

Andrea Olafsen Elman

What English VP Ellipsis Can Do, What Norwegian VP Ellipsis Can't, and Why

A Comparative Study of VP Ellipsis in English and Norwegian

Trondheim, May 2018





Master's thesis in English Linguistics

Andrea Olafsen Elman

What English VP Ellipsis Can Do, What Norwegian VP Ellipsis Can't, and Why

A Comparative Study of VP Ellipsis in English and Norwegian

Master's thesis in English Linguistics Trondheim, May 2018

Norwegian University of Science and Technology Faculty of Humanities Department of Language and Literature



ABSTRACT

This quantitative study compares the anaphoric phenomenon Verb Phrase Ellipsis (VPE) in English and Norwegian. The main aim of the thesis is to investigate and compare licensing conditions on VPE in these two languages. The most part of previous VPE studies have generally focused on English and/or other more dominating languages. The Norwegian auxiliaries tested for in this study are må 'must', ha 'have', være 'be' and bli 'become'. The study's design consists of an online survey asking for acceptability judgments of 48 test items on a Likert scale ranging from 1-7. In total, there were 426 Norwegian native speakers participating. The data on Norwegian VPE come from judgments these participants gave, and data on English VPE come from other linguistic research conducted for the most part within the last few decades. The results in the current study show evidence of lower acceptance of Norwegian VPE-constructions containing the adverb også 'too'. Contrarily, the English equivalent 'too' is felicitous in VPE sites, and this difference is discussed in depth in the analysis. The test items that received highest acceptability mean score were ellipsis sites containing no adverb at all. Furthermore, this study found a bimodal distribution of opinions on Norwegian VPE and slightly lower acceptance of the auxiliary være 'be'. A suggested licensing condition on Norwegian VPE is proposed; whether pitch accent is assigned to the auxiliary in the elided phrase is crucial for licensing Norwegian VPE. This entails that it differs from English where pitch accent is allowed on other entities in a VPE than the auxiliary.

ACKNOWLEDGEMENTS

I am greatly indebted to my supervisor, Andrew Weir, Associate Professor of Modern English Language and Linguistics in the Department of Language and Literature, Norwegian University of Science and Technology (NTNU), for the guidance and support he has rendered me throughout this study from the time of framing my ideas. He has helped me structure my thoughts in times when they were anything but structured, and his expertise and knowledge has helped me immensely with my work. I wholeheartedly appreciate that. Thank you for always being available and for your explicit and thorough feedback on all chapters of this thesis. Not once have I felt alone in my work on this master's.

My special thanks are extended to my family and friends who have always encouraged me to work hard. I am grateful to be surrounded by so many lovely people and would like to emphasize some of these. My boyfriend, Daniel, has been there for me every step of the way and has endured many conversations where I have gone on and on about my study. Thank you for not complaining when I have been burning the midnight oil, for proof reading and for providing me with moral support and continuous encouragement throughout my writing of this thesis.

Many thanks also go to my mother, Mona, who has given me tons of emotional support and motherly advice, and always make time to talk on the phone. To my father, Bjørn, who has shown great interest in my study of ellipses. To my sister, Mari, who has contributed with proof reading and useful comments. Thank you for always being there for me. To my brother and fellow student Henrik, for many interesting and enjoyable conversations over lunch at Dragvoll. To my stepfather Pål, for proof reading, giving helpful and insightful comments and for contributing with his analytical and critical perspective. To Sarah, for many heart-to-heart conversations and for letting me vent out my frustrations when I've needed to. To Lindis, for many valuable talks over countless study breaks at Dragvoll and for sharing her insightful comments on Norwegian syntax and VPE. To Cecilia, for always sharing her positivity with me through kindness and encouragement, and for brightening many days over the last year. To Marita, for many valuable conversations and for offering her sincere understanding of what it is like to be a master's student.

Many sincere thanks also go to Kyrre Svarva, senior advisor at the SU Faculty Administration, Norwegian University of Science and Technology (NTNU), for helping me formatting my online survey and for many hours of thorough instruction on how to use IBM SPSS.

I am also really indebted to all the study's participants who have contributed with their judgments on Norwegian sentences. Many thanks also go to all those who shared the survey on Facebook. I am proud and happy that so many wished to participate in this study and was overwhelmed by the number of responses.

Andrea Olafsen Elman May 2018, Trondheim

TABLE OF CONTENTS

1	Intr	oduction	. 1
	1.1	Ellipsis in general	. 1
	1.2	Verb phrase ellipsis	. 1
	1.3	Restrictions on ellipsis	. 2
	1.3.1	Recoverability	
	1.3.2	Licensing	
	1.4	VPE in Norwegian	
	1.5	Roadmap of the thesis	
2	The	oretical background	. 9
	2.1	Various types of ellipsis	
	2.1.1 2.1.2	Verb phrase ellipsis Noun phrase ellipsis	
	2.1.2	Sluicing	
	2.1.4	Verb Phrase Pronominalization	11
	2.1.5	<i>Do</i> -support and <i>gjøre</i> -support	
	2.1.6	Summary	
	2.2	Different views of ellipsis	
	2.2.1 2.2.2	Nonstructural approaches Structural approaches	
	2.3	Identity in ellipsis Syntactic approaches to identity	
	2.3.2	Semantic approaches to identity	
	2.3.3	Summary	16
	2.4	Licensing VPE	16
	2.4.1	Main verb as head	
	2.4.2 2.4.3	Auxiliary as head Infinitival 'to' as head	
	2.4.3	Summary	
	2.4.5	Research question	
3	Rese	earch Methodology	21
	3.1 Res	search design	21
	3 2 The	test items	21
	3.2.1	Adverb	
	3.2.2	Auxiliary	
	3.2.3 3.2.4	Tense Summary of variables in test items	
	3.3	Research sample - respondents.	
	3.4	Data collection tool	
		Procedure	
	3.6	A note on grammaticality judgments	
4			
4		ults	
	4.1	Introduction	31
	4.2	Presence or absence of adverbs	
	4.2.1	Mean scores based on presence or absence of adverbs	
	4.2.2	Histograms based on presence or absence of adverbs	33

4.3	No-adverb items displayed with different auxiliaries		
4.4	Lower acceptance of <i>være</i>		
4.5	Tense		
5 D	viscussion	41	
5.1	Introduction	41	
5.2	Presence of adverbs	41	
5.	2.1 No-adverb constructions		
5.	2.2 The adverb <i>også</i> in VPE		
5.	2.3 The adverb <i>ikke</i> in VPE		
5.	2.4 Differences between <i>do</i> -support and <i>gjøre</i> -support	47	
5.	2.5 Summary on the variety in acceptance between adverbs	48	
5.3	Lower acceptance of <i>være</i>	48	
5.	3.1 Hypothesis on why være-items were perceived as less acceptable	49	
5.	3.2 Comparing Norwegian <i>være</i> and English 'be'	51	
5.	3.3 A proposal for future research on Norwegian VPE with <i>være</i>	52	
5.4	Bimodal distribution of acceptability judgments	53	
5.	4.1 First hypothesis of the bimodal distribution of judgments: Split population		
5.	4.2 Second hypothesis of the bimodal distribution of judgments: Stress intonation	55	
5.	4.3 Summary of the bimodal distribution of judgments	56	
5.5	Summary	56	
6 C	onclusion	59	
Biblio	graphy	63	

APPENDICES

Appendix A – Electronic survey Appendix B – Frequencies of acceptability judgments Appendix C – Relevance for the teaching profession

1 Introduction

1.1 Ellipsis in general

Communication in any natural language happens through utterances that consist of strings of sounds. Each of the sounds we make have a certain meaning that makes the hearer interpret what is being said. However, when ellipsis occurs, a mismatch between sound and meaning happens, because we omit elements that are inferable from the context (Aelbrecht, 2010). That is, the interpretation is richer than what is actually pronounced, because the listener or receiver understands what is meant anyway. An elliptical sentence is exemplified in (1), where the underscore marks where the elliptical string would go.

(1) I saw Mary's son at the supermarket, and you saw Bill's _ at the coffee shop.

In generative syntax, the first attempt at analysis of ellipsis was given in Ross' doctoral dissertation in 1967 (Ross, 1967), although linguists had long been aware that such a phenomenon existed. In the decades following Ross' dissertation, the ellipsis phenomenon was given a lot of a attention by a large number of linguists and generative syntacticians, and still is a theoretical issue that dominates the field (Lobeck, 1995).

Ellipsis can take different guises and happen in different sorts of phrases. As Merchant (2016) nicely put it; "In ellipsis, there is meaning without form" (2016:1). This entails that words pertaining to different word classes can be elided. What is common for all ellipses is that there is a mismatch between sound and meaning, like Aelbrecht (2010) points out. *What* goes missing give name to the sort of ellipsis that happens and makes it able for us to divide them into smaller categories. This thesis will mainly revolve around one particular subgroup of ellipses, which is also the most investigated case in English (Merchant, 2001), called verb phrase ellipsis.

1.2 Verb phrase ellipsis

Verb phrase ellipsis (henceforth referred to as VPE) is a phenomenon in which a verb or a verb phrase appear to be missing, and where the sender of the message assumes and intends that the semantics of the sentence is still passed on to (and will not be lost to) the addressee. Thus, VPE happens when a verb phrase goes missing and it causes no semantic loss, only syntactic, so that the addressee will fully comprehend what is meant. Example (1) illustrates a sentence containing VPE in English.

(2) Helen can balance a football on her head, but Mary can't _.¹

The addressee in this context would most likely be able to understand what it is that Mary cannot do. As illustrated in (2), the verb phrase 'balance a football on her head' goes missing in the second clause, yet the meaning still prevails. As van Craenenbroeck and Merchant (2013) states, VPE (particularly English ones) dominated the literature of ellipsis for the early decades of generative grammar. In other words, VPE is a construction that is fairly heavily investigated, and many different theories on how such constructions are composed and understood have been presented.

It is important to note that this thesis will not be able to present every aspect of VPE, due to time and length restrictions. Thus, it cannot do full justice to previous research. However, literature that make up the theoretical base of this thesis will consist of the work of various prominent linguists and researchers. The literature is drawn from different stages over the last few decades.

VPE does not always convey the intended meaning, and sometimes there are factors disturbing the acceptability, semantics or syntax of it so that it is perceived infelicitous. In fact, there are cases where it is regarded totally unacceptable and ungrammatical to elide a VP. Hence, there are some conditions under which verb phrases are allowed to be elided, and others where they are restricted. The constraints that lie on VPE are discussed in the next section.

1.3 Restrictions on ellipsis

Now that an elementary description VPE has been put forward, it is time to take a closer look at its syntactic structure and potential restrictions.

1.3.1 Recoverability

The first condition put on all ellipses, including VPE, is *recoverability*. A VP can only remain unpronounced if the addressee can recover its meaning from the context (Aelbrecht, 2010). A sentence like (3), for instance, is perceived as ungrammatical when uttered out of the blue. This kind of observation was first discussed several decades ago in the classic paper by Hankamer and Sag (1976).

¹ The underscore marks where the unpronounced verb phrase would be.

(3) $?^2$ I hope John has _.

However, when the rest of the context gives you the antecedent for the elided VP, the meaning is conveyed. In other words, the ellipsis site has to be recoverable by means of a visible linguistic antecedent. The majority of linguists agree that this antecedent needs to be semantically identical to its ellipsis site. On top of this, it has been proposed that it needs to be syntactically identical as well (Aelbrecht, 2010). To date, there has been little agreement in the linguistic field on whether the relation between antecedent and the ellipsis site requires only semantical, or both syntactical and semantical identity.

1.3.2 Licensing

It is now obvious that recoverability is a condition that VPE cannot escape, but in addition to this, there are other constraints as well. Van Craenenbroeck and Merchant (2013) note that earlier studies on VPE claimed that VPE was limited to certain syntactic contexts. Yet, hardly any of these studies made attempts to answer *why* that should be the case. However, it has been established that the syntactic environment plays an important role in deciding whether an ellipsis can take place. This condition is called *licensing* (Aelbrecht, 2010). Not all verb phrases are allowed (syntactically and semantically) to go missing, and licensing is the condition that regulates whether they can or not. This means that even if an ellipsis is perfectly syntactically and semantically recoverable, it needs to be in a specific syntactic environment in order for it to be elided (van Craenenbroeck & Merchant, 2013).

There has been a lot of research done on the question of licensing VPEs. However, as van Craenenbroeck and Merchant (2013) note, "the licensing contexts of VPE in English constitute a fairly diversified group, and there is no unified account of them to date" (2013:716). As there is no unified account of licensing VPE in English, this thesis will focus on the most extensive and widespread accounts of licensing. In order to start this examination, I will replicate two examples, (4)a. and (4)b., borrowed from Aelbrecht (2010).

² The question mark indicates that the sentence is sometimes ungrammatical, in this case depending on the surrounding context. My example.

- (4) a. *Max having arrived and Morgan not having _, we decided to wait.
 - b. Max had arrived, but Morgan hadn't_, so we decided to wait.³ (Aelbrecht, 2010)

(4)a. is not licensed, but (4)b. is, even though the verb phrase is recoverable in both cases. In this particular example, only the verb phrase occurring in the finite clause, like in (4)b., is elidable. This demonstrates that not all verb phrases are allowed to be elided, and that tense of the verb may be one factor that plays a role in the syntactic licensing of VPE. This also demonstrates the aforementioned fact that even though we may be able to recover the elided phrase, the ellipsis' conditions depend on more than just recoverability (Merchant, 2016).

Aelbrecht (2010) and van Craenenbroeck & Merchant (2016) assert that VPE is quite rare in other languages than English. Further, van Craenenbroeck and Merchant (2016) argue that "ellipsis licensing is directly related to cross-linguistic variation". A cross-linguistic variation in licensing means that a specific type of ellipsis could work well in one language, yet not be accepted in another. It seems that licensing VPE in Norwegian is more restricted than in English. This is what I plan to investigate.

This study aspires to give a detailed account of whether Norwegian VPE-sentences actually *can* be regarded as grammatical. In order to do this, it will attempt discover and analyse what sort of Norwegian VPEs are accepted by Norwegian speakers, and to which degree they are perceived as grammatical or well-expressed. While doing this, one must also take into consideration that there is a possibility of variation between speakers or between dialects in Norwegian, which is one factor that might be interesting to investigate further. Moreover, the thesis will attempt to discover and discuss what eventual licensing rules VPEs in Norwegian and English share. A more detailed account of methods used in order to do this will be dealt with in chapter 3.

1.4 VPE in Norwegian

The main foundation on which the rest of this thesis will be based has now been presented, as ellipsis, VPE and restrictions they occupy have been discussed. However, there is still one important element missing. VPE in English is, as previously mentioned, a subject that has been under investigation for several decades. Yet, the number of investigations and studies made into

³ Numbering edited. My (4) is Aelbrecht's (31) (2010:13).

Norwegian VPE is quite limited. As the goal in this thesis is to compare licensing of VPE in English with Norwegian, the thesis's starting point will be a fairly recent study performed by Bentzen, Merchant and Svenonius (2013), as it has many relevant notes and findings. They examine VP-anaphoric uses of Norwegian *gjøre det* 'do it', which has a lot in common with the constructions of VPEs that are tested in this study.

Gjøre det is a construction which behaves a lot like English VPE. Thus, Bentzen et al.'s findings are relevant for this thesis. However, what this thesis is particularly interested in is what happens when *det* is omitted, that is to say, when the sentence has a structure exactly parallel to English VPE sentences. Bentzen et al. (2013) include some interesting and relevant findings about VPE without *det* as well. For instance, they state that VPE is allowed in Norwegian only with modals, and not with passive 'become', aspectual 'have', and the copula 'be'. What is interesting, is that in a poll they conducted with Norwegian speakers, there was considerable variability in acceptance of constructions containing VPEs of respectively passive 'become' and aspectual 'have'. Examples (5) and (6) below are two constructions in Norwegian originally given by Bentzen, Merchant and Svenonius (2013).

(5) Kari har skrevet ei avhandling, men Jan har ikke %(gjort det). *Kari has written a dissertation but Jan has not done it* 'Kari has written a dissertation, but Jan hasn't.'
(6) Kari ble arrestert, men Jan ble ikke %(det). *Kari became arrested but Jan became not it* 'Kari was arrested, but Jan wasn't.'⁴ (Bentzen et al., 2013)

These constructions were found to be accepted as VPEs by at least half of the Norwegian participants in the poll. Bentzen et al. inform that five out of ten native speakers accepted construction (5) without *det*, and six out of ten accepted (6) without *det*. They further state that Bentzen herself, who is a native speaker of Norwegian, does not accept these constructions when they are missing the information given in parenthesis. This means that a given number of speakers use VPE only in more restricted contexts, for instance when they contain a modal, like the Norwegian equivalent of 'can' or 'will'. However, to what extent this is accepted and by how many has not yet been investigated. The variability in acceptance is a very interesting

⁴ Numbering edited. Example (5) was their (6a) and (6) was their (6b).

finding, but as Bentzen et al.'s study largely focuses on surface and deep anaphoric uses of *gjøre det* 'do it', they did not follow up on this particular data. This is one of the reasons why this thesis aims to explore and investigate the nature of the mentioned variability. The current study will be a more detailed investigation of this, based on the findings discovered and assumptions made by Bentzen et al in 2013.

The verbs that this thesis will look at are *må* 'must'/'have to', *være* 'be', *ha* 'have' and *bli* 'become'. These can all act as both main and auxiliary verbs in English and Norwegian, but they are treated as auxiliaries and heads of VPEs in all examples in this thesis. Below are four different Norwegian sentences (also given as test items in this study) that I would consider perfectly acceptable in my Norwegian dialect. Personally, I would not be taken aback if someone had pronounced these sentences to me.

- (7) Martin måtte øve på gangetabellen, men Lisa måtte ikke. Martin had to rehearse on the times table but Lisa had to not 'Martin had to rehearse the times table, but Lisa didn't have to.'
- (8) Susanne hadde prøvd strikkhopping tidligere, men Eirik hadde ikke. Susanne had tried bungeejumping earlier but Eirik had not 'Susanne had tried bungee jumping before, but Eirik hadn't.'
- (9) Naboen min ble ikke forfremmet til viserektor, men min kone ble. The neighbour my became not promoted to viceprincial but my wife became 'My neighbour was not promoted to vice principal, but my wife was.'
- (10) Stolene var på plass etter renoveringen, men bordene var ikke. The chairs were at place after the renovation but the tables were not 'The chairs were in place after the renovation, but the tables weren't.'

However, informal investigation prior to launching the actual survey suggested that some Norwegian speakers would in fact be taken aback by at least some of these sentences and characterize them as ungrammatical. Interestingly, the English equivalents are perfectly grammatical and acceptable, supporting van Craenenbroeck and Merchant's (2016) note on cross-linguistic variation, and that English may be the language most accepting of VPE. During this informal investigation, comments on ungrammaticality were made on the VPE sentences; people reported that the items seemed to be missing the anaphor *det*, and that including this anaphor would make them grammatical. More on the allegedly missing anaphor *det* will be discussed in chapter 2, section 2.1.4.

1.5 Roadmap of the thesis

The upcoming chapter will give a more detailed discussion of the theoretical framework that has laid the basis for this thesis and discuss more aspects of VPE and similar constructions where 'meaning without form' occurs. Chapter 3 provides a description of the choice of test items, research sample, and methodological procedures of this study. The full list of test items can be found in appendix B. Chapter 4 presents the results found in this study tables and histograms and gives a brief explanation of these. In chapter 5 I present an analysis of the findings and make suggestions for future research. Finally, chapter 6 concludes whether there are similarities between English and Norwegian VPE and suggests some restrictions and licensing conditions on the Norwegian ones based both on my own data and analysis, and previous investigations.

2 Theoretical background

The chapter has four sections. The first section (2.1) repeats what VPE is, and discusses different types of anaphoric expressions, more specifically elliptical constructions that are *not* VPE. Section 2.2 is a discussion of different views on ellipsis. Section 2.3 treats the question of identity in VPE. The question of licensing VPE is discussed in the final section, 2.4. At the end of the chapter the research question of this study will be given. Example sentences given throughout the chapter will illustrate elliptical cases in English, Norwegian and in some cases other languages.

2.1 Various types of ellipsis

Although this thesis predominantly discusses one type of ellipsis, namely 'VPE' or 'VP ellipsis', it is relevant to give a brief account of the various types of ellipsis that exist. Like stated earlier, ellipsis is a phenomenon where something goes missing. *What* goes missing defines what kind of ellipsis takes place. Common for all ellipses is that the elided entity can be recovered from the context, i.e. interpreted and understood by the listener even though it is not pronounced. In the first subsection, a quick repetition of what VPE is will be given. Subsequently, other instances of anaphora will be presented and exampled.

2.1.1 Verb phrase ellipsis

A VPE is an instance of anaphora where a verb phrase gets elided. The phenomenon is pervasive in natural language use, and has consequently received much attention within both theoretical and computational linguistics (Kehler, 2000). An exemplification of VPE is given in (11).

(11) a. Helen can't draw a tiger, but Lisa can _.b. Helen kan ikke tegne en tiger, men Lisa kan _. (Norwegian)

In (11)a., the second clause can be understood as 'but Lisa can draw a tiger'. Following among others Aelbrecht's (2010) viewpoints, ellipsis in general "can only take place if a specific head with certain morpho-syntactic feature specification occurs in a local relation to the ellipsis site" (2010:88). This means that the head of the ellipsis, like the modal verb *can't* in (11)a., needs to have specific features and be in proximity to the elliptical string in order for the ellipsis to be licensed. In (11)a., the ellipsis is elidable, which means that the head has suitable morpho-

syntactic features, as it is obvious that is in a local relation to the ellipsis site. (11)b. is a construction that, to me personally, sounds felicitous. However, to other Norwegian speakers it might sound ungrammatical. The Norwegian example has the same build-up as the test items included in this study. Thus, the question of whether this construction is accepted and licensed will be examined more in detail throughout the thesis.

2.1.2 Noun phrase ellipsis

As we now know, the elided string is what determines what kind of ellipsis occurs. The entity being elided in an elliptical sentence could for instance be a noun, like in the below example sentence (12).

(12) a. The kids attended the football match, but most __went home disappointed.
b. Ungene deltok på fotballkampen, men de fleste _ dro hjem skuffet.⁵

When the elided entity is a noun, the ellipsis site is called a noun phrase ellipsis (NPE). NPE is fairly commonly used in English, Norwegian and many other Germanic languages (Lobeck, 1995). The Norwegian example in (12)b. sounds felicitous to me as a native Norwegian speaker.

2.1.3 Sluicing

Sluicing is demonstrated by a bare interrogative phrase in a context where an indirect question would be expected (Culicover & Jackendoff, 2005). The phenomenon was named by Ross (1969), presumably inspired by the verb 'sluice', originally meaning 'exclude' or 'shut out' (Merchant, 2001). Sluicing always contains a wh-phrase, and the ellipsis site is usually placed to the right of this phrase. The elliptical phrase can sometimes take a complement, for instance a preposition. Below is an example of a sentence where sluicing takes place, in particular a sluiced wh-phrase inversion with the preposition 'with', originally presented by Merchant (2001) and given in Norwegian, Danish and English.

(13) a. Per har gått på kino, men jeg vet ikke hvem med. (Norwegian)
b. Per er gået i biografen, men jeg ved ikke hvem med. (Danish) *Per has/is gone to cinema but I know not who with*c. 'Per went to the movies but I don't know who with.'⁶ (Merchant, 2001)

⁵ My example sentences.

⁶ Numbering edited. (13) is Merchant's (i) in footnote 14 (2001:64).

The Norwegian equivalent (13)a. is a very well-formed sentence in my opinion. Given that Merchant did not mark the construction as deviant points to him getting a similar report from his Norwegian colleague. Thus, sluicing is an elliptical form that seems to be highly accepted in several languages, including Norwegian.

2.1.4 Verb Phrase Pronominalization

Unlike a VPE, verb phrase pronominalization (VPP) does not entail the non-pronunciation of a full-fledged verb phrase (Houser, Mikkelsen, & Toosarvandani, 2007). Like mentioned in the introduction of this thesis, informal investigation prior to the survey showed that many Norwegian speakers feel that VPE-sentences are missing the proform *det*. If we substitute an unpronounced VP with *det*, the phenomenon is no longer a VPE, but a VPP. Houser et al.'s (2007) examples are focusing on VPP in Danish, a language that is much like Norwegian in many aspects, especially syntactically, and the two are thus easily comparable. They assert that in a VPP, the proform *det* 'it' can either occur in place of a verb phrase in an anaphoric expression, or in clause-initial position. Plainly speaking, this means that the VPE will be replaced by the *det*. For many Norwegian native speakers, a lot of VPE-sentences would sound better if one added the proform *det* at the ending, instead of omitting the material completely.⁷ Doing so means using VPP instead of VPE (Houser et al., 2007). Houser et al. gives the following two examples of VPP, shown in (14) and (15);

(14)	a. Han siger han kan hækle, men selvfølgelig kan han ikke det . ⁸	(Danish)
	b. Han sier han kan hekle, men selvfølgelig kan han ikke det. ⁹	(Norwegian)
	c. He says he can crochet but of course can he not DET	
	d. 'He says he can crochet, but of course he can't.'	
(15)	a. Han siger han kan hækle, men det kan han ikke.	(Danish)
	b. Han sier han kan hekle, men det kan han ikke. ¹⁰	(Norwegian)
	c. He says he can crochet but DET can he not	
	d. 'He says he can crochet, but he can't.'	(Houser et al., 2007)

⁷ Based not only on my personal judgments, but also on comments made by acquaintances.

⁸ Numbering edited. (14) is Houser et al.'s (1) and (15) is their (2).

⁹ My translation to Norwegian. In my view, a very well-sounding Norwegian sentence.

¹⁰ My translation to Norwegian. In my view, a very well-sounding Norwegian sentence.

In (14), *det* occurs instead of the verb phrase 'han kan hækle'. In (15), we see the VPP happening with the proform *det* appearing in clause-initial position. All of the examples are grammatical in the three languages depicted.

2.1.5 Do-support and gjøre-support

Do-support is a fairly conventional and important component of English language and is exemplified below in (16). Simply put, *do*-support entails placing any one form of the verb 'do' in a sentence string to either highlight, contrast or negate an action. A study by Platzack (2008) considered the relationship between English and Scandinavian *do*-support. He claimed that *do*-support does not have a counterpart in the Scandinavian languages Norwegian, Swedish and Danish (Platzack, 2008). The below example (16) is borrowed from Platzack (2008) and is illustrated in English and Swedish. Nevertheless, Swedish behaves the same way as both Norwegian and Danish.

(16) a. John did not drive the car.
b. *Johan gjorde inte köra bilen.
c. Johan körde inte bilen.
Johan drove not car.DEF¹¹

(Platzack, 2008)

Even though *do*-support is not accepted in Scandinavian in constructions like the one illustrated in (16)b., VPE *does* allow for *do*-support in Scandinavian languages. This entails that a sentence like (17)b. is recognized as grammatical. (17)b. is illustrated in Danish but is applicable to Norwegian as well.

a. Mary didn't drive the car but John did.
b. Maria kørde ikke bilen men Johan gjorde.
Mary drove not the car but Johan did. (Platzack, 2008)

Platzack (2008) claims that in Swedish, VPE with auxiliaries is much more acceptable than VPE with *do*-support (called *göra*-support in Swedish). Unfortunately, Platzack offers no such explanation for Norwegian. Whether this claim is applicable to Norwegian as well is imaginable. More research has been performed on Norwegian *gjøre*-support than on Norwegian

¹¹ Numbering edited. (16) is Platzack's (1).

VPE – it is therefore hard to tell which one of these phenomena is more acceptable based on actual facts. A further discussion of do- and *gjøre*-support will be given in chapter 5, section 5.2.4.

2.1.6 Summary

The above anaphoric expressions NPE, sluicing and VPP are widely accepted and used in Norwegian. What is controversial, however, is that VPE is usually not. In fact, English is the only Germanic language in which VPE is fairly common (Aelbrecht, 2010; Lobeck, 1995). This is partly the reason for choosing this particular phenomenon to have a closer look at. It is important to note that the focus of this thesis is a comparison between English and Norwegian VPE. Given the fact that the licensing conditions under which Norwegian VPE lies, and the very existence of VPE in Norwegian, have not yet been completely clarified nor researched in detail, I will mainly use my own data and intuitions while examining this phenomenon and comparing it to its English equivalent.

2.2 Different views of ellipsis

There are two main theories about the structure of ellipsis; nonstructural and structural approaches. In section 2.2.1 and 2.2.2 the differences between these two approaches and what they stand for will be presented.

2.2.1 Nonstructural approaches

According to Aelbrecht (2010), nonstructural approaches to ellipsis is often called 'WYSIWYG' – 'what you see is what you get'. The idea behind this is that the only structure in a sentence is what is actually being pronounced. This means that there are no elided, deleted or non-visible elements. Thus, the interpretation of an elliptical sentence must be richer than its phonetic realization. This entails that the interface between syntax and semantics is significant in pursuance of a correct interpretation of an ellipsis (Aelbrecht, 2010). Following the arguments of Aelbrecht, this approach presupposes less syntactic structure than its counterpart, however, it is necessary that the syntax-semantic interface is firm in order to map and interpret the ellipsis sites. Some linguists, among others Culicover and Jackendoff (2005), have argued that the syntax in an ellipsis completely match what is phonetically realized, although many disagree.

2.2.2 Structural approaches

Structural approaches to ellipsis argue that an ellipsis site contains unpronounced syntactic structure. Following this idea, there are various answers to why an unpronounced structure may be unpronounced. It could either be because the elided elements were null in the first place, or because the structure's phonological content is deleted. A third potential explanation is that it lacks lexical insertion. Whatever reason these theorists give, they all view the ellipsis site as a full-fledged syntactic structure that is interpreted the same way a non-elliptical string would be interpreted (Aelbrecht, 2010).

In my thesis I will be agnostic to this differentiating between structural and non-structural approaches because it is not relevant to the issue I will be focusing on; namely where and under which circumstances VPE can happen in Norwegian. Thus, the thesis will not deal with the internal structure of VPE in Norwegian.

2.3 Identity in ellipsis

Identity in ellipsis deals with the question of how identical the elided material needs to be to its antecedent in the current discourse (Lipták, 2015). Most elliptical cases (though not all) have their antecedent pronounced in the immediate preceding discourse. There are two main approaches to view the question of identity in ellipsis; theories based on syntactic identity, and semantically based theories.

2.3.1 Syntactic approaches to identity

Syntactic approaches hold that that identity is calculated on the basis of syntactic representations. In other words, the elided predicate is *formally* identical to the predicate phrase in the antecedent heading the ellipsis. The syntactic views assert that the elided material and its antecedent should be isomorphic¹² in their syntax. This means that the phrase marker in the antecedent must contain the exact same nodes and terminal elements as the elided string (Lipták, 2015). However, as Chomsky pointed out in the very first explicit discussion of identity in ellipsis in 1965, the deleted material need not be totally identical to its antecedent (Chomsky, 1965). According to him, the identity condition does not require inflectional identity between

¹² "Having similar or identical structure or form". Definition of 'isomorphic' by Collins COBUILD advanced learner's English dictionary (Sinclair, 2003).

different phrase markers, meaning that the comparative sentence shown in example (18) would still be allowed, even though the copula is not identical to its antecedent (plural vs. singular conjugation).

(18) These men are more clever than Mary is. (Chomsky, 1965)

This observation of different inflections on verbs has been confirmed in many languages and across different ellipsis types (Lipták, 2015).

2.3.2 Semantic approaches to identity

The semantic views of identity are more interested in whether the elided material have similar meaning to its antecedent. This entails that the semantic theory allows for material to be elided in a different syntactic context than their antecedent, as long as the syntactic differences do not change the sematic ones. Disturbing the intended meaning could make the antecedent and its elliptical counterpart non-identical (Lipták, 2015). If these two are non-identical, the meaning of the ellipsis would be lost. Many linguists have conducted studies that has concentrated on finding the limits of *tolerable* and *intolerable*¹³ semantic and formal dissimilarities. An example of a tolerable mismatch given by Lipták (2015), is that an elided lexical predicate can mismatch in form from its antecedent. Her example is reproduced in (19).

(19) John *likes this movie* and Bill might like this movie, too. (Lipták, 2015)

What we see in (19) is that inflected verbs such as *likes* can be antecedent for the infinitival form *like*. However, in (20), Lipták demonstrates an example of an intolerable mismatch. The elided infinitival auxiliary *be* cannot differ from its antecedent *is* in the same manner as in (19);

(20) * John *is fond of this movie* and Bill might be fond of this movie, too.¹⁴ (Lipták, 2015)

According to Lipták (2015), (20) is not accepted due to a higher degree of non-identity than what was demonstrated in (19).

¹³ Terms by Thoms (2015).

¹⁴ Numbering edited. (19) is Lipták's (3a) and (20) is Lipták's (3b).

2.3.3 Summary

As has been demonstrated in section 2.3, identity in ellipsis deals with the question of how identical the antecedent and the elided material needs to be. The syntactic approaches hold that the elided material and its antecedent should be have similar *structure* or *form*. The semantic approaches, on the other hand, assert that the elided material needs to have similar *meaning* to its antecedent. As this thesis focuses on licensing and formal constraints, the attention will not be set on the question of identity in ellipsis. However, the syntactic and the semantic approaches will be brought up briefly later when discussing the findings in this study. This discussion is located in chapter 5.

2.4 Licensing VPE

Licensing is a condition put on VPE that either allows or disallows it to be elided. More specifically, it deals with syntactic constraints that may be put on ellipsis sites. It is this particular condition that will get the main attention in this thesis, and the analysis in chapter 5 will compare licensing of VPE in English and Norwegian. Before that, it is a good idea to take a look at the question of licensing in general.

2.4.1 Main verb as head

A fairly well-known licensing condition is the restrictions that are placed on the *head* of the VPE. A verb can be *heading* the ellipsis site; it will either be functional as head, or not. If it's not, the VPE is not licensed. The verb that precedes an elided VP is the verb that functions as the head of the VPE in question. According to McCloskey (2005) and Johnson (2001), main verbs in English do not head, and thus, do not survive VP-ellipsis. An example of a main verb is 'make', and an attempt of VPE headed by this main verb is exemplified in (21).

(21) *¹⁵ Sally Tomato made Mag laugh, and then José made _.¹⁶ (Johnson, 2001)

(21) is *not* licensed, which demonstrates that English main verbs do not have the proper syntactic properties to work as licensors for VPE. As Johnson (2001) argues, it seems that VPEs cannot occur under the scope of a main verb. In the previous chapter the description of *licensing* given was that material can be elided when the meaning can be deduced from the context.

¹⁵ The * indicates that the sentence is ungrammatical.

¹⁶ Numbering edited; my (21) is Johnson's (7b).

Digging deeper, we discovered that the remaining syntactic environment also has a say in whether or not an ellipsis can take place (Aelbrecht, 2010). Hence, the surrounding syntax can also license or deny the event of an ellipsis. There are, in other words, several syntactic factors that must be in place before a VP can be elided.

2.4.2 Auxiliary as head

We just saw that main verbs are not allowed to head a VPE. However, English VPEs are allowed to occur under the scope of an auxiliary (Johnson, 2001; Lobeck, 1995; McCloskey, 2005). Lobeck (1995) states that the auxiliary is regularly termed the *licenser* of the VPE. An interesting study by Aelbrecht (2010) gives an example of a VPE that has quite similar structure to the ones included as test items in this thesis. She demonstrates that this specific VPE construction (given in (22) and (23) below) cannot be reproduced in Dutch or French or Italian (Aelbrecht, 2010). However, judged from my own intuition, Aelbrecht's VPE sentence *could* actually be reproduced and accepted in Norwegian. Similar constructions, using the same auxiliary in the finite tense, were used in the test items in the current study¹⁷. More on this in chapter 3, 4 and 5. The example VPE from Aelbrecht (2010) is replicated below in (22)a., and in Norwegian in (22)b.:

(22)	a. Monika has paid	already, but	Alice hasn't.	
	b. Monika har betalt	allerede, men	Alice har ikke. ¹⁸	(Norwegian)

In (22)a., the VPE is syntactically licensed by the finite auxiliary *has*, and in (22)b. we see the Norwegian version of the same finite auxiliary; *har*. Below is the same sentence given by Aelbrecht (2010) in Dutch, French and Italian.

(23) c. *Jelle heeft al	betaald, maa	r Johan heft nog niet.	(Dutch)
Jelle has already	paid but	Johan has still not	
d.*Aurélie a déjà	payé, mai	s Jonathan n'a pas enco	ore. (French)
Aurélie has alread	y paid but	Jonathan NE.has not yet	
e.*Antonio ha già	pagato, ma	Stefano non ha ancora.	(Italian)
Antonio has alread	dy paid but	Stefano not has yet	(Aelbrecht, 2010)

¹⁷ A collection of all test items can be found in appendix B.

¹⁸ My translation to Norwegian. Also, numbering edited. (22)a. and (23)c.d.e. are given in Aelbrecht's (32).

What we see is that the counterparts of the English finite auxiliary *has* in Dutch, French and Italian do not license VPE. What is particularly interesting is that Dutch does not accept a VPE headed by the finite auxiliary, seeing as it is a Germanic language (together with English and Norwegian). However, Aelbrecht points out that modal verbs in the three latter languages do license ellipsis by allowing their infinitival complement to be elided. She further gives the example 'X *will* pay, but Y can't' in the three languages, showing that this syntactic structure allows for VPE to happen in the three languages Dutch, French and Italian (Aelbrecht, 2010). According to my own judgment, this latter construction with 'will' would most likely be accepted by Norwegian speakers as well. It is also imaginable that the acceptance would be more frequent than that of (22).

2.4.3 Infinitival 'to' as head

As demonstrated in the previous sections, VPE licensing seems to be sensitive to tense of the verb, and whether the verb is a main verb, an auxiliary or a modal also plays an important role in the licensing in these three languages. An elided VP is licensed when it is headed by an auxiliary. We will now take a closer look at whether VPEs can be governed by an infinitival *to*. Johnson (2001) discusses this type of VPE, and the following two examples are borrowed from him.

- (24) You shouldn't play with rifles because it's dangerous to _.
- (25) $*^{19}$ You shouldn't play with rifles because to _ is dangerous.²⁰ (Johnson, 2001)

Here, (24) is licensed, but (25) is not. (25) demonstrates that an infinitival *to* cannot license the VPE when the infinitival verb that *to* heads is in subject position (Johnson, 2001). This entails that there is an additional requirement when using infinitival *to* as head that forces it to be in near proximity to certain other items. This demonstrates that infinitival *to* can, under some specific circumstances, head a VPE, but that there are strict licensing rules that needs to be followed.

2.4.4 Summary

As we have seen in this chapter, VPE is subject to several different conditions – recoverability, identity, structure and licensing. What this thesis particularly will examine is the question of

¹⁹ The star indicates that the sentence is ungrammatical.

²⁰ Numbering edited. (24) is Johnson's (11a) and (25) is his (11b).

licensing. A considerable amount of literature has been published on licensing of English VPE. However, there has been relatively little literature published on Norwegian VPE licensing, although there are related studies looking at similar phenomena, both in Norwegian and other Scandinavian languages. This is one of the reasons for the aspiration to perform a study comparing English VPE its Norwegian equivalent. VPE, and licensing of VPE, in English and Norwegian is what the thesis will investigate. Bentzen's (2013) findings showed that five out of ten Norwegian speakers accepted their test items containing a Norwegian VPE. This indicates that there must be some difference in both existence and acceptance between Norwegian and English VPE. Thus, the below research question is proposed.

2.4.5 Research question

Does Norwegian allow VPE? And if it does, what differences are there between English and Norwegian licensing of VPE?

In order to answer this, data on Norwegian VPE had to be gathered. The next chapter will explain the methods used to gather the data.

3 Research Methodology

3.1 Research design

A quantitative study was carried out in which data were collected during two weeks of November 2017. The study's aim was to collect data from as large a number of participants as possible. The format of the data collection was an electronic survey. As a high number of participants was an ambition for the study, my supervisor and I shared the survey on our private social media pages.²¹ These sharings resulted in acquaintances from our social circles sharing it further.

The survey asked for acceptability judgments of 62 Norwegian sentences. 48 of these sentences contained VPE, and the remaining 14 were so-called fillers. Filler sentences were included for several reasons, among those to divert the attention from constructions containing VPE. Another motivation for including fillers was to be able to check whether well-formed and perfectly acceptable sentences not containing a VPE would get rated accordingly. Some of the fillers were well-formed, others obviously ill-formed, and the rest of them intermediate. Being a native speaker of Norwegian, I have used my own intuition to create and check the fillers. There were relatively few fillers included in the survey, but that was a conscious choice. Expanding the number of fillers would have made a long survey even longer. Thus, I decided that having a filler at approximately every fourth sentence would be sufficient.

The physical design of the study was quite ordinary, with black and blue writing and whitecoloured background, as was the standard setting within the programme used.

3.2 The test items

The test items, which are the 48 sentences containing a VPE, were created in a systematic way. Since speakers' judgments often are influenced by several extragrammatical factors, the test items were carefully constructed. Some of these disturbing factors can be lexical content, plausibility, processing difficulty and length (Dąbrowska, 2010). These factors were taken into consideration, and I tried my best to make them brief and simple to read. Furthermore, I had three variables that were varied between; presence of adverb, choice of auxiliary and tense of

²¹ Respectively on our personal Facebook pages as status updates, and additionally by me in a Facebook group for language enthusiasts called "Språkspalta".

verb. The choices made when creating the sentences and the reasons for them are presented in the next few sections (3.2.1, 3.2.2 and 3.2.3). A summary of all of them will be given in section 3.2.4.

3.2.1 Adverb

The test items were constructed in minimal pairs, or in this case in fact minimal triplets. A minimal pair or triplet means that the sentences it contains are more or less identical to each other except for one variable, in this case, the adverb. There was, however, a necessity to alter one more thing in order to make the sentences sound as natural as possible. The conjunction *men* (but) was switched out with *og* (and) where it was considered appropriate. Using minimal triplets allows me to be reasonably sure that any difference in acceptability is due to the change in the variable that has been manipulated. Thus, the variation in use between the two conjunctions *men* and *og* will hopefully not impact the eventual findings. Sixteen sets of such minimal triplets, each containing three sentences, were used in the survey. Below is a representation of one of the sets.

- (26) Hilde er ferdig med mastergraden sin, men John er ikke.Hilde is finished with master's degree hers but John is not'Hilde is finished with her master's degree, but John isn't.'
- (27) Hilde er ikke ferdig med mastergraden sin, men John er.Hilde is not finished with master's degree hers but John is 'Hilde is not finished with her master's degree, but John is.'
- (28) Hilde er ferdig med mastergraden sin, og John er også.Hilde is finished with master's degree hers and John is also'Hilde is finished with her master's degree, and John is too.'

As seen above, there are two adverbs used in the test items, the negator *ikke* 'not' in example (26) and the affirmative *også* 'too' in (28). In sentence (27) there is no adverb included in the VPE site; the negator is instead placed in the phrase that precedes the VPE. All of the sets were constructed using the same method. When putting together the survey the three sentences within each minimal triplet were spread out on different pages. This was done to ensure that participants could not notice two or three very similar sentences on the same page. If the sentences were displayed in near proximity to each other the participants could have compared these to each other. This might have lead to an avoidance of giving them the same score

consciously or intentionally doing the opposite. Thus, the minimal triplets were presented in what may seem like a randomized order, but really is quite systematic.

3.2.2 Auxiliary

The four different auxiliaries included in the test items were *må* 'must/have to' *være* 'be', *ha* 'have' and *bli* 'become'. There were several reasons for picking these four in particular. First of all, because the three latter ones were mentioned by Bentzen, Merchant and Svenonius (2013) in their paper discussing which Norwegian auxiliaries allow VPE. They claimed that "Norwegian allows VPE consistently only with modals, not with aspectual 'have', passive 'become', or the copula" (Bentzen et al., 2013). This claim was intriguing, and thus, *have*, *become* and *be* was included in the current study. In particular, there was one finding they presented that was interesting. Sentence (29) was accepted by five out of ten speakers with VPE, that is, without *gjøre det*.

(29) a. Kari har skrevet ei avhandling, men Jan har ikke (gjort det).²²
b. Kari has written a dissertation but Jan has not done it
c. 'Kari has written a dissertation, but Jan hasn't.' (Bentzen et al., 2013)

Bentzen, Merchant & Svenonius mentioned this finding only in a footnote, and the nature of the variability in acceptance was left to future research. Moreover, I had a suspicion that the more frequently used the auxiliaries are in Norwegian, the more likely it was that they would be accepted in VPEs. The verbs *be, have, become* and *must* are indeed very common in various contexts, both in Norwegian and in other languages. *Must* was also included because Bentzen et al. (2013) mention it. Furthermore, on the basis of my own intuition the Norwegian equivalent of *must* is a verb that allows for VPE. Thus, I personally accept this way of using it, at least under some conditions. The auxiliary *can* could surely have been investigated as well, but because of restrictions in time and resources for this study, it was ruled out. Below are some examples of VPE-test items in the survey with each of the different auxiliaries. The examples (30), (31), (32) and (33) all contain the adverb *ikke*. However, the auxiliary manipulation was done alongside the adverbial one. Hence, there are equivalents to all of these sentences containing no adverb and the adverb *også*.

²² Numbering edited. (29) is Bentzen et al.'s (6).

- (30) Daniel har spist en hel sjokoladekake alene, men Ragnhild har ikke.
 Daniel has eaten a whole chocolatecake alone but Ragnhild has not
 'Daniel has eaten a whole chocolate cake by himself, but Ragnhild hasn't.'
- (31) Fredrik blir nervøs før han skal ha eksamen, men Cecilia blir ikke. Fredrik becomes nervous before he will have exam but Cecilia becomes not 'Fredrik gets nervous before exams, but Cecilia doesn't.'
- (32) Karla er glad for at det er overskyet ute, men Petter er ikke. Karla is happy for that it is cloudy outside but Petter is not 'Karla is happy that it's cloudy outside, but Petter isn't.'
- (33) Heidi må rydde rommet sitt hver dag, men Even må ikke.Heidi must tidy the room her every day but Even must not'Heidi has to tidy her room every day, but Even doesn't.'

3.2.3 Tense

The last variable included in the test items was tense. All of the sentences were written in either past or present tense. There were four sets of sentences with each auxiliary. Two of these sets were created with present tense, and two of them with past tense. It is important to note that tense was not a variable that was changed using minimal triplets, so the test items with different tense do not necessarily have other factors in common than the type of auxiliary. Thus, the subsequent findings will only give indications on whether tense could affect judgments of VPEs. (34) and (35) are two examples of test items with the auxiliary *have*, one in present and one in past tense.

- (34) Martin har jobbet hardt for å bli stand-up-komiker, men Anna har ikke.
 Martin has worked hard for to become stand-up-comedian but Anna has not
 'Martin has worked hard to become a stand-up comedian, but Anna hasn't.'
- (35) Susanne hadde prøvd strikkhopping tidligere, men Eirik hadde ikke.
 Susanne had tried bungee jumping earlier but Eirik had not.
 'Susanne had tried bungee jumping before, but Eirik hadn't.'

3.2.4 Summary of variables in test items

The three manipulations performed on the test items were change of adverb, auxiliary and tense. This entails that there are $4 \times 3 \times 2 \times 2$ (48) test items in total. For each possible value of each variable, there are two sentences that test it. For instance, the combination of the

auxiliary *må* in *present tense* and with the adverb *også* appears in two sentences. All of the test items can be found in appendix B.

3.3 Research sample - respondents

The study recruited a total of 426 respondents. People with different proficiency levels of English, different backgrounds, and at various ages participated in the study. The criteria for selecting respondents were as follows; they had to be native speakers of Norwegian, and over the age of 18. Thus, these are the only two factors known that were common for all respondents. The respondents' age and Norwegian geographical origin were spread, and there were participants from all 19^{23} counties, or *fylker*, in Norway. The respondents were randomly selected; that is, I did not seek them out individually. They voluntarily answered the survey in their own spare time. All information about the respondents have been treated confidentially, and as the survey is anonymous, I do not know any personally identifiable information about the respondents.

Considering that the respondents were spread among each of the counties of Norway, there is reason to believe that they are more or less representative of the Norwegian population. The main interest with the survey was initially not to look at regional differences in Norwegian people's acceptance of VPE, but I decided that it would be interesting to collect this information about the participants in order to detect or discover any possible regional distinction between the reported opinions on VPE. It would be intriguing to see if the opinions they gave had any connection to, or were affected by, their geographical and dialectal background. Additionally, this could provide avenues for further research.

The ages of the participants were also collected, and they answered in terms of what age group²⁴ they fell within. Furthermore, they answered a question asking how much English education they had completed.²⁵ The last and final question they answered before giving grammaticality judgments was whether they had lived, or currently lived, in an English speaking country. The reason why these two latter questions were included was that I had a theory this might affect their grammaticality judgments in some way. It is known that the proficiency level of a second

²³At the time the study was conducted, and the survey was launched, the two Norwegian counties "Sør-

Trøndelag" and "Nord-Trøndelag" had not yet been merged, thereof 19 counties.

²⁴ The age groups had intervals of 10 years.

²⁵ There were five possible answer options; 'Less than 9 years', '9-13 years', '14-15 years', '16-18 years' and 'more than 18 years'.

language might affect how people perceive and use the grammaticality of their native tongue, which in the field of linguistics is called *language transfer*, *interference* or *crosslinguistic influence*. This has been explored and researched in depth by innumerous linguists, and Vivian Cook (2016) states that a large number of linguistic studies have shown that our first language have discernible effects on our second language, also when it comes to interference of grammar (Cook, 2016).

The motivation behind asking these four more personal questions was to get more insight into which factors could possibly affect the respondents' opinions on VPE-sentences. In doing so there was a possibility to choose which factors to focus on at a later stage in the work.

3.4 Data collection tool

The digital survey was created and launched using the programme SelectSurvey. SelectSurvey is an online system that lets you create surveys of different types and lengths, and it has a range of different inquiry methods. The system is used both by students and employees at the Faculty of Social and Educational Sciences²⁶ at NTNU. I chose to use SelectSurvey because it was recommended to me by senior advisor Kyrre Svarva, the IT service desk at my university and several co-students. My supervisor, Andrew Weir, had heard that this programme was intuitive and fairly manageable, which made the decision to use it easy. SelectSurvey is available without charge for students at NTNU.

The electronic survey²⁷ was written in Norwegian, as it was meant for Norwegian L1 speakers. It consisted of nine pages in total, and was divided into three parts. The first part consisted of information to the respondents about the project, instructions, contact information and two examples of my personal grammaticality judgments of two given sentences. The second part was the respondent information part mentioned above. The third part included six pages containing 10-12 sentences that the respondents were asked to give a grammaticality rating for. The scale ranged from 1 to 7, and the numbers represented different levels of grammaticality, as presented below.

²⁶ Originally *SU-fakultetet* (Fakultetet for samfunns- og utdanningsvitenskap). My translation.

²⁷ Appendix A contains the survey in full.

- 1 = Svært dårlig 'Very bad'
- 2 = *Ganske dårlig* 'Fairly bad'
- 3 = *Litt dårlig* 'Somewhat bad'
- 4 = *Verken/eller* 'Neither/nor' or 'average'
- 5 = Litt god 'Somewhat good'
- 6 = *Ganske god* 'Fairly good'
- $7 = Svært \ god$ 'Very good'²⁸

The scale was created as ordinal as possible, which means that the interval between each number should be more or less the same. This means that it is a non-dichotomous data scale consisting of a spectrum of values. A scale like this, with endpoints defined as acceptable or unacceptable (or equivalent terms like the ones used here), is in scientific terms called a 'Likert scale' (Schütze, 2014). One of the main benefits of using such a scale is that is both numerical and intuitive. Having a 7-point scale was a natural choice as it is standard for acceptability and grammaticality ratings in linguistic studies. I considered using a 5-point scale, but I wanted to differentiate more between the options on each end of the scale, i. e. not only giving the options 'somewhat good' and 'excellent' on the high end. Thus, in my view, a 5-point scale was too narrow. However, the choice of a 7-point scale instead of an even larger one was fairly easy. An even larger scale might come off as a bit confusing to the respondents, and they might favor only a certain number of options available instead of actually using the whole scale to its full extent. Snow (1975) presents a finding showing that respondents find scales larger than seven points hard to use. This was based on findings were psychologists measured attitudes (Snow, 1975). Moreover, having scales larger than seven points is not typical for grammaticality judgments in language studies.

The instructions given in the first part of the survey guided the respondents on how to give grammaticality scores. As mentioned above, I provided two example sentences and gave them my personal judgment. In this way, the respondents could get an idea of the range within which they were working. Carden (1970) states that "You must define 'grammatical' or 'acceptable', words that naive informants use in widely varying ways" (Carden, 1970). Thus, creating a common understanding before asking the respondents to give grammaticality judgments could contribute to more credibility and reliability to the study and its findings.

²⁸ My translations.

3.5 Procedure

Potential respondents to the study were able to open the survey by clicking a link attached to the post on social media. Even though participants were technically able to participate more than one time, one can be reasonably sure that respondents only answered the survey once. A great number of people opened the link without answering the questionnaire. This is understandable as the project was voluntary and may not interest all. However, 426 respondents chose to answer the survey in full. All of the questions were voluntary, that is, none of them were obligatory to answer. This was a conscious decision based on my own experience from being a participant in various studies – it might come off as annoying or boring to *have to* answer something. Because of this a number of respondents had some sentences they did not give judgments on. However, these were very few.²⁹

The completion process of the survey was fairly simple. After giving their answers and judgments the respondents were asked to click 'next' if they wanted to participate in the study.³⁰ Their answers became available to me as soon as they had clicked this button, and would then be marked with status 'completed' in SelectSurvey. At several points during these weeks I was able to look at different tendencies in the data gathered to that point. After having drawn the line at 426 respondents, the data was exported to IBM SPSS and analysed.

3.6 A note on grammaticality judgments

It is important to note that the respondents' opinions on grammaticality are not always coherent with the way they actually speak (Labov, 1996). This entails that respondents tend to observe prescriptive grammar rather than rely on the actual practice of speaking. From the time when Labov (1972) discussed unreliability of native-speaker judgments, the claim has been well known. There are indeed many factors that may influence the character of the data gathered. This phenomenon is explained in more detail by Cornips and Poletto (2005), who asserts that when native speakers judge a certain form to be completely unacceptable, they can still be observed using it freely in every-day conversation (2005:942-943). Moreover, Cornips and Poletto assert that native speakers are able to give judgments about structures without any explicit knowledge about them, and without having these structures explicitly taught to them.

²⁹ At most, 3 out of 62 sentences were not answered. The sentences that were not answered were different ones for each of the respondents that missed a few. Some respondents did not give judgments and only answered questions on information about themselves. Naturally, these were ruled out once the analysis began.

³⁰ The respondents were informed that they may withdraw consent at any time.

Acceptability judgments can also be based on the frequency of use in their own speech, or on the degree of pragmatic or semantic plausibility of the sentence (Cornips & Poletto, 2005:943). The sentences are meant to be judged as conventional. The respondents were reminded that there were no right or wrong answers on every page of the survey.

To sum up, one cannot account for all of the different possible interpretations that might have taken place during the participants' reading of the test items. Nevertheless, the careful construction of test items and the survey as a whole has hopefully ensured that people judged the items on the actual grammaticality, and as Cornips and Poletto (2005) stated, people are more than able to give judgments without being taught this ability explicitly.

The findings of the study will be presented in the next chapter, and the analysis and discussion of them will be presented in chapter 5.

4 Results

4.1 Introduction

The grammaticality judgments given by participants in the survey provided many interesting results, and decisions had to be made on which results to keep for presentation in this thesis, and which to eliminate. After collection, the data were entered into the computer database IBM SPSS³¹ for quantification.

When data were entered into IBM SPSS two main analyses were carried out. The first analysis involved calculating the mean for each sentence, and each composition of sentences; groups based on adverb, auxiliary and tense. This was done to determine whether the group of participants accepted or rejected the different sets of test-items, and to which degree the items were seen as acceptable.

As previously mentioned the survey contained a number of sentences of the same type, that is, with similar auxiliary, tense or adverb. It was created this way with two aims. Firstly, for making sure that any generalization should not be made based on solely one sentence. Filler sentences that did not contain ellipsis were also included for the same reason. Secondly, because there were so many variables to test for. Hence the necessity of a fairly long survey with sixteen minimal triplets containing variation in auxiliary, tense and presence and distinction of adverb. Considering that no studies has gone in-depth on VPE in Norwegian, the different variables were all equally interesting to begin with, before the survey was launched.

Averages of sentences of the same type (that is, having at least one of these aforementioned factors common) were added together and a grand mean was calculated for the sum in each group. Histograms showing the different results on acceptability judgments based on which adverbs were included were also constructed. The following sections presents the findings of the study.

³¹ SPSS originally stood for Statistical Package for the Social Sciences when it was created in 1968, but has since then simply kept the name. IBM stands for International Business Machines. (Jensen, 2017)

4.2 Presence or absence of adverbs

First off, data analysis displayed a clear difference in judgments between which adverbs the test items contained. There were three different possibilities; items containing no adverb, the adverb *ikke* or the adverb *også*. The first interesting finding was that test items that did *not* have an adverb inside the elliptical string (but that did contain *ikke* in the preceding clause) were the ones scoring highest on acceptability. An example of such a construction is displayed in (36).

(36) Susanne hadde ikke prøvd strikkhopping tidligere, men Eirik hadde.Susanne had not tried bungee jumping before but Eirik had

4.2.1 Mean scores based on presence or absence of adverbs

The tendency of higher acceptability of no-adverb construction was revealed across the different auxiliaries ma, ha, bli and vare. Below are the mean scores for each group of test items in a table showing this tendency.

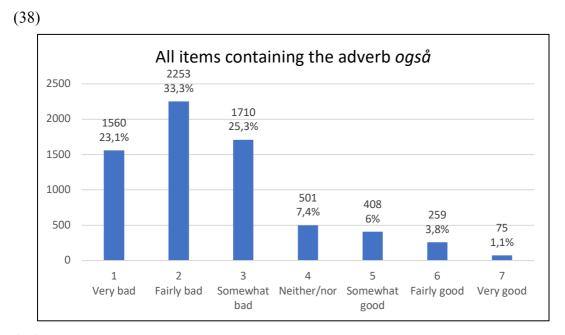
(37)

Mean scores depending on presence or absence of adverb in ellipsis site				
	Items without adverb	Items with adverb <i>også</i> included	Items with adverb <i>ikke</i> included	
Valid	425	425	425	
Mean	4.03	2.56	3.44	
Std. Deviation	1.43	1.04	1.29	

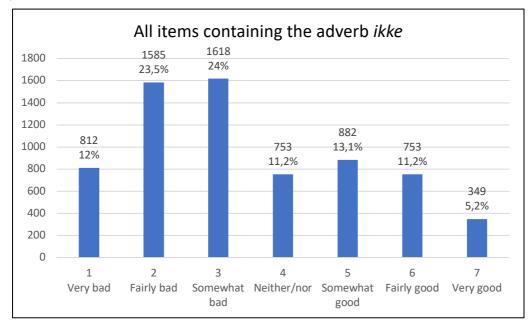
Table (37) shows the mean scores in bold. This illustrates that items without adverb inside the ellipsis are considered to be far better-sounding and more accepted than the other two subgroups. The *også*-group had the lowest mean score with only 2.5, which means that is situated right in the middle of 2 and 3 representing 'fairly bad' and 'somewhat bad'. Items with the adverb *ikke* brought together as a group also score below average, like *også* does, but are more accepted than its counterpart adverbial construction containing *også*. For a more thorough discussion of the adverb findings, see chapter 5, section. First, let us take a closer look at the distributions of reported judgments based on presence or absence of adverb.

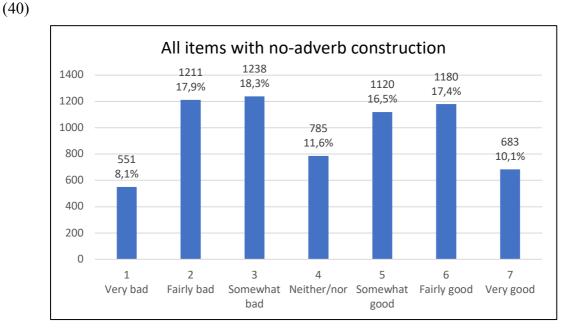
4.2.2 Histograms based on presence or absence of adverbs

The general tendency is that having adverbs inside the ellipsis causes a decrease in acceptability of VPE. Figure (38) shows all *også*-items combined into one histogram, figure (39) shows all *ikke*-items, and (40) shows all items with no-adverb construction.









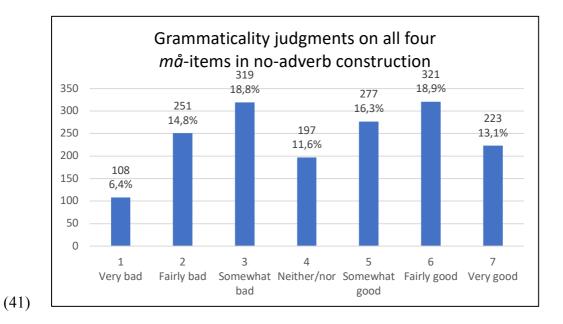
The results, as seen in figures (38), (39) and (40) show that he bimodal effect is very present again in (40), but also slightly accounted for in (39) with the *ikke*-construction. In (38), which displays the *også*-items, there is merely a steep decrease from left to right, indicating that the acceptability of such constructions is very limited, close to non-existent. Chapter 5 will discuss all three variations more deeply and carefully examine of the differences between them.

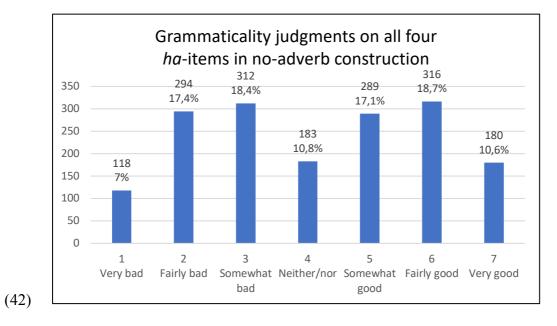
4.3 No-adverb items displayed with different auxiliaries

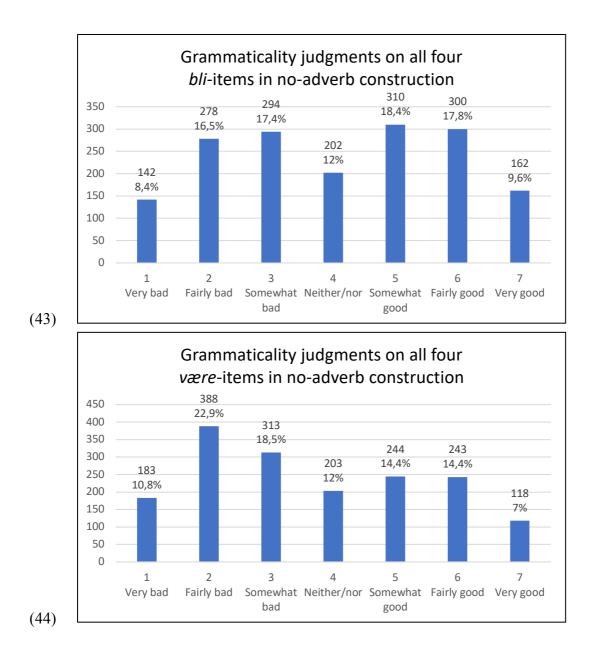
As has now been established, the no-adverb construction was the highest-rated one when it came to the question of presence of adverb. Thus, these were the first ones to be investigated further. The four different auxiliaries included in the test items were *må* 'must', *ha* 'have', *bli* 'become' and *være* 'be'. Each of these verbs were portrayed four times in no-adverb constructions in the survey. What will be demonstrated below are four histograms, each pertaining to one group of auxiliaries. The following histograms show the highest-rated construction of the three discussed here, which will from now on be referred to as 'no-adverb construction'.

The histograms in figures (41) through (44) show how many judgments were given on each of the alternatives on the scale ranging from 1-7, and the percentages these numbers represent. It is worth mentioning that there were a few missing cases where respondents didn't give judgments, but merely skipped the question. However, the number of missing cases is very low

seen in a larger context. Seeing as there were 426 respondents, the maximum number of responses on all four 'må'-items, for instance, would be 1704 (426x4). At most, there were 16 missing cases out of a total of 1704 judgments. Due to the low number of missing cases, these were excluded when calculating the percentages shown above each bar representing an alternative in the histograms (41) through (44). The frequency-number above the percentage portrays the actual number of responses on that alternative.







What we see in these four histograms, and especially in (41), (42) and (43) is that respondents in this study tend to rate the sentences either above or below average, as there is a decline in frequency at number 4, which is the intermediate alternative meaning 'neither bad nor good'. Considering that VPE in Norwegian is such a poorly investigated subject, the initiate expectation was that the test items would be judged with higher frequency on the three alternatives representing 'bad'. The more even spread of judgments among the alternatives 1-7, and the fact that the low score on 4 is creating a bimodal shape of two obvious relative modes, or data peaks, were both interesting and unexpected findings. The bimodal-shaped frequency in responses is visible also in constructions containing the adverb *ikke*. The *også*-items do not get the bimodal distribution but are rather descending from left to right. Possible reasons for this split frequency, the low acceptance of *også* and the relatively high overall acceptance of no-adverb and *ikke*-constructions will be discussed and analysed in chapter 5.

4.4 Lower acceptance of *være*

Another result readable from the displayed histograms is that (41), (42) and (43) seem to be more accepted than (44) which treats the verb *være*. This is also demonstrated in figure (45).

(45)

Mean score of all items grouped by auxiliary				
	Items with må	Items with ha	Items with bli	Items with være
Valid	425	425	425	425
Mean	3.55	3.44	3.32	3.06
Std. Deviation	1.20	1.23	1.20	1.16

The table show all mean scores collectively and solely based on auxiliary groups, not taking into consideration whether the test items contain an adverb or not. The *også* and *ikke*-items are within all of these groups, and as was shown in table (37), these constructions might lead to a decrease in acceptability. Thus, they might be the cause for all mean scores ending up below the average 4 in table (45). Therefore, table (46) might be more representative of the lower acceptance of *være*.

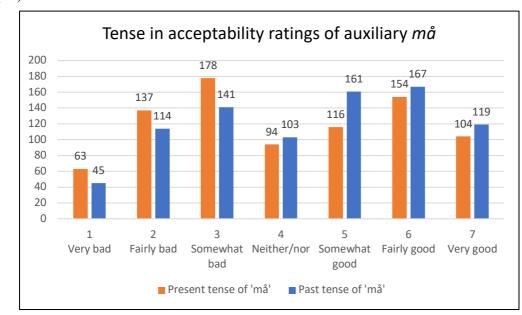
(46)

Mean score of all no-adverb items grouped by auxiliary				
	Items with må	Items with ha	Items with bli	Items with være
Valid	426	426	426	426
Mean	4.26	4.11	4.06	3.67
Std. Deviation	1.49	1.55	1.53	1.50

In this table, the standard deviation is higher than in (45), indicating that there is slightly more disagreement between respondents. Here, the other verbs end up with a mean score above 4, whereas *være* has a mean score of 3.67. In both tables, we see a slight difference between the *være*-items and the other three auxiliaries. There are various possible explanations for an unveiled result like this. A discussion around the finding of lower acceptability on the copula *være* will be given in chapter 5, section 5.3.

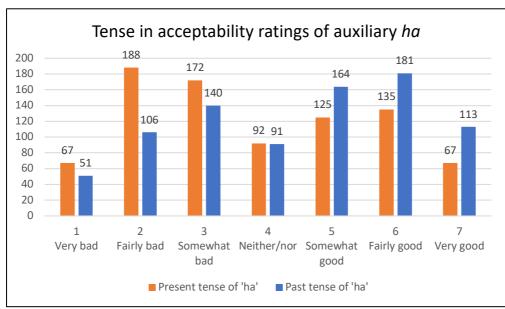
4.5 Tense

While examining tense, varying between the present and past, there was a slight difference in acceptability that was observable in the responses from the survey. These are presented below in figures (47) and (48), where (47) will display acceptability ratings of ma in both tenses, and (48) displays ha. The figures were created based on four sentences of each auxiliary, two in the present and two in the past tense. These are merely included as indications of a finding that might be worthwhile examining more in future research.



(47)





A comparison of the two auxiliaries' acceptance score in present and past tense seems to indicate that the ones in past tense (blue bars) are accepted with a slightly higher frequency. However, it is important to note that this might be an incidental finding, as there are various factors contributing to whether or not a VPE is accepted, and if it is, to which degree. The item that received the highest mean score (4.63) of all test items was also in past tense and had the no-adverb construction. The present and past tense items used as a base for creating the histograms (47) and (48) were completely different constructions containing only two factors in common; the auxiliaries headed a VPE, and the constructions did not contain an adverb.

As has been demonstrated in this chapter, there are several interesting results to discuss further. In the analysis that follows in chapter 5, the difference between presence or absence on adverbs, the bimodal distribution and the lower score on *være* will be examined in more detail. Based on the findings in the current study and on literature on English VPE, a licensing condition for Norwegian VPE will be hypothesized.

5 Discussion

5.1 Introduction

The different findings presented in chapter 4 will in this chapter be discussed and analysed. There are three main parts of this discussion. The first part (section 5.2) will discuss the different means depending on the presence (or absence) and choice of adverbs in the test items. The second part (section 5.3) will focus on the lower score on the auxiliary *være* 'be'. The third part (section 5.4) will discuss the bimodal distribution of judgments, showing an increase in answers on the edges of the scale rather than an elevation in the middle of the scale.

There was a considerable amount of data to analyse and review. As this study is an exploratory one, it focuses on the findings considered most interesting and noteworthy. Sadly, some of the data had to be disregarded due to a limited time frame and lack of space in the thesis. One finding that did not make the cut was dialectal differences in acceptance of Norwegian VPE. Excluded was also a systematical investigation of age groups in connection to judgments given, and respondents' proficiency of English in connection to their responses. I propose that future research focus on some of these elements.

5.2 Presence of adverbs

Initially, the study did not have any specific predictions about the effect of an adverb inside the ellipsis site. In the previous chapter, more specifically in section 4.2, a clear variance in acceptance between the three different constructions within minimal triplets was demonstrated.

As was shown in table (37) and histograms (38), (39) and (40), the type of constructions that received the highest mean score on grammaticality judgments were the no-adverb items. This suggests that VPE with the adverbs *ikke* 'not' and *også* 'too' in Norwegian are not as highly accepted as VPE without adverb. Another interesting finding was that *også* was rated very low, with all items having a grand mean of only 2.56 on the scale ranging from 1 to 7. Section 5.2.1 will discuss possible reasons for why no-adverb constructions were considered the most felicitous ones. The section after that, 5.2.2, will examine the low mean score of items containing the adverb *også*. The third section, 5.2.3, discusses the items containing the adverb *ikke*, which were perceived as slightly less acceptable than the no-adverb construction.

5.2.1 No-adverb constructions

We saw that the no-adverb items were the ones with highest mean score of acceptance. These were sentences that were constructed like the ones in that are illustrated below; (49), (50), (51) and (52). These are samples of VPE-sentences that were included as test items in the survey, and the examples demonstrate one sentence with each of the four auxiliaries. The below examples only illustrate no-adverb items.³²

- (49) Heidi må ikke rydde rommet sitt hver dag, men Even må.Heidi must not tidy room her every day but Even must'Heidi doesn't have to tidy her room every day, but Even has to.'
- (50) Karla er ikke glad for at det er overskyet ute, men Petter er.Karla is not happy for that it is cloudy outside, but Petter is 'Karla is not happy that it's cloudy outside, but Petter is.'
- (51) Daniel har ikke spist en hel sjokoladekake alene, men Ragnhild har.Daniel has not eaten a whole chocolatecake alone, but Ragnhild has'Daniel has not eaten a whole chocolate cake himself, but Ragnhild has.'
- (52) Espen blir ikke sint om han får reklame i postkassa si, men Stine blir.
 Espen becomes not angry if he gets advertise in mailbox his, but Stine becomes
 'Espen doesn't get angry if he receives advertisement in his mailbox, but Stine does.'

No-adverb constructions seem to license VPE in Norwegian. An important issue emerging from these findings is why this construction is considered more acceptable than the two others that contain either the adverb *også* 'too' or *ikke* 'not' inside the ellipsis site. I propose that the well-formedness of no-adverb items could have something to with where the stress is pronounced in the VPE. Before getting into more detail on this, I will replicate two English examples in (53) and (54) originally given by López & Winkler (2000):

- (53) Peter has seen 'Wag the Dog' but John has not.
- (54) John has not seen 'Wag the Dog' but Peter has.³³

(López & Winkler, 2000)

³² In total, there were four test items containing each auxiliary with the 'no-adverb' construction.

That is, $4 \times ma^{a}$ + no adverb, $4 \times vare$ + no adverb, $4 \times ha$ + no adverb and $4 \times bli$ + no adverb.

³³ Numbering edited. (53) is López and Winkler's (1a) and (54) is their (1b).

López and Winkler (2000) have performed prosodic and syntactic elements investigations of the remaining elements in VPA constructions. They argue that the English auxiliary 'has' in (54) bear an 'emphatic-affirmative feature', which is a term originally presented and discussed in Chomsky's *Syntactic Structure* (1957). This means that 'has' in (54) has emphasis, which plainly spoken would entail that 'has' receives *stress* or *focus* in its pronunciation. It is affirmative in the sense that it contradicts the first clause. In (53), the stress would rather be assigned to the negation word 'not'. What is displayed in (53), is thus a negation feature. López and Winkler (2000) argue that the negative or affirmative features that are exemplified in (53) and (54) are encapsulated in the syntax in a functional category called Σ . The category Σ takes a VP as a complement. They further argue that the functional head Σ licenses VPE (López & Winkler, 2000).

They also argue that VPA³⁴ constructions are characterized by a pitch accent assigned to the negative or affirmative term. López and Winkler (2000) identify this accent as *polarity focus* and argue that this actually licenses VPA when it is realized on the auxiliary, like shown in (54). They further assert that polarity focus is realized in each of the VPA constructions they have encountered. This means that when the accent pitch is realized on the auxiliary, the VPE is licensed.

Following López and Winkler's (2000) theory, I argue that the VPEs that contain no adverb in this study are licensed because the auxiliary in the elliptical conjunct is assigned a pitch accent. Even though the format of the study was an online questionnaire, people still assign voices in their head while reading (Kurby, Magliano, & Rapp, 2009). Based on these arguments, I assume that whether or not the pitch accent is put on the auxiliary in Norwegian helps decide if the ellipsis site is licensed. This will be discussed more in detail in the next section, as the polarity focus-hypothesis could also be applied to the low score *også*-items received in the current study.

5.2.2 The adverb også in VPE

The Norwegian adverb *også* 'too' is poorly accepted in the Norwegian VPEs tested for in this study. A big distinction is revealed when comparing such constructions to English. As mentioned in the previous chapter, the grand mean of all items containing the adverb *også* was

³⁴ VPA is short for Verb Phrase Anaphora, which covers other anaphoric deletions of verb phrases. VPE is a subcategory of VPA, thus, every claim about VPA that López and Winkler (2000) make is directly transferable to VPE.

only 2.56. The *også*-items also had a lower standard deviation of the mean than the other items, indicating that Norwegian speakers agree more on this The test item presented below, (55)a., was the one rated the lowest of all test items in the study.

(55) a. Daniel har spist en hel sjokoladekake alene, og Ragnhild har også.Daniel has eaten a whole chocolate cake alone, and Ragnhild has toob. 'Daniel has eaten a whole chocolate cake himself, and Ragnhild has, too'

The mean score of (55)a. was only at 2.08 on the scale ranging from 1-7. However, the English sentence in (55)b. is a completely acceptable sentence in English, and the English equivalent ellipsis is thus licensed.

This finding could also be explained by the role of pitch accents in VPA, as was explained in the previous section and originally discussed by López and Winkler (2000). They propose that polarity focus plays a crucial role in the licensing of VPE in English, and of VPA in German. The examples they draw are based on sentences where an event that is introduced in the first coordinate sentence is either affirmed or negated by a polarity focus. As discussed in the previous section, an item in the elliptical conjunct *will* receive a pitch accent somewhere (López & Winkler, 2000). López and Winkler argue that when the pitch accent is assigned to the auxiliary in an elliptical string in English, this is one thing that licenses ellipsis in English. Nevertheless, VPE-sentences in English can be licensed in other ways, and the pitch accent is not necessarily realized on the auxiliary in all licensed English VPEs. Such a VPE is demonstrated in (56).

(56) JOHN has watched Game of Thrones, and MARY has TOO.

The hypothesis I give for Norwegian, however, is that *where* the pitch accent is realized is crucial in determining whether the ellipsis is licensed or not; it has to be realized on the auxiliary in the elliptical string. López and Winkler (2000) draw several examples of this event in English. Two of them are replicated here in (57) and (58).

- (57) Ben said he has read Dostoyevsky's Idiot, but he HASN'T _.
- (58) Jan said that he hasn't read Dostoyevsky's Idiot, but he HAS .³⁵

(López & Winkler, 2000)

The pitch accents (shown in capital letters on the words 'hasn't' and 'has') demonstrate that it is the entity that also functions as head of the elliptical phrase that receives stress. The focus accent is placed on the last element of the sentence. López and Winkler (2000) argue for a licensing condition that holds that the final position in the sentence *must* be accented, even if the VP is contextually given. If the pitch is on the auxiliary that is also head of the VP, the VPE is licensed, even though there are other conditions that can allow for an ellipsis in such cases as well. My claim for Norwegian VPE is that when it is not realized on the auxiliary, but rather on an adverbial like *også*, the VPE is not licensed. This is different from licensing of English VPE, as VPE-constructions ending with the affirmative adverb 'too' are usually grammatical, and thus, licensed. This could explain why the Norwegian test items containing *også* are not licensed – the pitch accent will be put on *også*, and not on the auxiliary because the polarities of the sentences do not contrast. This is illustrated in (59).

(59) *Daniel har spist en hel sjokoladekake alene, og Ragnhild har OGSÅ_.Daniel has eaten a whole chocolate cake alone and Ragnhild has TOO .

5.2.3 The adverb ikke in VPE

Having the adverb *ikke* 'not' in the elliptical string of my test items seemed to cause a slight decrease in acceptability. The polarity focus hypothesis that was given for the *også*-items' low mean score can be applied for the *ikke*-items as well. López and Winkler (2000) argue that polarity focus has a central role in the licensing of VPE in English and Spanish, and they also extend their claim to VPA in German. As was stated in the two previous paragraphs, the function of polarity focus is either to negate or affirm an event that is introduced in the first clause. The example drawn in 0 can be reused here. As we saw, 0 assigned the pitch accent to 'hasn't', which is a contraction of 'has' and 'not'. Examples (60), (61) and (62) are all translations of 0 into Norwegian. The pitch accent is assigned to different entities in the different examples.

³⁵ Numbering edited. 0 is López and Winkler's (26a) and (58) is their (26b).

- (60) * Ben sa at han har lest Dostoyevsky's Idiot, men han HAR IKKE_. Ben said that he has read Dostoyevsky's Idiot, but he HAS NOT.
- (61) ? Ben sa at han har lest Dostoyevsky's Idiot, men han HAR ikke_.Ben said that he has read Dostoyevsky's Idiot, but he HAS not_.
- (62) * Ben sa at han har lest Dostoyevsky's Idiot, men han har IKKE_.Ben said that he has read Dostoyevsky's Idiot, but he has NOT_.

As mentioned earlier, English needs pitch accent *somewhere* in a VPE-sentence, but the pitch does not have to be on the verb. My claim is that Norwegian needs the pitch assigned on the verb specifically, as this seems to be crucial in order to license a VPE in Norwegian. Thus, this would entail that the readings presented in (60) and (62) are not licensed, because the pitch does not fall on the auxiliary.

However, a contraction of the auxiliary *ha* and the negation word *ikke*, creating varieties like *ha'kke*, *ha'kje* or *ha'itj* is conventional in oral speech in some Norwegian dialects, even though such a contraction is not formally accepted in written form. I hypothesize that some respondents *did* contract these two entities while reading them, and thus, putting the stress on both *ha* and *ikke* at the same time. This would allow for an ellipsis to be licensed, because the auxiliary receives stress. The same contraction can happen between *bli* and *ikke* creating *bli'kke/bli'kje*, *være* and *ikke* creating *æ'kke/e'kje* or *må* and *ikke* creating *må'kke/må'kje*³⁶. It is, however, important to note that none of the test items had such contractions in written form – I propose that some respondents can have contracted the items while reading.

Based on this I argue further that the Norwegian reading in (60) *could* be accepted if the participants contracted the two entities here in their head while reading. Thus, it might be that there are some dialectal differences in pitch assignment, and that this is the reason for the lower score on the *ikke*-items than that found for the no-adverb items. This would entail that speakers that did not contract auxiliaries and *ikke* considered the items infelicitous. Data on the respondents' dialects was gathered, but sadly, dialectal differences were not investigated in depth due to time and space limitations in this study.

³⁶ These are merely some examples of dialectal contractions in Norwegian – there are plenty more.

Another hypothesis for the lower score on *ikke*-items is that some speakers only allow *affirmative* polarity focus in VPE to license VPE in Norwegian. With affirmative I mean that it contradicts the first clause in a positive way, thus, not including *ikke*. The no-adverb constructions were such sentences, where the first clause was negative and the second, elliptical one, was affirmative. Hence, the affirmative polarity focus is expressed as stress on the auxiliary, which is what I argue that license VPE. I hypothesize that other speakers, to the contrary, allow *any* order of polarity focus (both negative and affirmative in the first clause and then a contrasting one in the second). This would also explain why sentences with *også* got a low score – they do not involve any kind of polarity focus at all. Moreover, this hypothesis could explain why the *også*-items were the only ones that did not end up with a bimodal distribution of acceptability judgments; they were rejected by essentially everyone because of lack of polarity focus.

5.2.4 Differences between *do*-support and *gjøre*-support

We saw in section 2.1.5 that English *do*-support does not have a counterpart in the Scandinavian languages (Platzack, 2008). However, VPE *does* allow for *do*-support (or *gjøre*-support) in Scandinavian languages. I will now have a look at where pitch is assigned in *do*-support constructions in English and Norwegian, and lay out some difference between the use of *do*-support in these languages. English uses *do*-support to express polarity focus of the relevant sort, and the pitch is assigned to the verb *do*. This is exemplified in (63)a.

(63) a. Daniel didn't try the cake, but Ragnhild DID try the cake.
b. *Daniel prøvde ikke kaka, men Ragnhild GJORDE prøve kaka.
Daniel tried not the cake but Ragnhild DID try the cake

The Norwegian equivalent in (63)b., however, is totally ungrammatical. This illustrates that in Norwegian, one would not normally use *gjøre*-support in this manner, like Platzack (2008) also illustrates in his study. In the example below, (64), I try to change (63)b. into a VPE.

(64) *Daniel prøvde ikke kaka, men Ragnhild PRØVDE.Daniel tried not the cake but Ragnhild TRIED

(64) is not acceptable in Norwegian – it sounds really infelicitous. To convey (63)b. in a Norwegian VPE one would most likely prefer using *gjøre*-support instead. *Gjøre*-support seems to be more acceptable in VPE-constructions in Norwegian, like shown in (65).

(65) ? Daniel prøvde ikke kaka, men Ragnhild GJORDE.
Daniel tried not the cake but Ragnhild DID
'Daniel didn't try the cake, but Ragnhild DID.'

Based on my own intuition, (65) sounds a lot better than the attempt of *gjøre*-support (63)b. This indicates that English and Norwegian differ in how they express polarity focus when the verb is *not* an auxiliary and in the absence of ellipsis. Whether *gjøre*-support in VPE-constructions like the one in (65) is accepted or not has not been tested for in my study. However, there are many others that have discussed *gjøre*-support in Scandinavian VPE, among others Bentzen et al. (2013), Platzack (2008) and Houser, Mikkelsen, Strom-Weber, and Toosarvandani (2006) and Houser et al. (2007). Sadly, the scope of this thesis is not big enough to examine in detail the relation between *gjøre*-support and the pitch-accent condition I have hypothesized for VPE above. Thus, I suggest that future research could examine the interaction between these two factors.

5.2.5 Summary on the variety in acceptance between adverbs

Section 5.2 has discussed the higher acceptance of no-adverb constructions and the low acceptance of også-VPEs, and links have been drawn between Norwegian and English counterpart strings. I argued that pitch accents need to be assigned to specific elements, more specifically the auxiliary, in order for Norwegian ellipses to be licensed. When the pitch accent in Norwegian is assigned to an affirmative feature Σ like også, the ellipsis is not licensed. Thus, contrastive polarity focus on an auxiliary seems to be necessary for licensing VPE in Norwegian. The affirmative feature 'too' in English, however, *do* allow for ellipsis, as English does not require stress on the auxiliary.

5.3 Lower acceptance of *være*

As we saw in section 4.4, there are findings demonstrating that the copula 'be' in Norwegian has a lower frequency of acceptance than the other three auxiliaries included in this study. This finding suggests that there are some characteristics that *være* possesses that are different from

the ones *ha*, *må* and *bli* possess, and that there are more restrictions or licensing conditions on *være*. The most important questions emerging from this finding is; *why* are *være*-items rated more poorly than the other auxiliaries by the Norwegian participants? In the following sections a discussion and an attempt to reply to this query will be given.

5.3.1 Hypothesis on why være-items were perceived as less acceptable

'Be' in English and its equivalent *være* in Norwegian have many of the same areas of use. However, there are a few distinctions in use in the two languages. One of the things that separates 'be' from its Norwegian equivalent *være* is that 'be' is used in more syntactic environments, and it seems to take more predicates than Norwegian *være* does. 'Be is used to form the passive in English, but *være* does not have this area of use. Instead, Norwegian uses *bli*. The passive form of 'be' in (66) and its Norwegian equivalent string with passive *bli* in (67) exemplify this.

(66)	The man	was	arrested because he robbed a bank.		
(67)	Mannen	ble	arrestert fordi	han robbet en bank.	(Norwegian)
	? The man	became	arrested because	e he robbed a bank.	

According to Aelbrecht & Harwood (2015), 'be' is an auxiliary that is very frequently used as head of elided verb phrases in English. (66) and (67) show that this is a construction in which Norwegian often would substitute the verb 'be' with 'become'. The literal translation of (67) back to English is nonetheless a practically ungrammatical use of the verb 'become'. This exemplifies that Norwegian *være* followed by another verb is not very conventional. However, as will be demonstrated in section 5.3.3 below, VPE-constructions with *være* followed by a main verb *are* possible to construct, even though they are not very frequently used.

The test items with *være* included in this study are shown in examples (68)-(71). They all had equivalent sentences within their minimal triplets containing the adverb *ikke* 'not' and *også* 'too', but the below examples illustrate only the ones that had no adverb included in the second clause.

(68) Karla er ikke glad for at det er overskyet ute, men Petter er.Karla is not happy for that it is cloudy outside, but Petter is.'Karla is not happy that it's cloudy outside, but Petter is.'

- (69) Hilde er ikke ferdig med mastergraden sin, men John er.Hilde is not finished with master's grade hers, but John is.'Hilde is not finished with her master's, but John is.'
- (70) Stolene var ikke på plass etter renoveringen, men bordene var.The chairs were not at place after the renovation, but the tables were.'The chairs were not in place after the renovation, but the tables were.'
- (71) Foreleseren var ikke fornøyd da ingen studenter dukket opp, men rektor var.The lecturer was not pleased when nobody students showed up, but principal was.'The lecturer was not pleased when no students showed up, but the principal was.'

The entities *glad*, *ferdig*, *på plass* and *fornøyd* are all succeeding the verb *være* which is heading the elliptical phrases in all of these cases. The elided string in (68) is thus headed by the adjective *glad*, and not by a verb. The same goes for *ferdig* in (69), where the Norwegian equivalent is behaving like an adjective, describing what 'Hilde is not'. Besides, the Norwegian equivalent word *ferdig* does not stem from a verb and might just as well be translated into the English adjective 'done'. Similarly, (70) has *på plass* modifying the verb. It is a prepositional phrase, which means that the whole phrase 'in place after the renovation' is a prepositional phrase with adverbial functions. In (71) the adjective *fornøyd* succeeds the heading verb *var* (past tense of *være*). Let us now compare these four constructions to one of van Craenenbroeck & Merchant's (2013) examples of *Predicate Phrase Ellipsis* (PPE);

(72) Ben will be in the garden, though he'd rather not be. ³⁷ (Predicate phrase ellipsis)
 (van Craenenbroeck & Merchant, 2013:702)

The discussion of (72) by van Craenenbroeck and Merchant (2013) assert that these sort of ellipses are cases where a non-verbal predicate goes missing. This applies also for the test items showed in (68) through (71), as they involve the deletion of either a prepositional phrase or an adverbial phrase. However, Thoms (2010) assumes that (72) involves VP-deletion as well, but that it has prior extraction of *be*, which moves to a position outside the ellipsis site. One thing that has not yet been noted is that three of the four minimal triplets with *bli* actually involve deletion of phrases other than VP's as well. These three deleted entities are *sint* 'angry', *nervøs* 'nervous' and *stand-up komiker* 'stand-up comedian'. These

³⁷ Numbering edited. (72) is Craenenbroeck and Merchant's (2b).

seemed to be slightly more frequently accepted than those with *være* but are nevertheless considered a bit worse than those with *må* and *ha*. This is illustrated in $(73)^{38}$.

(73)

Mean score	Mean score
Items with bli	Items with <i>være</i>
3.32	3.06

Based on Thoms' (2010) ideas, we can assume that the test items with *være* (and three of those with *bli*) in the current study could be considered actual VPEs, but that they differ syntactically from the test items with *må*, *ha* and the remining ones with *bli*. However, as van Craenenbroeck and Merchant (2013) state, more research on this specific subtype of predicate ellipsis is needed, and it is not possible to say whether future studies will assert that sentences like (68)-(71) and Craenenbroeck and Merchant's (72) are *not* VPEs.

This illustrates a weakness in the items constructed for the survey which was unfortunately not discovered until after the survey was launched. To sum up, the test items that were constructed with *være* could still be considered verb phrase ellipses, even though they differ in the sense of what is elided from the other VPE test items in this study.

5.3.2 Comparing Norwegian være and English 'be'

Være is rarely constructed with a succeeding verb phrase in Norwegian. Norwegian does not, for instance, have the gerund form that in English is usually constructed by the inflected verb 'be' and the desired main verb suffixed by '-ing'. The gerund form is one of the syntactic factors that contributes to a more extended use of the verb 'be' in English than that of Norwegian. Thus, a sentence like 'Mary is singing' cannot be directly translated into Norwegian in a satisfactory manner. Further, the verb 'be' in English covers many of the Norwegian uses of two different verbs; *være* 'be' and *bli* 'become'. Thus, in many contexts, one would preferably translate the verb 'be' to the Norwegian *bli*. Sentence (74) exemplifies this alteration in choice of Norwegian verb in the translation.

³⁸ (73) is a smaller excerpt of table (45) that was presented in chapter 4.

(74) a. Betsy was hassled by the police, and Peter was, too. (Aelbrecht & Harwood, 2015)
?³⁹ b. Betsy var plaget av politiet og Peter var også
c. 'Betsy ble plaget av politiet, og Peter ble også.'

If using the translation shown in (74), the semantics of the sentence is most likely read as 'Betsy was hassled by the police in the past'. It is also indicating that this happened habitually and was hence not only a single event of hassling. The English equivalent in (74)a. however, cover both of these semantical uses, and is somewhat functioning ambiguously. Thus, using past tense of *være* (*var*) in the Norwegian translation cannot mean that the event happened recently. As may be noticed, in the literal translation I use the verb 'be' translated into Norwegian in past tense⁴⁰, and in the actual 'correct' translation I have used the Norwegian equivalent of the English verb 'become'. (74)c. shows how it would be pronounced grammatically in Norwegian. This illustrates that *være* rarely functions as head of other verb phrases in Norwegian, even though it is very conventional in English.

5.3.3 A proposal for future research on Norwegian VPE with være

We have now seen that English 'be' seems to cover a broader area of use than its Norwegian equivalent *være*, and that *være* rarely heads a verb phrase in Norwegian. Despite this, it *is* possible to construct sentences that could be used for testing acceptability judgments of VPEs headed by *være* in Norwegian. The verb used to form the perfect tense in Norwegian is usually *ha*, but as will be demonstrated below, this can also be *være* (for some speakers and for some verbs, typically unaccusative verbs). For instance, it is possible that sentences like (75), (76) and (77) could be accepted by some Norwegian speakers. These are sentences where *være* is used to form the perfect tense in Norwegian.

- (75) Toget er ikke gått ennå, men bussen er.The train is not left yet but the bus is.'The train has not left yet, but the bus has.'
- (76) Rommet til Mari er ikke malt ennå, men rommet til Sigurd er. The room to Mari is not painted yet, but the room to Sigurd is 'Mari's room is not painted yet, but Sigurd's is.'

³⁹ The question mark here indicates that the sentence is weird-sounding yet grammatical.

⁴⁰ In Norwegian verbs are not conjugated differently according to the person they refer to.

(77) Lasse er ikke kommet hjem, men Daniel er.Lasse is not come home, but Daniel is'Lasse hasn't come home, but Daniel has.'

These are examples where *være* 'be' is substituting the auxiliary *ha* 'have' that is used more conventionally in such constructions. *Være* is nevertheless sometimes used in constructions like these in Norwegian. To sum up, there are factors indicating that the finding of lower acceptance of *være* may be due to *være*'s succeeding entities. Since the *være*-items did not have a verb succeeding *være*, and may actually be predicate ellipses instead of VPEs, there is no way of concluding to which extent Norwegian VPEs containing *være* are accepted. Some suggestions were made on how to test for acceptability of *være* in VPE in future research. I now turn to the issue of the bimodal distribution of opinions on VPE.

5.4 Bimodal distribution of acceptability judgments

Histograms (38) through (44) showed that scores of acceptability judgments were bimodally distributed on nearly all items, except for the ones with *også*; participants seemed agree that these were bad-sounding. The findings showed quite 'drastic' opinions, indicating that the participants were either very accepting of VPE or very disapproving of it. The number of answers for each given alternative 1-7 peaked at the higher and lower scale numbers (like 2, 3, 5 and 6), maybe indicating that the Norwegian respondents disagreed on how grammatical the test items were. Thus, there was a decrease in the middle-ranging number 4. I present two possible hypotheses for this finding. These will be dealt with in the two following sections (5.4.1 and 5.4.2) and a summary will be given in section 5.4.3.

5.4.1 First hypothesis of the bimodal distribution of judgments: Split population

The first hypothesis that will be presented is inspired by findings in two papers on Korean variation in language acquisition by Han, Musolino, and Lidz (2007) and Han, Musolino, and Lidz (2016). In their study from 2007, investigating the scope of negation and quantifiers in Korean, they propose that half the population are acquiring one grammar and the other half another. They refer to the phenomenon as 'two distinct grammars' within the Korean language and that there are 'two populations' of Korean speakers (2007:37). The study had two test groups, one with adults and another with children. Both the adults' and the children's acceptability judgments were bimodally distributed, thus, no significant difference was displayed for the group of children's judgments. Han et al. (2007) further state that this

difference in acquirement of Korean grammar can be caused by 'insufficient input' while learning the language (2007:37). This is a claim that is supported by several linguists working within the field of diachronic syntax. The general model they are referring to holds that all language acquisition involves grammar competition, which is a view presented by Chomsky (1986) and Yang (2000), among others. Under this approach, learners consider multiple grammars simultaneously when acquiring a language, and they actively exclude some alternatives before they eventually settle on a single grammar.

Han et al.'s study from 2016 also made a two-grammar hypothesis based on split frequency in grammaticality judgments. In this study, they offer an alternative interpretation of the split-frequency results, which is not based on respondents' missing knowledge of the existence of two different grammars. They propose instead that the grammar may have been chosen already on the very first item, which could consequently have exerted an influence over the choice of grammar on the remaining items. This phenomenon is in scientific terms called *priming* (Han et al., 2016). This implies that respondents in their study might have known both grammars but decided on one to use throughout their contributions of judgments. This priming effect could give the appearance of two populations when in fact there was only one (Han et al., 2016). However, analysis of whether each respondent 'preferred' one grammar over the other was not carried out.

Thus, the findings of a bimodal distribution in acceptability judgments of Norwegian VPEs might suggest that there is a split population in Norway, where one subpopulation has decided on one sort of grammar to adopt, and the other subpopulation is preferring the other. Following this hypothesis, one of these two grammars would be very liberal with regard to VPE licensing (perhaps with a recoverability condition, i. e. as long as the meaning is prevailed). The other grammar would then be the exact opposite, entailing that verb phrases cannot be elided in Norwegian. It could also be the case that people have acquired both types of grammar, but that a priming effect occurred so that they chose one grammar over the other. A third theory could be that the respondents knew both grammars and chose to switch between them depending on the surrounding context, but still kept their resilient opinions, and thus, not rating them 4 'neither/nor' but favoring the left or right side of the scale. In whatever manner we choose to look at it, the finding of a bimodal distribution of judgments in the present study is comparable to those described and discussed by Han et al. (2007, 2016), and the finding might indicate that there are two populations of Norwegian speakers favoring one sort of grammar each.

5.4.2 Second hypothesis of the bimodal distribution of judgments: Stress intonation

Putting the 'split population'-theory aside, one might also consider an alternative explanation for the result displaying the bimodal distribution of judgments. The other hypothesis for the mentioned result is that it may not be because there exist two *populations* of Norwegian speakers – but rather because there are two distinctive *readings* of the test items. The hypothesis is based on the same proposal by López and Winkler (2000) that was argued for in sections 5.2.1, 5.2.2 and 5.2.3. Following up further on this theory, the current section will argue that there might be two different readings of my test items based on where the pitch accent is placed in the sentence.

Selkirk (1984, 1995) observed that accent location within a phrase is rule governed (López & Winkler, 2000). Selkirk (1995) states that a pitch accent in English is associated with a stressprominent syllable in a word, and that it is typically the main word that receives stress. Further, Selkirk states that English is characterized by a 'comparative richness in intonative shapes' (1995:551). Earlier in this chapter, we saw that when the accent pitch is realized on the auxiliary, a Norwegian VPE is licensed. When it is not realized on the auxiliary, but rather on an adverbial like *også*, the VPE is not licensed, even though this does not seem to be the case for English VPEs.

I argue against this previous claim here, based on the fact that even though the no-adverb items were the highest-rated ones, they did not get a very high mean score on acceptability. In fact, we saw that the overall mean score of those items was 4.03, which is almost exactly on the middle of the scale ranging from 1-7. The current hypothesis argue that the respondents were perhaps not sure on *where* to assign accent pitch in the test items, and they might have been varying between two different types of pitch assignment. This can be exemplified by one of the test items in the present study, here displayed as (78).

- (78) a. Heidi må ikke rydde rommet sitt hver dag, men Even MÅ.
 Heidi must not tidy the room hers every day, but Even MUST
 'Heidi doesn't have to tidy her room every day, but Even HAS TO.'
 b. Heidi må ikke rydde rommet sitt hver dag, men EVEN må.
 Heidi must not tidy the room hers every day, but EVEN must
 - 'Heidi doesn't have to tidy her room every day, but EVEN has to.'

(78) exemplifies two possible pitch accents. It is possible that respondents' judgments were given with regards to where the pitch falls. It is also certainly possible that they changed their pitches while reading the test items, before settling on one judgment to give. If the pitch is assigned to the subject 'Even', the sentence does not sound very well-formed, in my opinion. This hypothesis also explains why there was little deviation between judgments given on *også*-items, as the pitch in those will most naturally fall on *også*. The bimodal distribution was not realized on sentences containing *også*, which is something that strengthens this hypothesis, because the respondents did not have to make a choice of pitch assignment on the *også*-items.

5.4.3 Summary of the bimodal distribution of judgments

Two different hypotheses for the bimodal distribution have been put forward. The first theory suggested that the Norwegian population is split in two, and that one group acquires a different grammar than the other. The second hypothesis suggested that there might be two different readings of the test items, and that the pitch assignment would differ in these two readings. The respondents may have favored one type of pitch assignment and used this throughout their responses in the survey. Alternatively, they may have changed their pitches between test items, causing the same effect of a bimodal distribution, as one reading sounds more well-formed than the other.

5.5 Summary

The current chapter has discussed the different means that were generated based on the presence or absence of adverbs, where two different hypotheses were proposed. We saw that the no-adverb constructions were considered the most well-formed, and the test items containing også were considered rather unacceptable. A hypothesis for why this is the case was based on the proposal by López and Winkler (2000) that when the stress is put on the auxiliary in the ellipsis site, the ellipsis is licensed. Pitch accent cannot be assigned to the auxiliary when the string is finalized by the adverb *også*. This would also explain why no-adverb items were considered better-sounding, because they allow for pitch accents on the auxiliary in the finite clause.

Interestingly, López & Winkler (2000) stated that as far as they know, there has been little cross-linguistic systematic studies on the information structure of VPA constructions. It seems to be characteristic for VP-anaphora studies that they are generally not performed cross-linguistically. According to López & Winkler, remarks on this topic in literature tend to be brief

and perfunctory. Thus, the current study might add to the cross-linguistic body of knowledge around the subgroup of VP-Anaphora, VPE, more specifically with regards to English and Norwegian. I concluded that the current findings cannot make any assumptions on Norwegian VPEs containing other varieties of adverbs, and that this should be dealt with in future research.

Moreover, the lower mean score on the auxiliary *være* has been examined. I hypothesized that the lower acceptability may be due to the syntactic elements succeeding the auxiliary, because they are not verb phrases like in the *må-* and *ha-*items. Further, some differences between Norwegian *være* and its English counterpart 'be' were discussed. I proposed that future research should examine Norwegian VPE with *være* where the succeeding element is a verb phrase.

The third finding discussed in this chapter was the bimodal distribution of acceptability judgments. I proposed three different hypotheses for why the distribution came out bimodal. One hypothesis was that the Norwegian population is split in two, and that each group have their separate grammar, and have not been taught the grammar of the opposing group. The second hypothesis was that population is not split as such, but that the respondents knew both grammars, but chose one to focus on fairly early in their contributions in the survey. The third hypothesis was that there could be two different readings of the sentences tested for instead of two populations of speakers. Here, it was proposed that the respondents assigned pitch accents to different entities in the test items.

Based on the claims made by Labov (1972; 1996), Carden (1976) and Cornips and Poletto (2005) that were presented in chapter 4, I can conclude that all data that are retrieved from acceptability judgments must be interpreted with caution, including the ones found in the present study. With that said, Sprouse and Almeida (2017) claim that linguistic studies using acceptability judgments as source of data generally introduce very little error due to large sample sizes. However, the findings that were presented in chapter 4 and discussed in the current chapter were of such a character that they could not have occurred accidentally - this study *did* gather 426 unique opinions on 62 Norwegian sentences. Therefore, there is reason to assume that the data gathered in the current study are relatively trustworthy.

6 Conclusion

The point of departure of this study was to investigate the differences between the distribution and licensing of VPE in English and Norwegian. One issue was presented in the beginning of the thesis; Bentzen et al.'s (2013) found that two VPE constructions were accepted by approximately half of the Norwegian participants in their study. Thus, other similar constructions were carefully created, and an online survey was launched where 426 respondents gave their judgments on acceptability. The analysis of the opinions they gave uncovered many interesting findings. However, three main findings remained the focus of the discussion; the low acceptance of *også*-items, the bimodal distribution of opinions on VPE and the lower mean score of *være*-sentences.

The main focus of the analysis was the bimodal distribution of opinions and the low acceptance of items containing the adverb *også* 'too'. Several hypotheses of why the opinions were bimodally distributed were put forward. However, one of these hypotheses seemed to explain this inconsistency particularly well; the assignment of pitch accents.

In the very beginning of this thesis I stated that licensing rules on Norwegian VPE seem to be more restricted than those on English VPE. My findings in this study implicate that this is in fact the case. I have shown that English VPEs containing the adverb 'too' are licensed, but this is not the case for Norwegian VPE containing the equivalent adverb *også*. Moreover, as none of the test items got a higher mean score than 4.63 (not even the no-adverb constructions), this indicates that Norwegian speakers are uncommitted and hesitant in the use of VPE in general. Thus, I can conclude that licensing VPE in Norwegian *is* more restricted than in English.

We have seen that as long as recoverability and other licensing conditions are fulfilled, noadverb constructions in Norwegian seem to (at least to some degree) license VPE. It is nevertheless important to note that since the test items that *did* have adverbs in this study either contained *ikke* or *også*, this finding cannot say anything about the acceptability of adverbcontaining VPEs *in general*. Other adverbs could have been included, such as adverbs of manner, frequency, time, place or degree. It is certainly imaginable that there are other types of adverbs that could work better in Norwegian VPE than the ones included in this study. However, following my hypothesis on pitch assignment, other potential adverbs will need to allow stress on the auxiliary. More research is needed to better understand the licensing conditions of Norwegian VPE. For future studies aspiring to research VPE in Norwegian and examine their acceptability, I recommend focusing on the no-adverb construction, as this thesis has shown that the *ikke-* and *også-*constructions are not very felicitous in Norwegian. Or, future research could on the contrary focus on precisely adverbs; a larger scope of adverbs than the ones tested here.

Because of the scope of this thesis and time limitations, I was not in a position to analyse and investigate all factors that I wished to. To build on the claims and hypotheses proposed in this study about pitch accent assignment one could perhaps consider performing some sort of prosodic acceptability testing. Future research on the topic of VPE in English, Norwegian and/or other Scandinavian languages, could possibly discover many interesting findings by seeking judgments involving prosodic manipulation measuring pitch accents. This would require either the 'presentation of auditory material' or the use of some 'notational conventions for conveying the critical prosodic patterns in writing' (Sprouse, Schütze, & Almeida, 2013). A study like this could possibly strengthen or build a bigger picture of my proposed hypothesis on the crucial pitch accent assignment on auxiliaries in Norwegian VPE.

On that note, I would like to make one more suggestion on how to test the pitch assignment hypothesis. One way to ensure that readers will put stress on the auxiliary is to change the verb between the non-elliptical and the elliptical one. Exemplification of such sentences are given below in (79) and (80)

- (79) Du MÅ ikke bruke Word, men du KAN.You MUST not use Word but you CAN'You don't HAVE TO use Word, but you CAN.'
- (80) Han BØR ikke være så frekk, men han ER.He SHOULD not be so rude, but he IS'He SHOULDN'T be that rude, but he IS.'

What would be particularly interesting with a study looking at VPE like the ones displayed above, is that these sentences *do* involve a pitch accent on the auxiliary, but *not* polarity focus. In other words, they do not contrast polarity of the affirmative or negative kind. A study like this could contribute to tease apart two different hypotheses based on my claims in this thesis. These are demonstrated below.

- (81) Is Norwegian VPE licensed by (a) or (b)?
 - (a) Pitch assignment on the auxiliary
 - (b) Contrasting polarity focus specifically

Linguistic research examining whether (a) or (b) allows for VPE in Norwegian would most definitely be of interest to me and presumably many other language enthusiasts and researchers. As my study is one of very few that treats the subject of Norwegian VPE in detail, I believe it has a number of important implications for future studies. I hope that my investigations have laid a foundation for more research on Norwegian VPE in the future.

Bibliography

Aelbrecht, L. (2010). The syntactic licensing of ellipsis. Amsterdam: John Benjamins.

- Aelbrecht, L., & Harwood, W. (2015). To be or not to be elided: VP ellipsis revisited. *Lingua*, *153*, 66-97.
- Bentzen, K., Merchant, J., & Svenonius, P. (2013). Deep properties of surface pronouns: pronominal predicate anaphors in Norwegian and German. *The Journal Of Comparative Germanic Linguistics*, 16(2-3), 97-125. doi:http://dx.doi.org/10.1007/s10828-013-9057-z
- Carden, G. (1970). Discussion of Heringer 1970. In C. L. Society (Ed.), *Papers from the sixth* regional meeting (pp. 296). Chicago: Chicago Linguistic Society.
- Carden, G. (1976). *English quantifiers: Logical structure and linguistic variation*. (Corrected ed.). New York: Academic Press.
- Chomsky, N. (1957). Syntactic Structure. The Hague: Mouton.
- Chomsky, N. (1965). Aspects of the Theory of Syntax. Cambridge, Massachusetts: MIT Press.
- Chomsky, N. (1986). Barriers. Cambridge, Massachusetts: MIT Press.
- Cook, V. (2016). Transfer and the Relationships Between the Languages of Multi-Competence. In R. Alonso Alonso (Ed.), *Crosslinguistic Influence in Second Language Acquisition*. Bristol: Multilingual Matters.
- Cornips, L., & Poletto, C. (2005). On standardising syntactic elicitation techniques (part 1). *Lingua*, 115(7), 939-957.
- Culicover, P., & Jackendoff, R. (2005). Simpler Syntax. Oxford: OUP.
- Dąbrowska, E. (2010). Naive v. expert intuitions: An empirical study of acceptability judgments. *The Linguistic Review*, *27*(1), 1-23. doi:10.1515/tlir.2010.001
- Han, C.-h., Musolino, J., & Lidz, J. (2007). V-Raising and Grammar Competition in Korean:
 Evidence from Negation and Quantifier Scope. *Linguistic Inquiry*, 38(1), 1-47.
 doi:10.1162/ling.2007.38.1.1
- Han, C.-h., Musolino, J., & Lidz, J. (2016). Endogenous sources of variation in language acquisition. *Proceedings of the National Academy of Sciences*, 113(4), 942-947. doi:10.1073/pnas.1517094113
- Hankamer, J., & Sag, I. (1976). Deep and surface anaphora. *Linguistic Inquiry*, 7(3), 391-428.
- Houser, M., Mikkelsen, L., Strom-Weber, A., & Toosarvandani, M. (2006). Gøre-support in Danish. 21st Comparative Germanic Syntax Workshop. Handout. University of California. Berkeley.

- Houser, M., Mikkelsen, L., & Toosarvandani, M. (2007). Verb Phrase Pronominalization in Danish: Deep or Surface Anaphora? *Proceedings of the Thirty-Fourth Western Conference on Linguistics*, 183-195.
- Jensen, K. (2017). Answer to question at IBM Internet Forum. Retrieved from https://developer.ibm.com/answers/questions/361174/what-is-spss-stands-for/
- Johnson, K. (2001). What VP Ellipsis Can Do, and What It Can't, but not Why. In M. Baltin & C. Collins (Eds.), *The Handbook of Contemporary Syntactic Theory* (pp. 439-479): Blackwell Publishers.
- Kehler, A. (2000). Coherence and the Resolution of Ellipsis. *Linguistics and Philosophy*(23), 533-575.
- Kurby, C. A., Magliano, J. P., & Rapp, D. N. (2009). Those voices in your head: Activation of auditory images during reading. *Cognition*, 112(3), 457-461. doi:doi:10.1016/j.cognition.2009.05.007
- Labov, W. (1972). Sociolinguistic Patterns. Philadelphia: University of Pennsylvania Press.
- Labov, W. (1996). When Intuitions Fail. In L. McNair, K. Singer, L. Dobrin, & M. Aucon (Eds.), *Papers from the Parasession on Theory and Data in Linguistics* (Vol. 32, pp. 77-106). Chicago: Linguistic Society.
- Lipták, A. (2015). Identity in ellipsis: An introduction. *Lingua, 166*(B), 155-171. doi:https://doi.org/10.1016/j.lingua.2015.08.003
- Lobeck, A. C. (1995). *Ellipsis : functional heads, licensing, and identification*. New York: Oxford University Press.
- López, L., & Winkler, S. (2000). Focus and Topic in VP-Anaphora Constructions. *Linguistics*, 38(4), 623-664.
- McCloskey, J. (2005). A note on predicates and heads in Irish clausal syntax. In A. Carnie, H. Harley, & S. A. Dooley (Eds.), *Verb First: On the Syntax of Verb-initial Languages*. Philadephia: John Benjamins Publishing Company.
- Merchant, J. (2001). The Syntax of Silence. Oxford: Oxford University Press.
- Merchant, J. (2016). Ellipsis: A survey of analytical approaches. In J. v. Craenenbroeck & T. Temmerman (Eds.), *The Oxford Handbook of Ellipsis*. Chicago: University of Chicago.
- Platzack, C. (2008). Cross Linguistic Variation in the Realm of Support Verbs. In: Proceedings of the 23rd Comparative Germanic Syntax Workshop.
- Ross, J. R. (1967). *Constraints on Variables in Syntax*. (Doctoral Dissertation), MIT, Cambridge, Massachusetts.

- Ross, J. R. (1969). Guess Who? In R. Binnick, A. Davidson, G. Green, & J. Morgan (Eds.), *Papers from the 5th Regional Meeting of the Chicago Linguistic Society* (pp. 252-286). Chicago: Chicago Linguistic Society.
- Schütze, C. T. (1996). *The empirical base of linguistics : grammaticality judgments and linguistic methodology*. Chicago: University of Chicago Press.
- Schütze, C. T. (2014). Chapter 3: Judgment Data. In R. J. Podesva, R. Podesva, & D. Sharma (Eds.), *Research Methods in Linguistics*. Cambridge: Cambridge University Press.
- Selkirk, E. O. (1984). *Phonology and Syntax: The Relation between Sound and Structure*. Cambridge, Massachusetts: MIT Press.
- Selkirk, E. O. (1995). Sentence Prosody: Intonation, Stress and Phrasing. In J. Goldsmith (Ed.), *Handbook of Phonological Theory* (pp. 550-569). Oxford: Blackwell.
- Sinclair, J. (Ed.) (2003) Collins COBUILD advanced learner's English dictionary. Glasgow: HarperCollins Publishers.
- Snow, C. E. (1975). Linguists as behavioral scientists: Towards a methodology for testing linguistic intuitions. In A. Kraak (Ed.), *Linguistics in the Netherlands 1972–1973* (pp. 271-275). Assen: Van Gorcum.
- Sprouse, J., & Almeida, D. (2017). Setting the empirical record straight: Acceptability judgments appear to be reliable, robust, and replicable. *Behavioral and Brain Sciences, 40.* doi:10.1017/S0140525X17000590
- Sprouse, J., Schütze, C. T., & Almeida, D. (2013). A comparison of informal and formal acceptability judgments using a random sample from Lingustic Inquiriy 2001-2010. *Lingua, 134*, 219-248.
- Thoms, G. (2010). 'Verb floating' and VP-ellipsis: Towards a movement account of ellipsis licensing. *Linguistic Variation Yearbook*, *10*(1), 252-297.
- Thoms, G. (2015). Syntactic identity, Parallelism and accomodated antecedents. *Lingua, 166*, 172-198.
- van Craenenbroeck, J., & Merchant, J. (2013). Ellipsis phenomena. In M. Dikken (Ed.), *The Cambridge handbook of generative syntax* (pp. 701-745). Cambridge: Cambridge university press.
- Yang, C. (2000). Knowledge and learning in natural language. (Doctoral dissertation), MIT, Cambridge, Massachusetts.

APPENDIX A

Electronic survey

Hei!

Tusen takk for at du ønsker å ta spørreundersøkelsen jeg har laget i forbindelse med min masteroppgave.

Bakgrunn og formål

Formålet med mitt masterprosjekt er å kunne kartlegge hvor høy aksept en bestemt form for setningsoppbyggelse har i det norske språket. Jeg ønsker å utforske norsk syntaks i dybden, og deretter sammenligne norsk og engelsk syntaks. Jeg vil basere deler av oppgaven min på de funnene jeg gjør gjennom denne spørreundersøkelsen.

Jeg er student ved NTNU i Trondheim, nærmere bestemt på Institutt for språk og litteratur på Dragvoll. Jeg er over gjennomsnittet interessert i språk og språklige konstruksjoner, og har derfor valgt å fordype meg i dette temaet når jeg nå skal skrive masteroppgave.

Jeg ønsker deltakere i alle aldre og med ulik bakgrunn. De eneste kravene jeg har til deg som deltaker er at du er **morsmålsbruker av norsk**; altså at norsk er ditt hovedspråk, og at du er **over 18 år**. Det er også ønskelig med et sprik i dialekter blant deltakere for å få dekket hele det norske språket.

Hva innebærer deltakelse i studien?

Deltakelse i studien innebærer at du svarer på noen få spørsmål om deg selv, og deretter tar stilling til hvor akseptabel du mener en rekke setninger er. Spørsmålene om deg selv vil gå på aldersgruppe, fylket du har vokst opp i, hvorvidt du bor eller har bodd i et engelskspråklig land, og hvor lenge du til sammen har hatt undervisning i (eller studert) engelsk. *Ingen* av svarene du oppgir vil være direkte personidentifiserende, og svarene behandles anonymt.

Selve spørreundersøkelsen

Etter å ha svart på spørsmålene om deg selv, ønsker jeg at du gir din bedømmelse av hvor god eller dårlig noen gitte setninger er. Du vil bli bedt om å vurdere setningene på en skala fra 1 til 7, hvor 1 er "svært dårlig" og 7 er "svært bra". Du krysser så av i én av de nummererte boksene.

Et eksempel på en setning som *etter min mening* ville fått 1 (svært dårlig) er følgende; *"Markus hadde kjøpt seg ny genser til første skoledag, men Ola ikke hadde."* Grunnen til at jeg hadde vurdert den til en 1'er er fordi jeg mener konstruksjonen "Ola ikke hadde" høres merkelig og ugrammatisk ut.

Et eksempel på en setning som *etter min mening* ville fått 7 (svært bra) er; *"Helene kunne ikke kjøre bil med tilhenger, men det kunne Oda."*

Hva skjer med informasjonen om deg?

Alle opplysninger vil bli behandlet konfidensielt. Det vil kun være meg og min veileder, Andrew Weir, som får se svarene gitt i spørreskjemaet. Siden spørreundersøkelsen er anonym, vil ingen av oss vite navn eller andre personidentifiserende opplysninger om deg. Du som deltaker vil ikke kunne gjenkjennes i publikasjonen av masteroppgaven. Hele masterprosjektet vil avsluttes 15.05.2018. Alt av datamateriale vil slettes etter prosjektslutt.

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du har spørsmål til studien, ta kontakt med masterstudent **Andrea Olafsen Elman** (tlf. 48034407) eller førsteamanuensis **Andrew Weir** (tlf. 73596482). Studien er meldt til Personvernombudet for forskning, NSD - Norsk senter for forskningsdata AS.

Undersøkelsen vil ta ca. 10 minutter å gjennomføre.

Ved å klikke på "neste" samtykker du til deltakelse i studien.

Neste

Spørsmål om deg

- **1.** Hvor gammel er du?
 - 18-25 år
 - O 26-35 år
 - 36-45 år
 - 46-55 år
 - 56-65 år
 - Over 65 år
- 2. Hvilket fylke har du vokst opp i?

Velg det fylket som samsvarer med din norske dialekt. Hvis du har vokst opp i mer enn ett fylke, velg det som du føler samsvarer best med dialekten du bruker til daglig.

Akershus/Aust-Agder/Buskerud/Finnmark/Hedmark/Hordaland/Møre og Romsdal/ Nord-Trøndelag/Nordland/Oppland/Oslo/Rogaland/Sogn og Fjordane/Sør-Trøndelag/Telemark/Troms/Vest-Agder/Vestfold/Østfold

3. Hvor mange års opplæring eller utdanning har du i *engelsk?* Har du hatt engelskopplæring i kun barne-, ungdomsskole og videregående, velg "9-

13 år".

Har du tatt et årsstudium i engelsk ved høyskole eller universitet, velg "14-15 år". Har du bachelor eller master i engelsk fra høyskole eller universitet, velg "16-18 år". Har du en PhD i engelsk, velg "mer enn 18 år".

- O Under 9 år
- 9-13 år
- 14-15 år
- 16-18 år
- Mer enn 18 år
- **4.** Har du bodd, eller bor du nå, i et land hvor engelsk er morsmålet? Og i så fall, hvor lenge har du bodd der?

Velg det alternativet som passer best for deg. Velg "nei" om du aldri har bodd i et engelskspråklig land.

- Nei
- Ja, ett semester
- Ja, ett år
- Ja, 2-5 år
- Ja, lengre enn 5 år

På de neste sidene finner du setninger som jeg ønsker du skal vurdere på en skala fra 1-7.

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Heidi må ikke rydde rommet sitt hver dag, men Even må.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\circ
Emma sparer litt penger hver måned, men Svein gjør ikke det.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Martin måtte øve på gangetabellen, og Lisa måtte også.	0	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Hilde er ferdig med mastergraden sin, men John er ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Daniel har spist en hel sjokoladekake alene, og Ragnhild har også.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	0
Foreleseren var fornøyd da ingen studenter dukket opp, men rektor var ikke.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Stolene var ikke på plass etter renoveringen, men bordene var.	0	0	$^{\circ}$	0	\bigcirc	\bigcirc	$^{\circ}$
Robert har fugleskrekk, og det har Sara også.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Naboen min ble forfremmet til viserektor, men min kone ble ikke.	0	0	0	0	0	0	0
Espen blir sint om han får reklame i postkassa si, og Stine blir også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Karoline må kjøre 30 minutter for å komme til jobb, men Geir må ikke.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Statsministerens bolig ligger i Oslo, og det gjør Stortinget også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Ruben hadde ikke avgitt sin stemme under stortingsvalget, men Karen hadde.	0	0	\bigcirc	0	\bigcirc	\bigcirc	\circ
Susanne hadde prøvd strikkhopping tidligere, og Eirik hadde også.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
Karla er glad for at det er overskyet ute, men Petter er ikke.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	0
Runar måtte stå opp klokken 06 hver tirsdag, og Helene måtte også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Jazzmusikk har lenge vært favoritten til Per, men Anita ikke liker det.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Martin har ikke jobbet hardt for å bli stand-up komiker, men Anna har.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fredrik blir ikke nervøs før han skal ha eksamen, men Cecilia blir.	$^{\circ}$	0	$^{\circ}$	0	0	\bigcirc	$^{\circ}$
Sandra ble ambulansesjåfør i år, men Martin ble ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Karla er ikke glad for at det er overskyet ute, men Petter er.	$^{\circ}$	$^{\circ}$	$^{\circ}$	\bigcirc	\bigcirc	\bigcirc	$^{\circ}$
Astrid er glad for at moren hennes har fått ny jobb, og faren til Astrid er også det.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Naboen min ble ikke forfremmet til viserektor, men min kone ble.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	$^{\circ}$
Karoline må ikke kjøre 30 minutter for å komme til jobb, men Geir må.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Stolene var på plass etter renoveringen, men bordene var ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	$^{\circ}$
Hanne har tatt dagboka til Julie, men Julie vet ikke om det.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Foreleseren var ikke fornøyd da ingen studenter dukket opp, men rektor var.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	$^{\circ}$
Martin måtte øve på gangetabellen, men Lisa måtte ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Ruben hadde avgitt sin stemme under stortingsvalget, men Karen hadde ikke.	0	0	$^{\circ}$	\bigcirc	0	\bigcirc	$^{\circ}$
Vilde kunne ikke hoppe høyere enn én meter, men Krister kunne hoppe hele to meter.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Hilde er ikke ferdig med mastergraden sin, men John er.	$^{\circ}$	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Heidi må rydde rommet sitt hver dag, og Even må også.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Bente har snakket med moren sin, og det Venke har også.	$^{\circ}$	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Martin har jobbet hardt for å bli stand-up komiker, men Anna har ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Daniel har ikke spist en hel sjokoladekake alene, men Ragnhild har.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	$^{\circ}$
Susanne hadde prøvd strikkhopping tidligere, men Eirik hadde ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Tor han sprang han til bussen, men Toril gikk.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
Runar måtte stå opp klokken 06 hver tirsdag, men Helene måtte ikke.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Foreleseren var fornøyd da ingen studenter dukket opp, og rektor var også.	0	0	0	0	0	0	0
Karla er glad for at det er overskyet ute, og Petter er også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Grete måtte ta ut mer penger for å betale taxisjåføren, men Ola ikke gjorde.	$^{\circ}$	0	\bigcirc	0	0	\bigcirc	$^{\circ}$
Sandra ble ikke ambulansesjåfør i år, men Martin ble.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Heidi må rydde rommet sitt hver dag, men Even må ikke.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
Naboen min ble forfremmet til viserektor, og min kone ble også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Politimannen var alltid ute etter å finne spor, og Karl ikke var.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc
Espen blir sint om han får reklame i postkassa si, men Stine blir ikke.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Ruben hadde avgitt sin stemme under stortingsvalget, og Karen hadde også.	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	$^{\circ}$
De fleste studentene glade var for at det var ferie, men Synne var ikke glad.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Hilde er ferdig med mastergraden sin, og John er også.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fredrik blir nervøs før han skal ha eksamen, men Cecilia blir ikke.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Karoline må kjøre 30 minutter for å komme til jobb, og Geir må også.	0	0	$^{\circ}$	0	0	\bigcirc	\bigcirc

Vennligst vurder de følgende setningene på en skala fra 1 til 7, hvor 1 er dårligst og 7 er best. Husk at det er ingen riktige eller gale svar. Svarene du gir er din egen bedømmelse av hvor gode eller dårlige du synes setningene er.

	Svært dårlig 1	Ganske dårlig 2	Litt dårlig 3	Verken /eller 4	Litt god 5	Ganske god 6	Svært god 7
Stolene var på plass etter renoveringen, og bordene var også.	\bigcirc	0	\bigcirc	0	\bigcirc	0	$^{\circ}$
Sandra ble ambulansesjåfør i år, og Martin ble også.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Petra og Selma hadde kjøpt seg motorsykler, men Chris hadde ikke det.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	0	\circ
Martin måtte ikke øve på gangetabellen, men Lisa måtte.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Daniel har spist en hel sjokoladekake alene, men Ragnhild har ikke.	0	0	\bigcirc	0	\bigcirc	0	0
Martin har jobbet hardt for å bli stand-up komiker, og Anna har også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Susanne hadde ikke prøvd strikkhopping tidligere, men Eirik hadde.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	0	\circ
Siri ble sint da hun fant ut at matbutikken var stengt, Simon men ikke ble sint.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Fredrik blir nervøs før han skal ha eksamen, og Cecilia blir også.	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	0	$^{\circ}$
Runar måtte ikke stå opp klokken 06 hver tirsdag, men Helene måtte.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Espen blir ikke sint om han får reklame i postkassa si, men Stine blir.	$^{\circ}$	0	\bigcirc	$^{\circ}$	\bigcirc	0	$^{\circ}$
(Page 8)							

Ved å klikke på "Ferdig" nå, fullfører du spørreundersøkelsen.

Om du skulle ønske å se over svarene dine før du leverer, samt sjekke at du har svart på alt, klikk på "Tilbake".



(Page 9)

APPENDIX B

Frequencies of acceptability judgments of no-adverb items

	No-adverb test items	1	2	3	4	5	6	7
	Heidi må ikke rydde rommet sitt hver dag, men Even må.	22	60	88	38	51	95	72
MÅ	Karoline må ikke kjøre 30 minutter for å komme til jobb, men Geir må.	41	77	90	56	65	59	32
~	Martin måtte ikke øve på gangetabellen, men Lisa måtte.	18	51	58	51	80	100	67
	Runar måtte ikke stå opp klokken 06 hver tirsdag, men Helene måtte.	27	63	83	52	81	67	52
	Hilde er ikke ferdig med mastergraden sin, men John er.	25	74	71	49	67	93	45
VÆRE	Karla er ikke glad for at det er overskyet ute, men Petter er.	46	109	90	54	50	55	18
VA	Stolene var ikke på plass etter renoveringen, men bordene var.	44	97	70	57	77	46	33
	Foreleseren var ikke fornøyd da ingen studenter dukket opp, men rektor var.	68	108	82	43	50	49	22
	Martin har ikke jobbet hardt for å bli stand-up komiker, men Anna har.	34	94	82	41	56	79	36
A	Daniel har ikke spist en hel sjokoladekake alene, men Ragnhild har.	33	94	90	51	69	56	31
НА	Susanne hadde ikke prøvd strikkhopping tidligere, men Eirik hadde.	19	46	61	44	95	90	67
	Ruben hadde ikke avgitt sin stemme under stortingsvalget, men Karen hadde.	32	60	79	47	69	91	46
	Fredrik blir ikke nervøs før han skal ha eksamen, men Cecilia blir.	57	85	88	46	54	61	28
Γ	Espen blir ikke sint om han får reklame i postkassa si, men Stine blir.	32	63	73	50	77	77	52
BLI	Naboen min ble ikke forfremmet til viserektor, men min kone ble.	29	52	60	59	93	80	47
	Sandra ble ikke ambulansesjåfør i år, men Martin ble.	24	78	73	47	86	82	35

Appendix B

	Test items with the adverb <i>ikke</i>	1	2	3	4	5	6	7
	Heidi må rydde rommet sitt hver dag, men Even må ikke.	24	72	74	62	78	76	34
MÅ	Karoline må kjøre 30 minutter for å komme til jobb, men Geir må ikke.	67	154	113	39	27	18	6
R	Martin måtte øve på gangetabellen, men Lisa måtte ikke.	24	61	66	71	73	75	50
	Runar måtte stå opp klokken 06 hver tirsdag, men Helene måtte ikke.	35	87	108	51	58	60	23
	Hilde er ferdig med mastergraden sin, men John er ikke.	60	93	125	42	40	41	22
VÆRE	Karla er glad for at det er overskyet ute, men Petter er ikke.	85	134	108	37	34	14	10
VA	Stolene var på plass etter renoveringen, men bordene var ikke.	42	96	114	45	52	46	25
	Foreleseren var fornøyd da ingen studenter dukket opp, men rektor var ikke.	113	120	93	39	29	21	8
	Martin har jobbet hardt for å bli stand-up komiker, men Anna har ikke.	48	134	105	51	41	34	11
V	Daniel har spist en hel sjokoladekake alene, men Ragnhild har ikke.	51	97	113	45	57	43	16
НА	Susanne hadde prøvd strikkhopping tidligere, men Eirik hadde ikke.	27	68	86	51	81	67	40
	Ruben hadde avgitt sin stemme under stortingsvalget, men Karen hadde ikke.	22	67	95	47	81	73	36
	Fredrik blir nervøs før han skal ha eksamen, men Cecilia blir ikke.	46	96	100	42	68	50	20
F	Espen blir sint om han får reklame i postkassa si, men Stine blir ikke.	49	95	111	51	47	57	15
BLI	Naboen min ble forfremmet til viserektor, men min kone ble ikke.	53	103	111	31	62	44	18
	Sandra ble ambulansesjåfør i år, men Martin ble ikke.	66	108	96	49	54	34	15

Frequencies of acceptability judgments of *ikke*-items

Appendix B

	Test items with the adverb <i>også</i>	1	2	3	4	5	6	7
	Heidi må rydde rommet sitt hver dag, og Even må også.	51	113	124	52	39	35	9
MÅ	Karoline må kjøre 30 minutter for å komme til jobb, og Geir må også.	102	150	105	24	25	14	4
~	Martin måtte øve på gangetabellen, og Lisa måtte også.	79	138	106	37	38	16	12
	Runar måtte stå opp klokken 06 hver tirsdag, og Helene måtte også.	95	157	114	27	15	9	3
	Hilde er ferdig med mastergraden sin, og John er også.	70	124	112	40	45	24	7
VÆRE	Karla er glad for at det er overskyet ute, og Petter er også.	159	138	82	20	15	8	2
ΥA	Stolene var på plass etter renoveringen, og bordene var også.	87	142	124	25	29	15	3
	Foreleseren var fornøyd da ingen studenter dukket opp, og rektor var også.	148	128	88	25	19	9	5
	Martin har jobbet hardt for å bli stand-up komiker, og Anna har også.	90	149	107	33	23	16	4
V	Daniel har spist en hel sjokoladekake alene, og Ragnhild har også.	156	141	91	17	14	3	2
HA	Susanne hadde prøvd strikkhopping tidligere, og Eirik hadde også.	78	145	118	38	19	17	6
	Ruben hadde avgitt sin stemme under stortingsvalget, og Karen hadde også.	68	133	108	36	44	28	6
	Fredrik blir nervøs før han skal ha eksamen, og Cecilia blir også.	104	140	111	27	18	20	1
T	Espen blir sint om han får reklame i postkassa si, og Stine blir også.	139	152	92	20	11	7	2
BLI	Naboen min ble forfremmet til viserektor, og min kone ble også.	58	147	117	44	33	19	6
	Sandra ble ambulansesjåfør i år, og Martin ble også.	76	156	111	36	21	19	3

Frequencies of acceptability judgments of *også*-items

Filler sentences included in the survey

Emma sparer litt penger hver måned, men Svein gjør ikke det. Robert har fugleskrekk, og det har Sara også. Statsministerens bolig ligger i Oslo, og det gjør Stortinget også. Jazzmusikk har lenge vært favoritten til Per, men Anita ikke liker det. Astrid er glad for at moren hennes har fått ny jobb, og faren til Astrid er også det. Hanne har tatt dagboka til Julie, men Julie vet ikke om det. Vilde kunne ikke hoppe høyere enn én meter, men Krister kunne hoppe hele to meter. Bente har snakket med moren sin, og det Venke har også. Tor han sprang han til bussen, men Toril gikk. Grete måtte ta ut mer penger for å betale taxisjåføren, men Ola ikke gjorde. Politimannen var alltid ute etter å finne spor, og Karl ikke var. De fleste studentene glade var for at det var ferie, men Synne var ikke glad. Petra og Selma hadde kjøpt seg motorsykler, men Chris hadde ikke det.

Siri ble sint da hun fant ut at matbutikken var stengt, Simon men ikke ble sint.

APPENDIX C

Relevance for the teaching profession

My master thesis is relevant in several ways for teaching ESL (English as a second language). The work with this study has helped me gain more insight into the structures and prosodic patterns of both English and Norwegian, and the differences there are between them. Knowing and understanding these differences and thus learning how to simplify explanations of them, has given me a lot of tools that will come in handy in the classroom. Students often tend to wonder *why* grammar works the way it does. The work on this thesis has enabled me to explain this at least to some extent.

In chapter 3 of this thesis I stated that our first language have discernible effects on our second language, also when it comes to interference of grammar, and that a second language might affect how people perceive and use the grammaticality of their native tongue as well (Cook, 2016). As a teacher in the ESL classroom, being familiar with the field of translation, language interference and differences between the student's first and second language is crucial. This work has enabled me to understand and foresee challenges students might run into when interference between English and Norwegian grammar occurs.

In the ESL classroom, it is essential to teach students both oral and written language production. I believe that after writing this thesis, I will be better equipped to guide them through such communication and writing processes. This work has also enhanced my own writing and grammar skills, and thus, making me a more competent teacher in ESL. Moreover, my English vocabulary has been improved and expanded, and I feel comfortable writing and speaking English. Being comfortable speaking English as an ESL teacher is, without a doubt, a fundamental quality.

Furthermore, my work on this thesis has required constant concentration and working in long, continuous blocks of time. I have also been consistent with setting intermediate goals throughout my work so that I could envision my next goal. As I have worked as a teacher for some years now, I know that the work day is often long and that teachers frequently need to multitask. These are skills that I will strive to teach my students in the future, and mastering this myself is thus essential. Hence, I will definitely benefit from this experience in my practice as a teacher.