* (Doctoral dissertation, University of Massachusetts at Amherst).
- Wiklund, A. L., Hrafnbjargarson, G. H., Bentzen, K., & Hróarsdóttir, Þ. (2007). Rethinking Scandinavian verb movement. *The Journal of Comparative Germanic Linguistics*, 10(3), 203-233.
- Zeijlstra, H. (2004). *Sentential negation and negative concord*. Utrecht: Universiteit Utrecht doctoral dissertation.

Zeijlstra, H. (2012). Not a light negation. *In Semantics and Linguistic Theory (Vol. 22, pp. 545-564).*

Zeijlstra, H. (2016). Negation and negative dependencies. *Annual Review of Linguistics, 2,* 233-254.

Åfarli, T. A., Eide, K. M. (2008). *Norsk generativ syntaks* (2nd edition). Oslo: Novus forlag.