Abstract

This thesis investigates Norwegians' L2 knowledge of English verb phrase anaphora patterns. 44 native speakers of Norwegian with English as their L2 were given an acceptability judgement test with 60 sentences containing anaphoric expressions. The study aims at investigating whether or not conditions for English verb phrase patterns are internalised within Norwegians' L2 competence. Ratings diverging from English native speaker standards are examined and attempted explained in terms of transfer from L1 or being L1 independent. The study also examines if proficiency of target language affects the judgments, hence the 44 participants came from two different groups with different levels of proficiency. Group one consists of 21 pupils from VG2, Norwegian upper secondary school, and group two consists of 23 students studying English at university level. The participants were exposed to three different experimental conditions and the results reveal that both groups arguably show some evidence of transfer from L1 with regards to *stative verbs* in combination with *do so* constructions. English verb phrase ellipsis seems to be familiar to most participants. However, ratings diverging from native speaker standards in the cases not including a *stative* verb and *do so* anaphors can simply be explained in terms of variability in L2 competence between groups and among participants within the groups.

Preface

My years as a student are coming to an end, and there are many people who have supported me along the way and deserve to be acknowledged.
For all their help and guidance during the process of writing my thesis I will first of all thank my supervisors professor Mila Vulchanova and professor Christopher Wilder.

I will also give a special thanks to professor Giosué Baggio for helping me with the statistical analysis and to Marianne Christiansen for always providing help and advice when needed.

My friends and fellow students have contributed with positive energy and much happiness during countless hours of studying. Without these friendships, five years at university would have been much harder.

Finally I would also like to thank my family and my boyfriend for the support they always give me.

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Mie Marie Grønning

Table of contents

1. Introduction

Transfer refers to the event of an L1 structure or rule being used in an L2 utterance (Saville-Troike, 2006). The occurrence of transfer in L2 communication is very common and the role of transfer within second language acquisition (SLA) is a phenomenon thoroughly investigated by several researchers. It is an interesting topic because it tells us something about how bilinguals and L2 learners process language differently than monolinguals. Knowledge of transfer can provide insight about how languages in the L2 acquirer's minds are simultaneously activated, controlled, and selected for correct usage (Treffers-Daller & Sakel, 2012). However, transfer from Norwegian to English with regards to anaphoric expressions is a topic hardly investigated. Nevertheless, it is a very common part of human speech, and fascinating because we interpret meaning which is not spelled out or pronounced. An anaphor denotes the act of referring back to something previously uttered or written. Consider sentence 1) where the content in brackets is elided:

1) Fred has been sick and Mary has [~~been sick~~], too.

Anaphoric expressions in English are built up through complex structures which are acquired late even by native speakers (Ginzburg & Kolliakou, 2009) hence it is interesting to investigate whether or not proficient Norwegian L2 users of English have internalised the structure for these types of expressions.

In English, both verb phrase ellipsis (VPE) such as in 1) above, and use of the verb *do* with NP pronouns such as *it* and *so* are common anaphoric expressions. In Norwegian we find similar anaphoric expressions, such as *gjøre det* or just a pronoun with an auxiliary following *det* directly. The idea that there are two *dets* in Norwegian are proposed by Bentzen et al (2013). They claim that there is a surface anaphor *det,* and a deep anaphor *det*. Depending on whether or not *det* behaves like a surface or deep anaphor determines whether or not *det* behaves similar to VPE or *do it/do so* constructions in English. This particular thesis wants to find out if speakers of Norwegian in upper secondary school (VG2) and Norwegian university students studying English are likely to distinguish English use of *do it/do so* and VPE from Norwegian *gjøre det* through an acceptability judgement test. Moreover is the English

proficiency among Norwegians at such a satisfactory level that they have internalised the English conditions for use of English *do it/do so* constructions?

The Full Transfer/Full Access model proposed by Schwartz and Sprouse (1996) assumes that the acquisition of L2 starts with L1. The L1 grammatical structure is used as a starting point and then restructured to eventually fit new grammar rules of L2. In this model the L2 initial state, universal grammar (UG) and target language input are factors crucial for the restructuring to happen. In light of this, if a Full Transfer/Full Access model (Schwartz & Sprouse, 1996) is assumed it is expected that most of the participants in the experiment have internalised the conditions for English VPE and *do it/do so* constructions. Norwegian children, teenagers and adults are exposed to a great amount of English in their everyday lives through movies, music, television, internet and so on, and for this reason it is expected that the acceptance for Norwegian information patterns in English sentences should be relatively low. However, the Interface Hypothesis suggests that target language syntax can be acquired but it is when syntax interface with other domains of language the L2 user will face problems (Sorace & Filiaci, 2006). The interface perspective has particularly been devoted attention when studying proficient or near-native speakers of L2 (White, 2011).

Norwegian *gjøre det* can take as its antecedent a stative verb, and English *do it/do so* cannot. It was believed that this distinction could be difficult for native speakers of Norwegian to observe. It was also assumed that this construction would provide the most interesting results. However, it was expected to see acceptances of Norwegian uses of *do it/do so* to a greater extent among the upper secondary pupils than among the university students. This was assumed to be a natural outcome because the older students have been taught English and been exposed to the target language for a longer period of time.

Whether or not Norwegian pupils/students can distinguish the English and Norwegian structure from each other can tell us something about how the participants tested acquire English.

Hence, the main questions to be answered in this thesis are the following:

1) How will Norwegian L1 speakers with English as their L2 rate English anaphoric expressions with Norwegian structure? In case they accept them as grammatical, can this be explained in terms of transfer from L1?

2) Can the Norwegian L1 speaker's judgements in the test be explained in terms of the Full Transfer /Full Access model or the Interface hypothesis?
3) Does level of proficiency in the target language affect the participant's judgements?

The thesis is organized in the following way; in chapter 2, overall theoretical background for the study is presented. The chapter is divided into two parts whereas the first introduces relevant theory on SLA and transfer. The last part discusses the grammatical aspects of anaphoric expressions in Norwegian and English and a comparison of the two. In chapter 3 the experimental method is presented and discussed. The results from the experiment are shown in chapter 4. In chapter 5 the main findings of the experiment are discussed in relation to the hypothesis and research questions, before a conclusion is provided in chapter 6.

2. Theoretical background

In this chapter theoretical background for the thesis will be outlined. Section 2.1 includes research on, and findings of transfer in second language acquisition. Section 2.2 will look closer at how English and Norwegian grammar and syntax structure differ in terms of anaphoric expressions.

2.1 Second language acquisition research

Section 2.1 is further divided into four sections. The first gives an introduction to SLA. Section 2.1.2 presents the development in SLA research and the two final sections include transfer in SLA and transfer amongst proficient L2 users.

2.1.1 Generative linguistic theory and second language acquisition

Grammatical theory seeks to provide a model of the linguistic competence of native speakers; a model representing an abstract linguistic system which consists of a number of components such as syntax, morphology, phonology and semantics (White, 2009). According to generative linguistic theory, in all children, there is an innate ability to learn how to speak their mother tongue, their L1. All children are able to master this skill even with a mismatch between the linguistic input and the complex unconscious mental representation of language that they achieve (White, 2012). Universal Grammar (UG) first proposed and developed by Chomsky in the 1950s has been, and still is the most widely used theory explaining the phenomena.

When it comes to SLA on the other hand, research has focused on whether or not the same mismatch between input and mental representation of language happens. If it does, there is reason to believe that UG plays a role also on SLA, constraining interlanguages. Because there is already a language present in the acquirer's mind, the L2 learner can activate knowledge from their L1 and the previous knowledge causes cases of cross-linguistic influences or transfer to appear to various extents in target language production. Consequently, issues regarding the relationship between SLA, UG and L1 have been investigated (White, 2012).

Transfer, interference and cross-linguistic influence are terms used to describe the incidents of a deactivated language appearing in the language the speaker intends to use (Treffers-Daller

& Sakel, 2012). When learning a new language, linguistic features of the L1 will often be used as a basis for constructing the grammar of the L2. The linguistic features from L1 will often occur also because the L2 learner has not yet recognised differences between L1 and L2 grammar (Siegel, 2009). Transfer is common in bilinguals and L2 learners, and because these language users know more than one language they constantly have to juggle between the languages they comprehend. Bialystok (2009) proposes that all languages a human being knows are active and available even when only one of the languages are realised. Bialystok claims that the single factor differentiating bilinguals from monolinguals is the task of controlling attention to target language. The notion of transfer is controversial, although there is a common assumption that transfer does play a role in second language acquisition.

2.1.2 Development in second language acquisition research

In SLA, the role of the native language has been researched for many decades. Before the "cognitive turn" and Chomsky's review in 1959 of Skinner's book; *verbal behaviour* from 1957, research on language acquisition relied heavily on behaviourist theories (Meisel, 2011). The Contrastive Analysis was proposed by Lado in 1957 and claimed that interference from L1 was the main factor determining and shaping L2 speech (Meisel, 2011). The Contrastive Analysis' major theoretical claim is that "individuals tend to transfer forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture" (Lado, 1957, p. 2). According to this theory languages that have many similarities will be acquired more easily than languages that are less alike (Foley & Flynn, 2013). Other theories suggested that L1 and L2 learners make use of the "same mechanisms" like Corder in 1967 (Meisel, 2011), thus he still meant that there exists some differences - such as the fact that acquiring L1 is a natural process. At the onset of acquiring L2 the L1 is already present in the learners' mind resulting in a different starting point of acquisition. Finally he also emphasises that motivation for language acquisition is different in the two cases and that the motivation factor is the principal one distinguishing the two.

Several studies from the 1970s however found that L1 does not play a major role in L2 development and an L1=L2 hypothesis was presented. The hypothesis was driven by a wish to disprove the Contrastive Analysis Hypothesis. If evidence could be found which showed that the acquisition of a second language was similar to first language acquisition this could

be possible (Ellis, 1985). The hypothesis can be interpreted both in a strong form (claiming complete identity in acquisition) and a weak form (that claims the two processes are similar, but different in some areas, but not enough to refuse the hypothesis). Ellis (1985) examined arguments for and against the hypothesis by looking at relevant research and concluded that the hypothesis is most acceptable if it is presupposed that learning occurs through interaction. Cook further supported this in a study in 1980. It seems L2 learners behave similar to L1 learners in spontaneous speech. Cook found that due to cognitive differences between children and adults, an adult learner behaves more like a native-speaking adult rather than a child because the adult learner can activate "speech processing memory" (Ellis, 1985).

The late 1980s and 1990s focused on which role UG plays in SLA. Here, three main theories will be mentioned briefly. Vainikka and Young-Scholten proposed a *Minimal Trees Hypothesis,* which reduces the emphasis on L1 importance. Only lexical categories are available from the L1. Their theory is based on structure building where in the beginning of SLA, functional categories are neither available through L1 or UG. L2 learners start out with bare VPs from their native language and build functional structure gradually. Evidence from the L2 must be available for the structures to be applied by the L2 acquirer (Foley & Flynn, 2013). Eubank's *Weak Transfer hypothesis* suggests that both lexical and functional categories transfer but strength of inflection associated with the categories does not (Schwartz & Sprouse, 1996). The *Full Transfer/Full Access* model proposed by Schwartz and Sprouse suggests that the developing L2 uses L1 as a starting point. "The grammatical system is restructured when it fails to yield L2 forms that the learner encounters, and UG is consulted in the restructuring process" (Foley & Flynn, 2013, p. 106). Schwartz and Sprouse argue:

> The reason "everything transfers" in L2 acquisition is because "everything" – including all the semantically based functional elements necessary for coherent interpretations together with all the syntactically based functional elements required by the computational system- is necessary for there to be a natural-language grammar in the first place (Schwartz & Sprouse, 1996, pp. 68-69).

SLA research in the past decade has focused on the foundations presented above. In addition, there has been a move towards the so-called interfaces. This field investigates relationships between components of language. The grammar domain includes internal components of phonology, syntax, semantics, morphology and lexicon and these interface with each other. The grammar domain is also affected by external components such as discourse and

pragmatics. The field has particularly been interested in to what extent L2 learners' difficulties can be connected to interfaces where L1 and L2 differ.

2.1.3 Transfer in second language acquisition

L1 knowledge is unconsciously used to compensate for insufficient L2 knowledge (Siegel, 2009). Applying features of L1 in L2 communication is very common for L2 users and is what we call transfer. Transfer is referred to as features from another language than the target language appearing in communication and is the outcome of a psycholinguistic process that takes place in the L2 acquirer's brain (Siegel, 2009). In terms of language acquisition in general, Schwartz claims without much controversy that there is a language instinct within L1 learners. However, she also suggests that this instinct applies equally well to L2 learners (Schwartz, 1998). She argues that L2 acquisition depends on three components and these are the L2 initial state, UG and exposure to target language input. The initial state refers to the starting point of acquiring the target language.

"Input refers to meaningful samples of a target language to which a language learner is exposed in a meaningful context" (Barcroft & Wong, 2013, p. 627). Input can also be understood as primary linguistic data, which basically are all kinds of exposure from target language whether it is written or spoken. Krashen's input hypothesis emphasises the need for comprehensible input in SLA. Krashen reviews acquisition as a subconscious process that constructs a new language system, which is out of reach from the learners' awareness. He substantiates this claim by questioning the fact that learners intuitively have knowledge about the target language that goes beyond what is explicitly taught to them. Acquisition occurs when learners have access to comprehensible input. In the input hypothesis optimal input is described as i +1 in which the +1 indicates that the input should be slightly beyond one's current level of competence (Barcroft & Wong, 2013). In other words, learning happens when one is continuously challenged with exposure to language features slightly beyond what is familiar.

The Full Transfer/Full Access model proposes that learners initially transfer their entire L1 syntax including both lexical and functional categories and then process and produce L2 utterances by using their L1 grammar. After the initial state, L2ers are able to change their parameter settings, constraints or L1 grammar rules to fit those of the target language.

In relation to SLA the present study looked at whether or not two different groups of Norwegian L1 speakers with English as their L2 have internalised the conditions for anaphoric expressions in English and whether or not there were significant differences amongst the two groups. Later, in section 2.2, a comparison of English and Norwegian with regards to anaphoric expressions and ellipsis will be given. At first glance it may seem like English and Norwegian anaphoric constructions behave rather similar. However, as will be illustrated there are diverging patterns that distinguish the two languages from each other. Assuming a Full Transfer/Full Access model there are reasons to believe the participants are able to distinguish the verbal anaphora structures in English from the Norwegian one, due to the fact that both groups are at a high level of proficiency in their L2. Moreover they are past the L2 initial state and have consulted UG in the restructuring process. In addition they have received a large amount of target language input. Nevertheless, the question regarding why some learners are more successful than others in acquiring their SLA can be related to several reasons within the UG framework. All learners may not have the same access to UG and some learners may be more sensitive to mismatches between L2 input and existing L1 parameter settings (Saville-Troike, 2006). Other theories on SLA find that the UG framework rely too heavily on the internal domains of the process of acquiring a new language and seek to explain that there are more to language than syntax.

2.1.4 Transfer in proficient L2 users

Not many previous studies have looked at the acquisition of anaphoric expressions or ellipsis in SLA although it is a very common feature in speech. However, a corpus study by Ginzburg and Kolliakou (2009) investigates the emergence of specific non-sentential utterances in child speech. The main source of data is taken from four English-speaking children, with English as their L1 and one Greek L1 child. The major finding is what the authors call the late short query effect (Ginzburg & Kolliakou, 2009). Which means that children acquire non-sentential answers much quicker than non-sentential queries. At a point in the acquisition process where the children in the study produce sentential questions and can master elliptical declaratives and the polar lexemes *yes* and *no* hardly any of the children can produce non-sentential questions (Ginzburg & Kolliakou, 2009). The Children participating in the study were between the ages of two and three. The study tells us that elided content in communication is

a complex part of language that proves difficult for children to acquire in their L1. Hence it is presumably a difficult structure for even advanced L2 speakers to grasp.

Studies have revealed evidence of transfer also in near-native and highly proficient L2 users and therefore there are reasons to believe that there is more to becoming fluent in a language than acquiring the right syntactic structures of the target language. Many adults display various degrees of imperfections in target language even when they have received target input over a long period of time (Sorace, 2008). Sorace reviews research on ultimate attainment and finds that the defects in target language may be more of a systematic divergence from monolingual native speakers. "Residual optionality is a type of divergence that characterizes non-native grammars. It is selective and tends to affect interpretive interface aspects of grammar, or interface conditions on syntax" (Sorace, 2008, p. 146). The persistence of optionality in proficient speakers may be consequence of too little adequate input from target language that can help the L2 acquirer cross out the less favourable option. L2 speakers can therefore fail in removing the L1 settings. Metalinguistic awareness is defined by Gass and Selinker (2001) as "one's ability to consider language not just as a means of expressing ideas or communicating with others, but also as an object of inquiry" (Gass & Selinker, 2001, p. 302). For example, they understand metalinguistic awareness as a speaker's ability to judge whether a sentence is grammatical in in one's native language, or being able to translate it from one language to another. Sorace further claims that advanced non-native speakers arguably holds such a metalinguistic awareness so that in most cases they would successfully prevent expressions of the non-target option (2008).

The Interface Hypothesis proposed by Sorace and Filiaci (2006) suggests that L2 learners are able to acquire foreign linguistic systems, but may face problems integrating the various linguistic phenomena to interfaces such as syntax and discourse or syntax and semantics and so on (White, 2011). Research on interfaces has centred around how different linguistic modules relate to each other, and failure of acquiring fully native-like grammars have been related to these relations (White, 2009). The Interface Hypothesis claims that narrow syntactic properties are fully acquirable in a second language, although some significant developmental delays may occur. On the other hand, interface properties involving syntax and another cognitive domain may not be fully acquirable. If this is the case, instances of non-target structures may be licensed by highly proficient speakers/learners. Advanced and near-native

speakers of the target language may therefore process and produce structures differently than native speakers of the target language (Rankin, 2011). However, this claim is controversial and the interference form L1 has also been explained by the difficulties of processing and handling two languages at once (Rankin, 2011).

A study observing how Swedish L2 learners/speakers of German and German native speakers employ the clause-initial position of V2 declaratives in German conducted by Bohnacker and Rosén (2007) found that participants were using distinct L1 language-specific patterns. Due to the fact that German and Swedish are typologicially, grammatically and lexically very similar (more similar than English and Norwegian because they both are verb second languages) native speakers of Swedish would according to the Full Transfer/Full Access model, with help from their L1 grammar be able to transfer this knowledge into German (Bohnacker et al., 2007). However, the results reveal that the Swedish native speakers had a stronger tendency to fill the clause-initial position with an element of low informational value such as *it, that, so* and so on that is common in Swedish. This type of construction is not ungrammatical in German, but rare. Bohnacker and Rosén conclude that native speakers of Swedish are able to master the German syntax through full transfer accessed by their L1 like Schwartz and Sprouse (1996) propose. The interesting element they found is that the Swedish L2 users of German underuse German ways of introducing sentences and overuse Swedish information structure suggesting that transfer does not only happen in the domain of syntax but also in the domain of information structure and information organisation. Bohnacker and Rosén argue that this type of transfer persists even at highly proficient L2 levels (2007).

Other studies find similar results to those of Bohnacker and Rosén. Sorace and Filiaci (2006) performed an experiment on the interpretation of intrasentential anaphora in Italian by Italian native speakers and English speakers with near-native proficiency in Italian. They found that native speakers of English with near-native proficiency in Italian preferred the subject of matrix clauses as a possible antecedent for overt subject pronouns to a greater extent than Italian monolingual speakers. The authors conclude that the findings indicate that the near-native speakers participating in the study have acquired the syntactic constraints on pronominal subjects in Italian, but they may have some trouble in the interface processing (Sorace & Filiaci, 2006). Similarly, Rankin (2011) looked at the transfer of verb-second syntax (V2) from L1 German and Dutch into L2 English by analysing a corpus, and then

comparing the German and Dutch to native French speakers also having English as their L2. The findings suggest that the German and Dutch learners master the syntax of English but that transfer continues to occur at the level of discourse-pragmatics where L1 preferences for structures continue to transfer (Rankin, 2011).

In light of previous studies done on transfer amongst proficient L2 users, this thesis seeks to investigate whether ratings of anaphoric expression can be explained in terms of the Full Transfer/ Full Access model or in terms of the Interface hypothesis.

2.2 Grammar of predicate anaphora: comparing English and Norwegian

Section 2.2 contains six sections. The first introduces the notion of predicate anaphora. Section 2.2.2 looks at contrasts between Norwegian and English clause structure and the following three sections get more explicitly into detail with regards to differences between English and Norwegian verbal anaphora. Finally an overview of contrasts between the two languages is given in section 2.2.6.

2.2.1 Comparing English and Norwegian with regards to anaphoric expressions

To avoid redundancy in written or spoken communication, language provides solutions. Various types of anaphora are examples of such solutions. An anaphor replaces or refers back to something, which has previously been uttered or written in a sentence. An anaphor can refer to different entities such as a noun or an entire phrase. In predicate anaphora the anaphor refers back to, or replaces the predicate. Verbal anaphora is used in various ways and this particular thesis will mainly focus on verb phrase ellipsis (VPE) and the use of a pronoun, or a dummy verb in addition to a pronoun as anaphor. In VPE the main predicate of the clause is missing. Often it goes missing together with one or more of its internal arguments (Craenenbroeck & Merchant, 2013) such as in sentence 1) below: The deleted part of the sentence is shown in brackets.

1) Fred can't play the guitar, but Frank can [~~play the guitar~~].

In English, VPE is widespread and very common. In Norwegian on the other hand, the restrictions for use of VPE are more thorough. However, the Norwegian use of *gjøre det* and a modal auxiliary together in combination with *det* are patterns very much used in Norwegian

when English would typically use VPE. In sentence 2) *gjøre det* refers to *spille en gang til* which is marked in brackets.

2) Harry vil [spille en gang til], men Jake vil ikke **gjøre det**.

Harry wants play one time more, but Jake will not do it.
"Harry wants to play one more time, but Jake won't".

The other type of predicate anaphora that will be focused on is the use of a pronoun such as *it* and *that*, or a dummy verb in addition to a pronoun such as *do it* and *do so*. In sentence 3) the letters marked in bold *did so* refers back to *buy her drinks* which is enclosed in brackets.

3) I promised to [buy her drinks] and I **did so**.

In English, *do it/do so* constructions are widespread, but more restricted than Norwegian *gjøre det.* The common Norwegian structure; an auxiliary together with *det,* is however impossible in English as is illustrated in sentence 4).

4) Kan Nora [overnatte hos dere i kveld?] Selvfølgelig kan hun **det**.

Can Nora spend the night at you tonight? Of course can she that.
*"Can Nora spend the night with you tonight? Of course she can that".

In sentence 4) *det* is referring to the event of spending the night, which is enclosed in brackets.
The differences introduced here will be highlighted in section 2.2.3.

2.2.2 English clause structure contrasted with Norwegian

English and Norwegian sentence structure is similar in many ways. Every finite clause has exactly one finite verb and this is the leftmost verb in both English and Norwegian (Wilder, 2007) In English, lexical verbs remain VP internal. This means that INFL (inflection) lowers onto the lexical verb. This is called affix hopping. The auxiliaries *have* and *be,* act differently, and when finite, they must move to I to unite with their finite inflection. Modal auxiliaries on

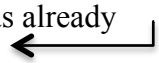
the other hand, are inserted directly under INFL (Haegeman & Guéron, 1999). Example 1) below is represented in deep structure - that is before any transformations or movements have taken place. In 2), the surface structure, the auxiliary verb *have* has been raised to I and connected with the morpheme *–s*.

1) D-structure:

NP I AdvP V V NP
Thelma -s already have read the book

2) S-structure:

NP I AdvP V V NP
Thelma has already read the book



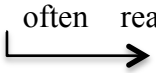
In the sentence *Louis often reads novels;* a different movement has taken place. In the S-structure the morpheme *–s* has lowered down to the lexical verb and we have a case of affix hopping.

3) D-structure:

NP I AdvP V NP
Louis -s often read novels

4) S-structure:

NP I AdvP V NP
Louis often reads novels



However, with lexical verbs, negation blocks affix hopping and in order for the bound morpheme of the inflection to survive the verb *do* is inserted (Haegeman & Guéron, 1999). Because the lexical verb cannot move up to the inflectional morpheme and the inflection cannot lower down to the lexical verb the insertion of *do* is the last solution. Hageman and Guéron (1999) have explained it like this:

5) *Thelma writes not any books.

6) *Thelma not writes any books.

7) Thelma does not write any books.

In sentence 5) the lexical verb has moved up to I. The sentence is not grammatical. Neither is sentence 6) where the inflectional morpheme has lowered down to the lexical verb. Sentence 7) abandon both these solutions and instead inserts the "dummy" verb *do* and becomes grammatical.

In Norwegian main clauses, affix hopping is not possible (Åfarli & Eide, 2003). Verbs, either lexical or auxiliary, always move to I as shown in 8a) and b). In embedded clauses there are various theories on how the verb is inflected for tense, but here I will assume that I gets attached to V by affix hopping in all cases (Wilder, 2014). This is illustrated in 9a) and b).

8a) Han kjøper aldri maten.

He buys never food.the

"He never buys the food".

D-structure:

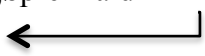
NP I AdvP V NP

Han -er aldri kjøpe maten.

S-structure:

NP I AdvP V NP

Han kjøp-er aldri maten.



8b) Han har aldri kjøpt maten.

He have never bought food.the

"He has never bought the food".

D-structure:

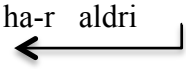
NP I AdvP V NP

Han -r aldri ha kjøpt maten.

S-structure:

NP I AdvP V NP

Han ha-r aldri kjøpt maten.



9a) Jeg lurer på om han ofte kjøper maten.

I wonder on if he often buy food.the

"I wonder if he often buys the food".

D-structure:

C NP I AdvP V NP

... om han –er ofte kjøpe maten

S-structure:

C NP I AdvP V NP

… om han ofte kjøp-er maten

9b) Jeg lurer på om han ofte har kjøpt maten.

I wonder on if he often has bought food.the

"I wonder if he often has bought the food".

D-structure:

C NP I AdvP V NP

… om han -r ofte ha kjøpt maten.

S-structure:

C NP I AdvP V NP

… om han ofte ha-r kjøpt maten.

Another contrast from English is that negation does not block affix hopping in Norwegian. This is shown in sentence 10a) and b).

10a) Det skulle ikke forundre meg om han ikke kjøper maten.

It should not surprise me if he not buy food.the

"It wouldn't surprise me if he doesn't buy the food".

D-structure:

C NP I AdvP V NP

… om han -er ikke kjøpe maten.

S-structure:

C NP I AdvP V NP

… om han ikke kjøp-er maten.

10b) Det skulle ikke forundre meg om han ikke har kjøpt maten.

It should not surprise me if he not has buy food.the

"It wouldn't surprise me if he hasn't bought the food".

D-structure:

C NP I AdvP V NP

… om han -r ikke ha kjøpt maten.

S-structure:

C NP I AdvP V NP

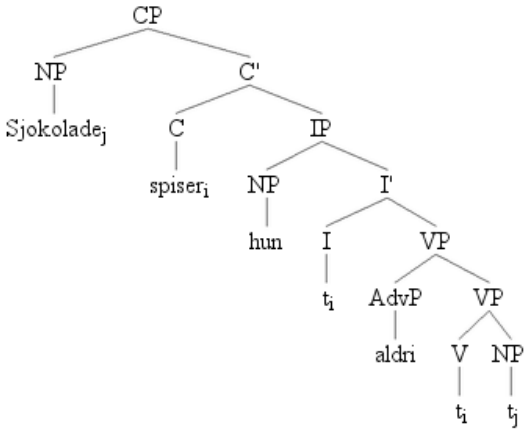
… om han ikke ha-r kjøpt maten.

One final distinction between Norwegian and English that will be included here is that in Norwegian, topicalisation (fronting) in declaratives is always accompanied by I-to-C, whereas that is not the case in English. Norwegian is a V2 language, a "verb second language". This means that the finite verb in main clauses always appears in second position in contrast to English where the verb can appear "late" in the clause (Wilder, 2014). This is exemplified in the syntactic trees below:

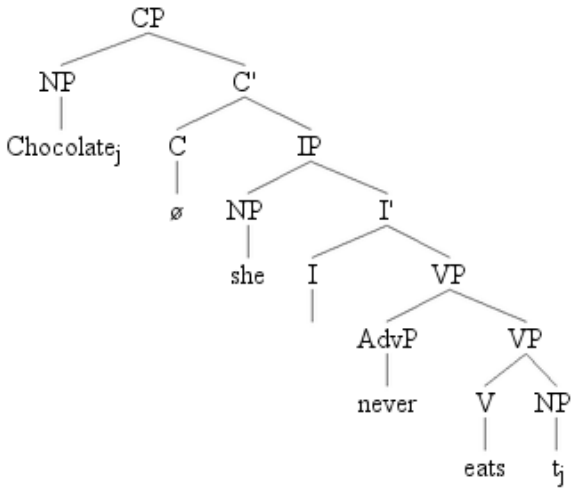
11) Sjokolade spiser hun aldri.

Chocolate eats she never.

"Chocolate she never eats".



12) Chocolate she never eats.



After having looked at basic clause structure in English and Norwegian, the text will now look at more complex language constructions, namely verbal anaphora.

2.2.3 Ellipsis and verbal anaphora

Much literature has been published on ellipsis and verbal anaphora and it has focused on answering three questions in order to explain the phenomena. The first question is the structure question. This question relates to whether there is syntactic structure that is unpronounced in ellipsis. Next, linguists have looked at the relationship between the understood material in ellipsis and its antecedent; the identity question. The identity question is concerned with the antecedent's relationship to the understood "silent" material. This relationship can be either syntactically or pragmatically controlled. Finally, much research has

been devoted to the licencing question, which tries to answer what heads or positions or structures allow for ellipsis, and what the locality conditions on the relations between these structures and ellipsis are (Merchant, 2013). First, the structure question will be considered. Linguists do not agree on this matter, but in this thesis the assumption is that there is syntactic structure present in the VPE site. However, it is deleted and it goes unpronounced. VPE is probably the most common verbal anaphora in English and works with any auxiliary and the copula (Bentzen et al., 2013). Sentence 1) is an example Bentzen et al use, and it is a VPE with the modal verb must. The elided content in the sentence is shown in brackets.

1) I don't know if Kari knows Joakim, but Jens must [~~know Joakim~~].

In English, VPE strands the auxiliary in I such as with the modal auxiliary *must* in sentence 1) above. Sentence 2), 3) and 4) are examples of VPEs with auxiliaries perfect *have*, progressive *be* and passive *be.*

2) Jack has eaten his dinner. And Kyle has, too.
3) I am running late, and Hannah is, too.
4) The car wasn't found, but the keys were.

However, in simple tense, VPE strands the tense affix in I and *do support* is prompted:
5) I like ice cream, and Mary does too.

In Norwegian there are similar verbal anaphoric constructions. However, Norwegian VPE is much more restricted than English VPE from the fact that it is restricted to modal auxiliaries in limited contexts and does not work with perfect *have* and passive *be*[1]as illustrated in sentence 6) and 7):

6) *Eric har levert oppgaven, men Lars har ikke.
Eric has delivered paper.the, but Lars has not.
"Eric has handed in the paper, but Lars hasn't".

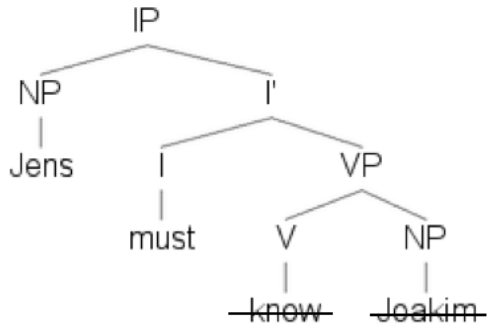
[1] Acceptance for these particular constructions seems to vary among Norwegians. For some Norwegians these would be fine especially in discourse. However, in this thesis these constructions are assumed ungrammatical without the pronoun *det.*

7) *Eplene ble spist opp, men pærene ble ikke.
Apples.the were eaten up, but pears.the were not.
"The apples were eaten, but the pears weren't".

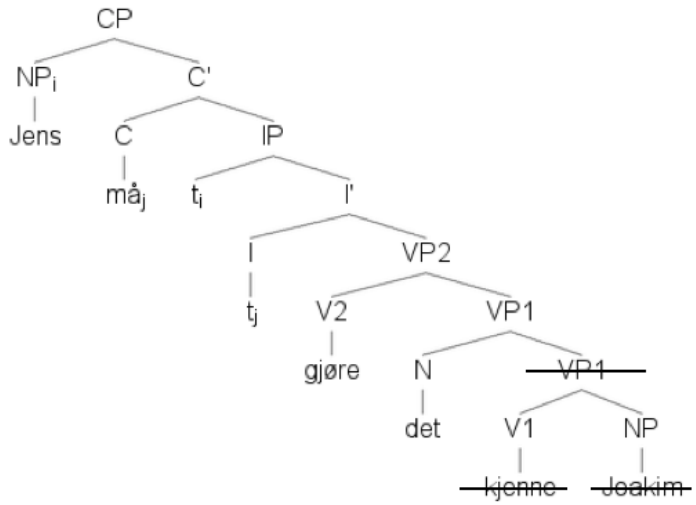
However, research conducted by Bentzen et al (2013) conclude that where English seems to have VPE Norwegian tends to require the pronoun *det* directly after the modal auxiliary or the pro-verb *gjøre* (Bentzen et al., 2013). This particular *det* has the distribution of a predicate, and is supported by an auxiliary or by a light verb use of *gjøre* (Bentzen et al., 2013). Bentzen et al use the example shown in 8) to exemplify this:

8) Jeg vet ikke om Kari kjenner Joakim, men Jens må **gjøre det**.
I know not if Kari knows Joakim but Jens must do it.
"I don't know if Kari knows Joakim, but Jens must".

A syntactic representation of sentence 1) and 8) is shown below:
1) I don't know if Kari knows Joakim, but…



8) Jeg vet ikke om Kari kjenner Joakim, men…



In the English example the VPE replaces the VP with silence. In the Norwegian example it looks like the VP is replaced by *det.* However, Bentzen et al propose that *gjøre det* (and Aux+*det*) also involves VP ellipsis. In their analysis, *det* is left-adjoined to the VP *kjenne Joakim* which is independently deleted while *det* still is pronounced. The syntactic representation of 8) above reflects Bentzen et al's proposal. For more details see Bentzen et al (2013, p. 114). In both cases however, there seems to be underlying structure, it is just not pronounced.

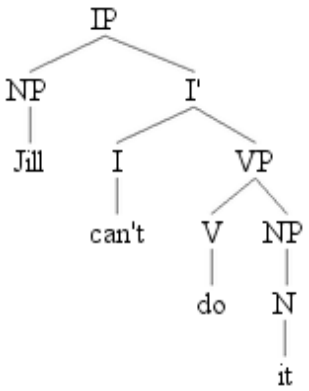
On the other hand, the use of the verb *do,* with a singular pronoun following, such as *it* or *so* is another very common type of anaphora in English. Bentzen et al provide an example where this type is exemplified. It is shown in 9). The Norwegian congener is shown in 10). An example of *do so* anaphora is shown in 11):

9) Jack can solve the problem. Jill can't do it.
10) Jack kan løse problemet. Jill kan ikke gjøre det.
Jack can solve problem.the. Jill can not do it.
"Jack can solve the problem. Jill can't do it".
11) John learns French in school. Mary does so, too.

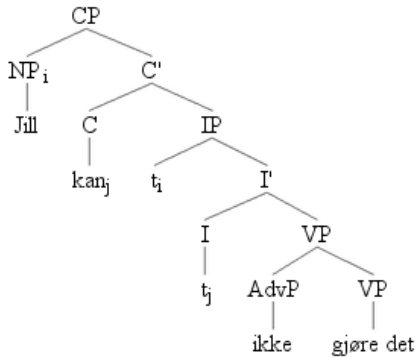
In these examples the pronouns *it/so/det* are introduced by the verbs *do/gjøre*. And in these cases they are the main verbs in contrast to *did/does/do* in English VPE. The *do it/do so/gjøre*

det in these cases do not need a linguistic antecedent and they contain no complex internal syntactic structure (Bentzen et al., 2013). This is shown in the tree representations of sentence 9) and 10) below. The possibility to occur without a linguistic antecedent will be discussed in section 2.8.1. However for a demonstration, see Bentzen et al's examples 16 and 17 (2013, pp. 103-104).

9) Jack can solve the problem…



10) Jack kan løse problemet…



The examples above reveal that there are two different uses of *gjøre det.* It seems that *gjøre det* share similarities to both English VPE and English *do it/do so.* In order to explain this fact Bentzen et al (2013) propose an analysis, which claims there are two different types of *det;* one surface anaphora *det* and one deep anaphora *det*.

2.2.4 Deep and surface anaphora

Hankamer and Sag claim that some types of anaphors are created by transformational processes, which means that they have underlying structure, while other anaphors do not. In the cases where there is no underlying structure it seems that somehow the anaphors have

been there from the start (Hankamer & Sag, 1976). When there is underlying structure Hankamer and Sag call it surface anaphora while cases without structure are called deep anaphora. Hankamer and Sag provide various tests to be able to diagnose underlying structure in an anaphor. Among these tests one can test for agreement, case effects, extraction, preposition pied piping and the missing antecedent phenomena. Here, examples of how agreement and extraction can be used as evidence for diagnosing structure in anaphors will be given. Consider example 1):

1a) Are there dogs outside? Yes, there are/*is.
1b) Are there dogs outside? Yes, there are [~~dogs outside~~].

In 1a) the verb in the second clause shows plural agreement. It agrees with the VP-internal subject as is shown in 1b) where the elided part of the sentence is shown in brackets. The fact that there is agreement has been used as evidence for the underlying presence of material in the ellipsis site (Hankamer & Sag, 1976). That is, there must be some structure containing an NP that the verb can agree with. Also, according to Hankamer and Sag, if there is underlying structure in the ellipsis site it should be possible to extract from it. This means that moving something into [Spec, CP] should be possible. This could be for example in cases with wh-movement or topicalisation.

2) Harry Potter, I like, but Draco Malfoy$_i$ I don't [~~like~~ t_i].

In sentence 2) the argument of the verb *like* in the second clause has moved up to [Spec, CP] and the VP has been elided as shown in the brackets. The fact that the argument of the verb has moved to [Spec, CP] has been used as evidence for claiming that there is in fact structure present, it is just not pronounced.
As mentioned there are also other tests that contribute in determining whether there is underlying structure present or not in anaphors and some of these will be addressed later when looking at the phenomenon in English and Norwegian.
In terms of identity, the second major question within literature on ellipsis, linguists have acknowledged the fact that some types of anaphors are controlled syntactically and that other anaphors do not require this strict control, but can be realised in a non-linguistic environment. Hankamer and Sag call it pragmatic control (1976). However, Hankamer and Sag argue that

certain anaphoric processes *must* be syntactically controlled (1976). The correlation between syntactic and pragmatic control of anaphors is closely linked to the distinction between deep and surface anaphora.

Hankamer and Sag conclude that only deep anaphors can be pragmatically controlled, and that all anaphors can be syntactically controlled (1976). Hankamer and Sag suggest that VPE is a surface anaphor and *do it* is a deep anaphor (1976). They also conclude that *do so* is a surface anaphor. However, there are arguments proposing that *do so* is indeed a deep anaphor that does not replace any structure in the verb phrase but rather forms a verb phrase by itself from the beginning of the derivation (Houser, 2010). Although Houser cannot find evidence for *do so* anaphora allowing pragmatic control, there is however enough evidence in other diagnostics to favour *do so* as a deep anaphor, and in this case it will be treated as a deep anaphor. Bentzen et al's (2013) ambiguity analysis suggests that *gjøre det* can appear as either a surface anaphor or deep anaphor. This depends on whether *det* in various situations has deep or surface properties. The two different *dets* are distinguishable through the pragmatic versus syntactic control distinction, object shift, stative predicate diagnostics and missing antecedent anaphora. Moreover, det_s allows stative predicates and missing antecedents but requires syntactic control. Det_d on the other hand allows object shift and pragmatic control.

2.2.5 Properties of English and Norwegian VPE and verbal anaphora

By using some of Hankamer and Sag's tests for diagnosing structure in anaphors one can find support for the assumption that there is unpronounced structure in VPE and not in *do it/do so* constructions.

2.2.5.1 Syntactic-Pragmatic Diagnostics

The structure question is closely related to the identity question, that is, what the relationship between the antecedent and the understood "silent" material is like. If there is evidence that a syntactic identity condition is required it suggests there is structure in the ellipsis site. If the identity condition is pragmatic, the structure question could go either way because all anaphors allow syntactic control whereas only deep anaphors allow pragmatic control. In the English example 1) and Norwegian example 2), non-linguistic context is given in brackets before the sentence is uttered.

1) [Mary and her friends watch John get ready to jump from the tallest cliff]

Mary: He won't do it.

2) [Mary og vennene hennes ser på at John gjør seg klar for å hoppe fra den høyeste klippen]

[Mary and friends.hers watch on that John get him ready for to jump from the tallest cliff]

Mary: Han gjør det ikke.

Mary: he do it not.

"Mary: He won't do it".

In both cases, Mary's utterance makes sense. In other words, pragmatic control is possible. In example 3) and 4) however, pragmatic control does not work which is evidence supporting the argument that *do it* constructions allow pragmatic control but VPE and Norwegian det_s does not.

3) [Mary is swimming in the pool]

John: *I can, too.

4) [Mary svømmer i svømmebassenget]

[Mary swimming in pool.the]

John: *Jeg kan også det.

John: I can too that.

"John: I can, too".

2.2.5.2 Object Shift Diagnostics

The two uses of *det* can further be distinguished from each other by object shift (Bentzen et al., 2013). The surface *det* is different from deep *det* (the usual pronoun) in that it fails to undergo object shift. Object shift is characterized by full NPs appearing to the right of negation, while unstressed pronouns move to the left of the negation. Consider sentence 5):

5) Han gjør det_d ikke.

He do it not.

"He won't do it".

In 5) the main verb *gjøre* has moved to C. Both the main verb and the pronoun *det* appear to the left of negation. Object shift is only possible with det_d and not with det_s as shown below:

6a) Liker du brokkoli? Nei, jeg gjør ikke det_s.

Like you broccoli? No, I do not it.

"Do you like broccoli? No, I don't".

6b) *Liker du brokkoli? Nei, jeg gjør det_s ikke.

Like you broccoli? No, I do it not.

"Do you like broccoli? No, I don't".

2.2.5.3 Stative Predicate Diagnostic

Norwegian *gjøre* det_s is similar to English VPE because Norwegian *gjøre* det_s can take as its antecedent stative verbal predicates (Bentzen et al., 2013) headed by for instance, love in the below example:

7a) Anne elsker sjokolade. Gjør Ola det?

Anne loves chocolate does Ola it?

"Anne loves chocolate. Does Ola?"

7b)*Anne loves chocolate. Does Ola do it/so?

Do it/do so does not allow stative antecedents as sentence 5b) illustrates.

2.2.5.4 Missing Antecedent Phenomenon

Both English VPE and Norwegian *gjøre det* allow Missing Antecendent Anaphors (MAA) (Bentzen et al., 2013). Grinder and Postal (Grinder & Postal, 1971) introduced the term and described the MAA phenomena as an anaphoric pronoun such as *it* or *det* that refers back to an antecedent (NP) which is an elided part of a larger phrase (VP). The anaphoric pronoun needs to have an overt linguistic context. In other words, it needs to be syntactically controlled. The examples below, taken from Bentzen et al.'s paper illustrate the fact that det_s allows missing antecedents, while det_d does not.

8a) Guro never writes with a pen. Jens always does. **It**'s green.

8b) Guro never writes with a pen. Jens always [use_j[$_{NP}$a pen]]. It_j is green.

9a) Guro skriver aldri med penn. Jens gjør alltid det_s. **Den** er grønn.

Guro writes never with pen.a. Jens does always it. It is green.

"Guro never writes with a pen. Jens always does. It's green".

9b) Guro skriver aldri med penn. Jens [$bruker_j$ alltid [$_{NP}$en penn]]. **Den**$_j$ er grønn.

Guro writes never with pen.a. Jens use always a pen. It is green.

"Guro never writes with a pen. Jens always use a pen. It is green".

In 8a) the pronoun *it* can refer to the pen Jens uses, likewise can the pronoun *den* in 9a) refer to the pen as is shown in 8b) and 9b). In 9a) the pronoun *det* has surface properties and shares characteristics with the VPE in 8a). In sentence 10a) however, the pronoun *it* cannot refer to the pen Jens uses, neither can the Norwegian pronoun *den* in 10b). The pronoun *det* has in 10b) been object shifted hence it disallows a missing antecedent.

10a) Guro never writes with a pen. Jens always does it. ***It**'s green.

10b) Guro skriver aldri med penn. Jens gjør det_d alltid. ***Den** er grønn.

Guro writes never with pen.a. Jens does it always. It is green.

"Guro never writes with a pen. Jens always does it. *It's green".

2.2.6 Contrasts English and Norwegian

To sum up; based on the differences between English and Norwegian the aim of this thesis is to investigate whether or not Norwegian L1 speakers with English as their L2 have internalised the conditions for English VPE and *do it/do so* constructions through an acceptability judgement test. Sentences of particular interest with regards to the phenomenon were like the sentences in 1), 2) and 3) below. Sentence 1) is a fine English VPE. However, it does not make a good Norwegian sentence when directly translated. If the pronoun det_s is added it becomes grammatical.

1) They displayed no signs of impatience. There was no reason why they should.

*De viste ingen tegn til utålmodighet. Det var ingen grunn for at de skulle.

They showed no sign of impatience. It was no reason for that they should.

De viste ingen tegn til utålmodighet. Det var ingen grunn for at de skulle det.

They showed no sign of impatience. It was no reason for that they should that.

Sentences like 2) are grammatical in Norwegian but ungrammatical in English because of the pronoun *that.* In contrast, Norwegian sentences with this type of construction are ungrammatical without the pronoun. English normally does not allow *that/it* to be used like Norwegian *det*$_s$, but there are exceptions. These are however outside the scope of this thesis and will not be mentioned here.

2) *The teacher asked me if I was disappointed. I said I was that

Læreren spurte om jeg var skuffet. Jeg sa jeg var det.
Teacher.the asked if I was disappointed. I said I was that.
*Læreren spurte om jeg var skuffet. Jeg sa jeg var.
Teacher.the asked if I was disappointed. I said I was

Finally sentence 3) is ungrammatical in English due to the fact that a stative verb precedes a *do so* anaphor as illustrated in section 2.2.5.3. In contrast, this type of sentence works fine in Norwegian.

3) *Sunniva and Ellen strongly dislike broccoli. Lars does not do so.

Sunniva og Ellen misliker brokkoli svært sterkt. Lars gjør ikke det.
Sunniva and Ellen dislike broccoli very much. Lars does not it/so.
"Sunniva and Ellen strongly dislike broccoli. Lars does not".

Before looking more closely at the results from the acceptability judgement test and the ratings of the particular sentences, as illustrated in this section, the actual study will be presented in further detail.

3. Method

This thesis investigates whether two different groups of Norwegian native speakers show evidence of transfer when asked to judge English sentences with Norwegian sentence patterns. This was done quantitatively, through an acceptability judgement test. In total 50 participants were tested. 25 participants were VG2 pupils and the other 25 were students studying English at university level. Out of the 50 participants, six participants had to be excluded from the final results hence the results and discussion are based on 44 participant's responses. These were 21 pupils from VG2 and 23 university students. The acceptability judgement test had 60 different sentences divided into five conditions. Condition 1, 2 and 3 were test sentences whereas condition 4 and 5 were filler sentences.

3.1 Acceptability judgements

In order to investigate evidence of transfer in the two different groups it was decided that a quantitative method would provide best results. The data was collected through an acceptability judgement test. In an acceptability judgement test speakers are asked to judge or report their reactions to various sentences with regards to whether they believe the string of words makes an acceptable utterance (sentence) or not. It is important to distinguish the two terms grammaticality and acceptability from each other. Traditionally speakers' reactions to sentences have been called grammaticality judgements (Schütze & Sprouse, 2013). "The notion "acceptable" is not to be confused with "grammatical." Acceptability is a concept that belongs to the study of performance, whereas grammaticalness belongs to the study of competence" (Chomsky, 1965, p. 11). Chomsky emphasizes that grammaticality is just one aspect of acceptability, hence we must distinguish the actual use of the language (does the sentence actually make sense?) from what speakers know about the structure of a language and which restrictions that follows from it (Schütze, 2016). Acceptability judgements are based on speakers' reported perceptions when exposed to a particular linguistic stimuli through some sort of measureable scale (Schütze & Sprouse, 2013). This means that sentences used in a judgement task must be carefully constructed. Speakers' judgments can be influenced by several extra-grammatical factors such as lexical content, length and plausibility. In order to detect and investigate particular topics the researcher must eliminate factors that may cause participants to judge sentences on false terms (Dabrowska, 2010).

In this experiment a Likert scale has been used to capture the participant's perception of the sentences they were exposed to. A Likert scale task is normally a numeric scale with an uneven number. Often ranging from 1-5 or 1-7, in which the lowest number indicates that the sentence is totally unacceptable while the highest number indicates that the sentence is perfectly acceptable. However, sometimes even numbered scales are used to avoid a "neutral" middle point. Each sentence is then to be rated on the scale (Schütze & Sprouse, 2013). There are both positive and negative sides to using this particular method. It is a natural and straightforward task. It is quite understandable for most participants (Dabrowska, 2010). However, there is always a risk that participants have not understood the task. Therefore it may be useful to include example sentences or test sentences before the task starts (Schütze & Sprouse, 2013). Because it is a numeric task it is easy to conduct various statistical tests on the results that can reveal interesting results. On the other hand, the fact that the participant's perceptions are measured on a scale means that it may not be sensitive enough to capture exact perceptions.

To detect significant effects between various experimental manipulations and independent variables one needs to have a good experimental design. Factorial designs are the most important tool for isolating factors that can give rise to relative differences in acceptability (Schütze & Sprouse, 2013). In this particular experiment a 2x3 within subjects factorial design was used. The two independent variables were group (with two levels: VG2 pupils and university students) and condition (with three levels: sentence type 1, 2 and 3). The dependent variable was the mean ratings each participant gave in the different conditions.
For the acceptability judgement test 60 sentences were carefully created. See appendix 6 for the complete acceptability judgement test. The 60 sentences were divided into 5 conditions, however, only condition 1, 2 and 3 were experimental test sentences, while condition 4 and 5 were fillers. Condition 1 had English sentences with VPE that work in English but do not work if they are translated to Norwegian, but may work if *det* is added. Condition 2 and 3 contained sentences, which work in Norwegian, but do not work in English when they are directly translated. Condition 2 had English sentences with *do* + *so* that do not work in English with a stative verb, but work with *gjøre* + *det* in Norwegian. Condition 3 had English sentences with a finite auxiliary + *it* or *that* that do not work in English, though they may work with VPE, but work in Norwegian with a finite auxiliary + *det.* The first filler condition; condition 4 was English sentences which work in English and in Norwegian with the same

VP anaphor type (either VPE or *do + it/so*). The second filler condition; condition 5 was English sentences, which do not work in either English or Norwegian with the same VP anaphor type. The fillers were added to reduce the risk of several possible biases. First of all, the fillers made it easy to get a balanced ratio between grammatical and ungrammatical sentences in the test. Hence the participants had to be alert at all times. Secondly, the fillers were added to make it harder for the participants to detect what was actually being tested in the test. And finally, the acceptability judgement test was created in 25 different versions randomizing the sentences (including the fillers) to avoid effects of presentation order (Schütze, 2016).

Traditionally, quantitative methods in linguistics, especially syntax and semantics, have not been widely used. Moreover, researchers in this field have usually based their statements on their own sentence judgements and intuitions, perhaps along with feedback from colleagues. Several researchers within the field are eager to address the methodological weaknesses that follow from this type of research (Gibson & Fedorenko, 2013). These researchers propose that future syntax and semantics research should be carried out just like any other area of science investigating human behaviour (Gibson & Fedorenko, 2013). That means that experiments should include several participants. Experiments should include distractive material such that experimental manipulations are not obvious for the participants. Finally, items should be presented in random orders to prevent effects of presentation order. Gibson and Fedorenko (2013) present some arguments used in favour of continuing to use a non-quantitative method in syntactic and semantic research and give reasons for why these arguments are invalid. However, only one of the arguments they target will be mentioned here, namely the one that "[l]inguists make better experimental participants because they can ignore non relevant factors in evaluating linguistic materials" (Gibson & Fedorenko, 2013, p. 98). Gibson and Fedorenko claim that naïve participants give better judgements due to the fact that they do not suffer from possible cognitive biases to the same extent as linguists. The existence of such biases can result in false conclusions (2013). At least two cognitive biases can negatively affect results when non-naïve participants are asked to give judgements. First of all, the researcher is aware of the research question and hypothesis and is therefore in danger of judging sentences or looking for data in directions, which favours a desirable outcome and supports the hypothesis. The second cognitive bias that is quite plausible is confirmation bias on the part of the participants when non-naïve participants are used. When

participants are asked directly by the researcher to give judgements they can be biased due to their theoretical knowledge. Colleagues may also subconsciously give judgements that they believe the researcher wants to receive (Gibson & Fedorenko, 2013). Contrary, naïve experimental participants perform tasks using their own intuitions to a greater extent. Dabrowska (2010) conducted a study comparing professional linguists' intuitions with those of linguistically naïve speakers and found that their judgements diverged. She concludes that syntacticians should not rely on their own judgements because they are not representative for a particular population.

3.2 Participants

This experiment uses naïve participants. The participants came from two different groups and in the end 44 participants created the basis for the results presented in chapter 4. The aim was to test two distinguishable groups with different backgrounds and prerequisites. But both groups had to be native speakers of Norwegian. However, it was desirable that the participants within the two different groups were relatively homogenous in particular areas such as age, education and exposure to target language such that they could be a representative sample of the group they belonged to (Buchstaller & Khattab, 2013). It was also desirable that the two groups were distinguishable in terms of age and language proficiency since the research questions and hypothesis claim that longer exposure to target language and higher proficiency in target language will lead to fewer cases of transfer. The results in chapter 4 are based on responses given from group 1; 21 pupils in an English class at VG2, Norwegian upper secondary school and from group 2; 23 students university students studying English (at various levels).

VG2 pupils

The VG2 pupils were all born in 1998 except for one participant that was born in 1997. The pupils were therefore 17 or 18 years of age and attended the same English class at an upper secondary school. The particular group of pupils was selected by an English teacher, who was contacted by me for the purpose of getting pupils to take part in the survey. 25 pupils were tested, but four participants had to be elided from the results. This was due to the fact that one of the participants had an additional L1 to Norwegian. The other three who had to be excluded from the results, did not provide a judgement to all sentences in the acceptability

judgement test, hence their total results were biased. The 21 participants left were six females and 15 males.

University students

Naturally, the age difference was bigger among the university students than among the VG2 pupils. The age span ranged from 21 to 28 years of age. Originally 16 females and 9 males were tested. In this group two participants had to be removed from the overall result. One of the participants had an additional L1 to Norwegian and the other did not provide a judgement to all sentences in the acceptability judgement test. To be able to get participants to join the survey some advertisement had to be done. Different channels of advertisement were being used. Lecturers in various English undergraduate and graduate courses at the university were contacted and asked to post advertisement on the university's intranet. In some English courses I also came in to the lecture and advertised for the project in person. The participants who were interested in joining then contacted me and we scheduled a time when they were available for testing. After going into lectures I had booked a room in advance and could also test volunteers straight away. Compared to testing the VG2 pupils, which was done in one sitting, the testing of the university students spanned over approximately two weeks whereas some were tested alone and others were tested simultaneously. Due to the fact that it was more difficult to get participants for the university (UNI) group the level of English education among the participants varies a bit. Most of the participants are master's students while some are at Bachelor levels.

3.3 Materials and procedure

The testing consisted of two parts. The purpose of the first part was to collect background information in order to assess the participant's grammar and vocabulary skills. In addition, all participants filled out a background questionnaire. In part two, the participants completed the acceptability judgement test.

The VG2 students were all tested on the same date. The whole session lasted approximately one hour and thirty minutes. Before the testing started, the class was given a short introduction to the study and what they had to do as participants. Also, instructions regarding the acceptability judgement test were carefully given. The scale from 1-5 was explained and

the pupils were told that they should read each sentence carefully, but at the same time let their intuition play a crucial role in whether or not they believed the sentences were acceptable. Before the testing could start a consent form had to be signed. The project has been evaluated and accepted by the NSD; Norwegian Centre for Research data. See appendix 8 and 9 for the consent forms. In the VG2 class all participants were willing to join. On the testing dates, the university students had already contacted me saying they were willing to volunteer, hence it was no problem for them to sign the consent form either. The university students also received the instructions about the different parts of the testing orally before the testing began. However, this was done in multiple sessions due to the fact that not all university students were tested in the same session.

In part one, all participants had to fill out a background questionnaire. See appendix 7 for complete questionnaire. The background questionnaire included questions about age, sex, home municipality and information about the participant's L1. The participants were to report their habits of using English such as how often they read, write and listen to English and so on. It also contained several self-assessment questions. The participants were asked to assess their skills in Norwegian, English, and other languages if they knew any. The final questions asked whether the participants had experienced or experience any issues when reading and writing. The background questionnaire's primary purpose was to control for who the participants that took part in the study were and to exclude participants who have or have had problems with learning abilities. By using a background questionnaire, one can easily make sure that the test groups are relatively homogenous and can represent a sample population.

The grammar and vocabulary tests were standard online tests. The reason for using these tests was to be able to check whether there were correlations between scores on these tests and the acceptability judgment test. It was emphasized that the online tests were only to be done once. When testing the VG2 pupils they were instructed to raise their hands when completing them so that their results could be written down before moving on to the next task. When testing the university students the same procedure was used when several participants were tested at the same time. Naturally, when participants were tested individually they just had to tell the results to me directly. Below is a description of both the grammar and vocabulary test the participants took.

The grammar test[2] consisted of 15 fill in the blanks questions. The questions are regulated such that they get harder or easier depending on the responses given. After completing the 15 questions the participants receive a score at a CEF level; from A1 to C2. CEF stands for Common European Framework of Reference for Languages. The Language Policy Unit within the Council of Europe has created the framework. They describe its purpose as follows:

> The Common European Framework provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc. across Europe. It describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively (Council of Europe2014, p. 1).

In other words the framework is a guideline for what is expected at various levels in language learning in Europe and there are six different levels one can achieve; A1, A2, B1, B2, C1 and C2. Whereas A1 is the level with lowest proficiency and C2 is the level with highest proficiency. However, the grammar test was not advanced enough to capture the differences among the participants due to the fact that the level of proficiency among Norwegian are at a relatively high level at both age groups. More details regarding this are provided in section 4.1.

The vocabulary test[3] was designed as a lexical decision task. In the test, 100 letter sequences appear on the screen, and by pressing the *F* key on the keyboard (indicating no) or the *J* key on the keyboard (indicating yes) the participants decide if they know the word or not. The letter sequences make up English words, but also non-words. The test takes approximately four minutes and aims at calculating the percentage of words in the English vocabulary the participant knows. By answering yes or no to the letter sequences, the test estimates the participant's vocabulary size. The words that appear on the screen are quite advanced such that the test will cover the range in the English vocabulary and avoid a ceiling effect. In total, the list of words used in the test is 60 469 words and 304, 275 non-words. Out of the 100 letter sequences each participant is presented to 70 of these will be English words while 30 will be non-words (http://vocabulary.ugent.be/wordtest/faq, 2014). The test is created by the Centre of Reading at Ghent University in Belgium and is part of a large-scale word

[2] *www.examenglish.com/leveltest/grammar_level_test.htm*

[3] *vocabulary.ugent.be*

recognition study in English, Dutch and French. Disadvantages with this test may be that participants do not pay attention but rather press yes or no by chance. The test penalizes participants that press yes to words that are non-words, which may not be obvious for all test takers.

After completing the first part of the testing, the participants could do the acceptability judgement test. The test had five test sentences to start with. After completing these, the test indicated that the participants had to raise their hands and wait for a signal before continuing. This gesture made it possible to control that each participant understood the task before giving judgments to the actual test sentences. Each participant received an individual test where the sentences appeared in random order. This was done to minimalize the possibility of participants copying each other's answers.

3.4 Analysis

The results were collected and adjusted for descriptive statistics in Excel. Moreover, all collected data was transformed into numeric values, which could then be analysed. After sorting the data in Excel the data was used for various inferential statistical tests. The results are presented in the next chapter.

4. Results

The collected data was organized and prepared for further analysis in R[4] (statistical software). The mean scores and standard deviations of the grammar and vocabulary tests were calculated. Judgements collected from the acceptability judgement test were analysed in various ways. An average score on each of the 60 sentences was calculated, including the calculations of standard deviations. A mean was then calculated for each group and for the 44 participants in total on every sentence. An average judgment score on the three sentence types, which was the mean for each participant's judgements in the three conditions, was also calculated. The individual mean scores were added creating a mean score for each group and for the 44 participants in total. Null hypothesis significance testing has been used to interpret the validity of various claims made about the two experimental groups and the conditions they were tested in. For results on the filler conditions see appendixes 3, 4 and 5.

4.1 Grammar and vocabulary test

The average scores including the standard deviations for the grammar and vocabulary test are presented in table 1) below:

Table 1: Mean scores on the grammar and vocabulary test

	Group	Mean	Std.Deviation	Participants
Grammar	VG2 students	5.333	1.065	21
	University students	5.870	0.458	23
	Total	5.614	0.841	44
Vocabulary	VG2 students	42.238	8.336	21
	University students	64.957	9.475	23
	Total	54.114	14.498	44

Table 1) shows that the university students have a slightly better average score on the grammar test than the VG2 pupils. In addition we can observe that the standard deviation is higher among the VG2 pupils than among the university students. In order to analyse

[4] https://www.r-project.org/

distributions of data series, a Shapiro-Wilk normality test was run: the results show that the scores on the grammar test are not normally distributed; $p<0.05$ (VG2 pupils: $p<0.001$, UNI students: $p<0.001$). Moreover, if p is smaller than the significance level of 5 percent, the null hypothesis is rejected (H_0) and the alternative hypothesis (H_1) is accepted (Gries, 2013). A non-parametric test, the Wilcoxon test shows that there is a ceiling effect in the grammar test for the university students (p-value: 0.3711), but not for the VG2 pupils (p-value: 0.01154). The results from the vocabulary test show that the difference between the VG2 pupils and the university students is bigger. The p-values (VG2 pupils: 0.6523, UNI students: 0.734) suggest that the scores are normally distributed ($p\geq0.05$). A parametric t-test rejects the null hypothesis that there is a ceiling effect in both groups (VG2 pupils: t: -31.662, Df: 20, $p<0.001$, UNI students: t:-17.738, Df:22, $p<0.001$).

In figures 1 and 2 below, frequencies of scores (from 1-6) on the grammar test are shown. Figures 3 and 4 on the next page illustrate frequencies of scores (0-100%) on the vocabulary test.

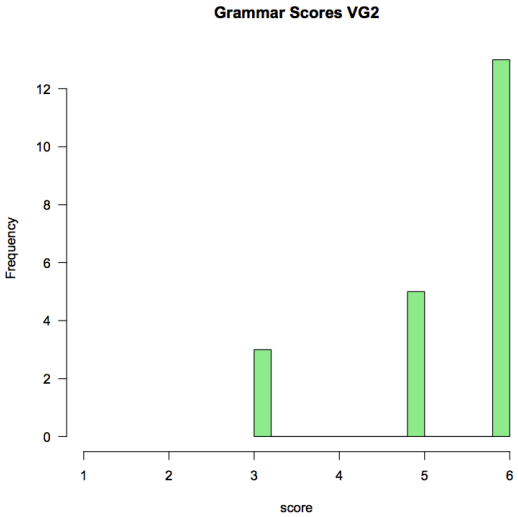


Figure 1: 21 breaks indicate 21 responses from VG2

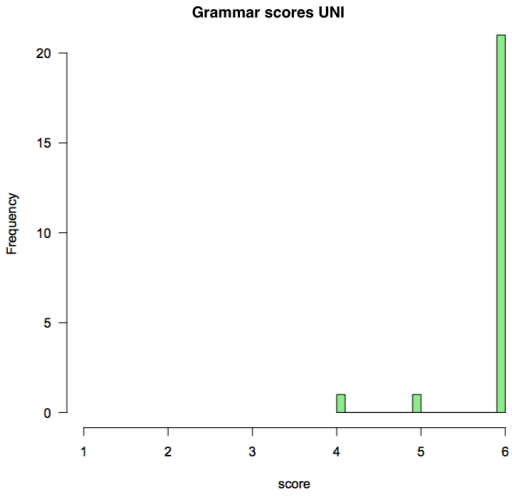


Figure 2: 23 breaks indicate 23 responses from UNI

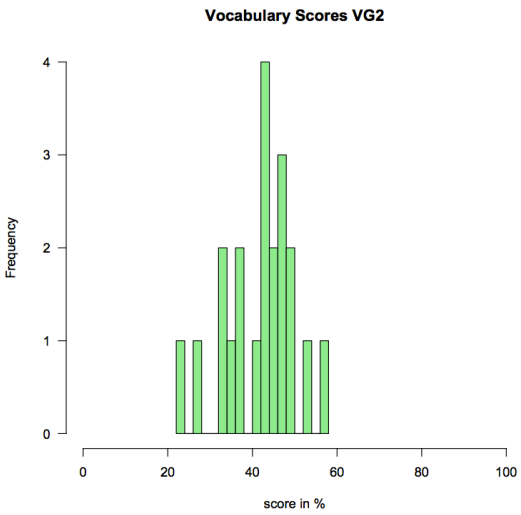


Figure 3: 21 breaks indicate 21 responses from VG2

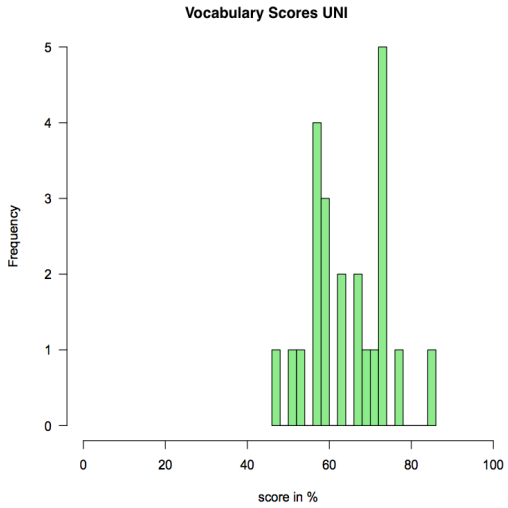


Figure 4: 23 breaks indicate 23 responses from UNI

Figures 1 and 2 show non-normal distributions of responses from the two groups. Both groups have a few outliers. The data shown in figure 3 has a slightly left skewed distribution of scores whereas the data shown in figure 4 has a right skewed distribution.

4.2 The acceptability judgement test

There were three different experimental conditions. Each participant gave 15 judgements in condition 1, 6 judgements in condition 2 and 9 judgements in condition 3. Condition 1 included sentences, which are acceptable in English but not acceptable in Norwegian if they are directly translated (see sentences in appendix 6). Condition two and three included sentence types, which are unacceptable/odd in English but acceptable in Norwegian if they are directly translated (see sentences in appendix 6). Moreover, condition 2 consisted of sentences with a stative predicate in combination with a *do so* anaphor while condition 3 had sentences with a pronoun such as *it/that* added to the VPE. Both sentence types are ungrammatical in English hence the participants were given an equal amount of grammatical and ungrammatical sentences. Nevertheless to be able to investigate the judgements given on a particular structure the ungrammatical sentences were divided into two experimental conditions. The average judgements made by every participant in each category were calculated, providing a mean rating of each category per participant. The mean of all

participant's judgments were then calculated providing a total mean for each condition for each group. The results are presented in table 2 below.

Table 2: Mean judgements in the various conditions in the acceptability judgement test

Sentence	Group	Mean	Std.Deviation	Participants
Condition 1: Acceptable Engl. Unacceptable Norw.	VG2 students	3.879	0.433	21
	University students	4.426	0.332	23
	Total	4.165	0.469	44
Condition 2: Acceptable Norw. Unacceptable Engl.	VG2 students	2.683	0.859	21
	University students	3.297	0.818	23
	Total	3.004	0.884	44
Condition 3: Acceptable Norw. Unacceptable Engl.	VG2 students	2.071	0.767	21
	University students	1.643	0.699	23
	Total	1.788	0.757	44

Table 2 shows that the university students have rated the acceptable English sentences in condition 1 higher than the VG2 pupils. In condition 2 the university students have rated the unacceptable sentences higher on the acceptability scale than the VG2 pupils. Finally, in condition 3 the university students have rated ungrammatical English sentences lower than the VG2 pupils.

4.2.1 Frequency distributions

Each participant's average rating on the Likert scale in the three different conditions are shown in figures 5-10 below. Figures 5, 7 and 9 illustrate the VG2 pupil's ratings with 21 breaks indicating 21 participants. Figures 6, 8 and 10 illustrate the university student's ratings with 23 breaks indicating 23 participants.

Figure 5

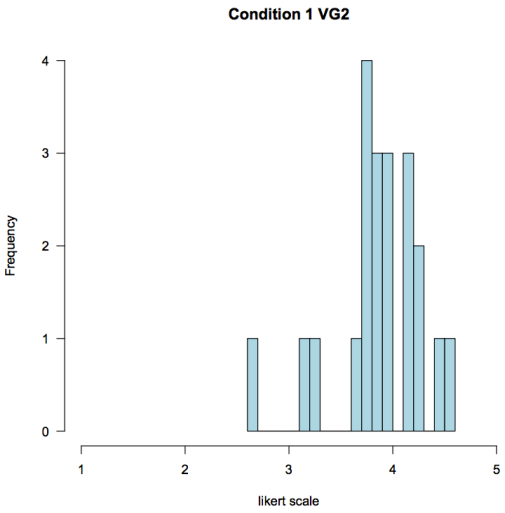


Figure 6

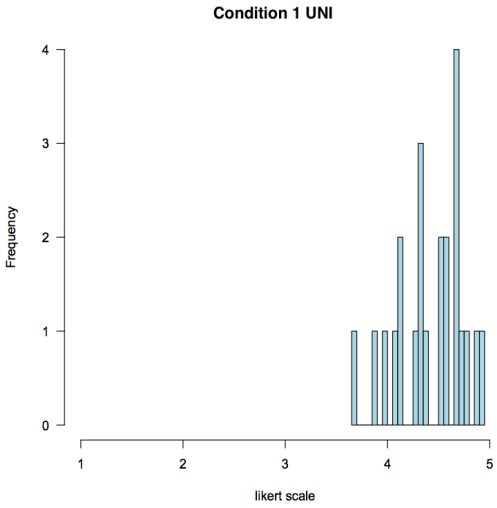


Figure 7

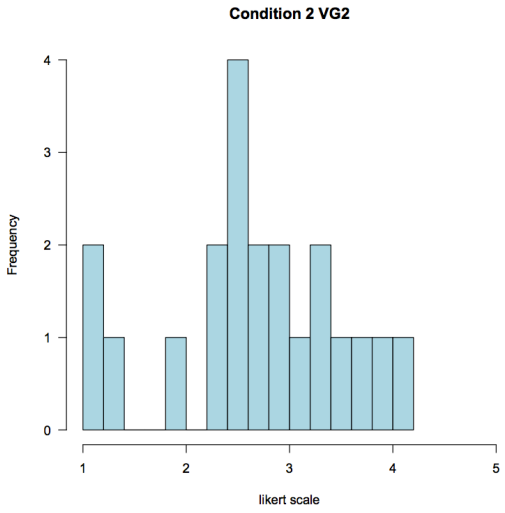


Figure 8

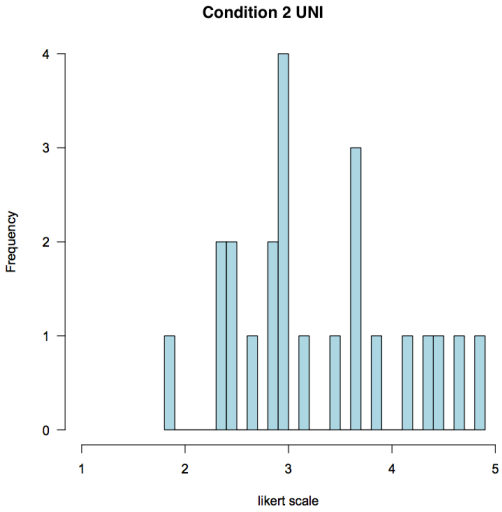


Figure 9

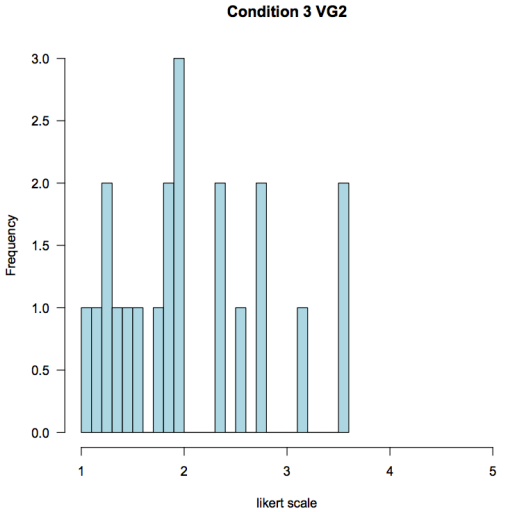
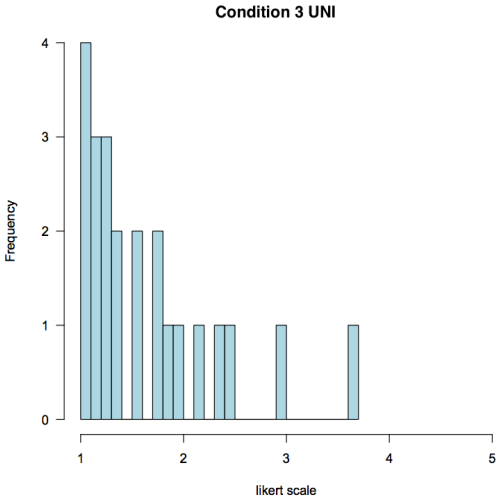


Figure 10



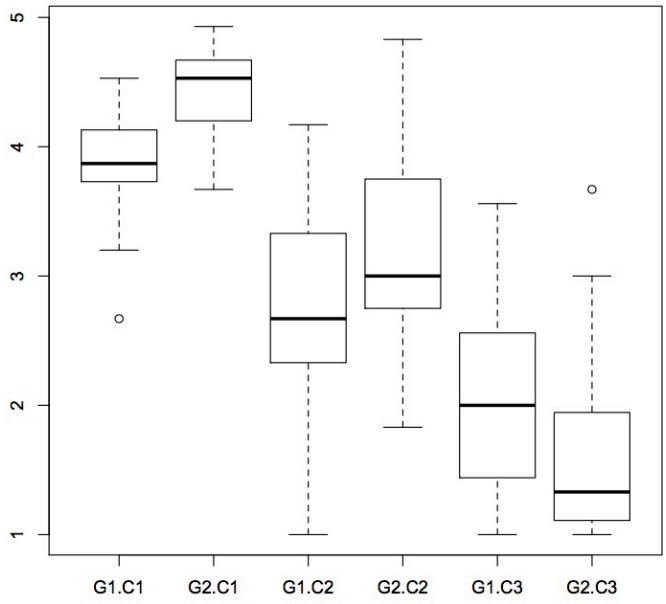
Looking at figures 5 and 6 it is evident that the university students are more consistent in their judgements for this sentence type. The majority rate the acceptable English sentences between 4 and 5 on the Likert scale. The VG2 pupils on the other hand tend to place their judgement's around 3,5-4. In condition 2 both groups tend to rate the sentence type across the whole scale as is illustrated in figures 7 and 8. However, the VG2 pupils tend to rate the unacceptable English sentences more towards the lower end of the scale than the university students. In the third condition the university students consistently rate the unacceptable sentences low as is illustrated in figure 10, however there are some outliers. The VG2 pupils on the other hand are much more inconsistent in their judgements as the frequency distribution in figure 9 shows. Figure 9 displays more spread judgments, whereas figure 10 shows greater certainty.

4.2.2 Analysis of variance - ANOVA

Two multifactorial analyses were run in order to determine whether the independent variables in the experiment correlate with performance and whether any differences could be found between the two groups of participants. An analysis of variance (ANOVA) was run in order to see how variability in the sample means in each condition could be explained. Also a linear regression model was run. Here effects of vocabulary and grammar on performance were tested. However, the linear regression model did not show any correlation between scores on the grammar and vocabulary test and performance in the acceptability judgment test.

In the mixed model ANOVA there were two independent variables, one was within-subjects (condition, with three levels: -1, 2 and 3) and one was between-subjects (group, with two levels: VG2 pupils, UNI students). All participants were exposed to the three within-subjects conditions; hence the dependent variable was the participant's judgments on the Likert scale in the various conditions. Figures 11, 12 and 13 below illustrate the results.

Figure 11: *Performance by the separate groups in all three conditions*

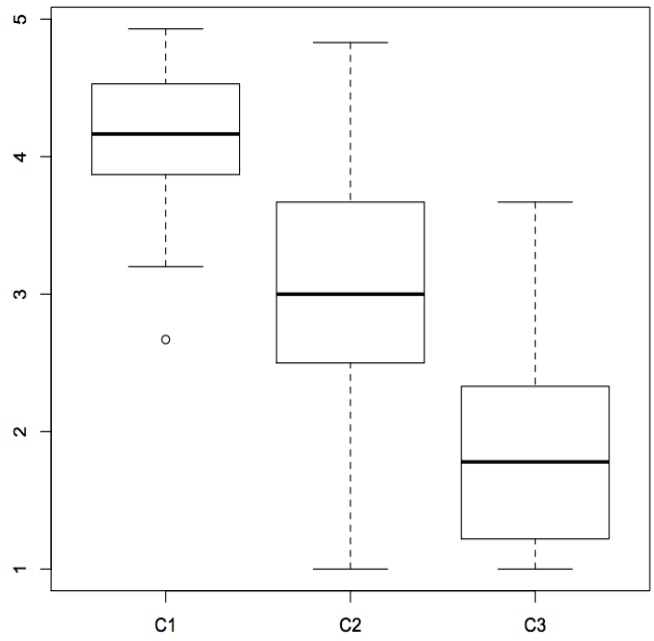


Note: G1: VG2 pupils, G2: UNI students, C1: condition 1, C2: condition 2, C3: condition 3

Figure 11 shows the performance by both groups in all three conditions. The numbers on the y-axis represents the Likert scale. The result from the ANOVA illustrated in the boxplot shows that there is a difference within-subjects and between groups in the various conditions (Group: $F(1,42)=2.575$, $p=0.116$, Condition: $F(2,84)=188.13$, $p<0.001$, Condition*group: $F(2,84)=11.92$, $p<0.001$). The small p-values ($p<0.05$), suggest we can reject the null hypothesis and accept the alternative hypothesis; that there is difference in performance between groups in each condition.

In condition 1 both VG2 pupils and university students rate sentences towards the higher end of the scale and the distribution of judgments along the scale is fairly small, however, there is an outlier among the VG2 pupils. In condition two on the other hand the VG2 pupils rate the unacceptable sentences lower than the university students. Figure 11 also illustrates that the judgements are much more spread out in this condition than in condition 1. The judgments also vary a bit in condition 3, although less so than in condition 2. The university students rated this sentence category low, although there is an outlier. The VG2 pupils, on the other hand seem to be more inconsistent in their judgments.

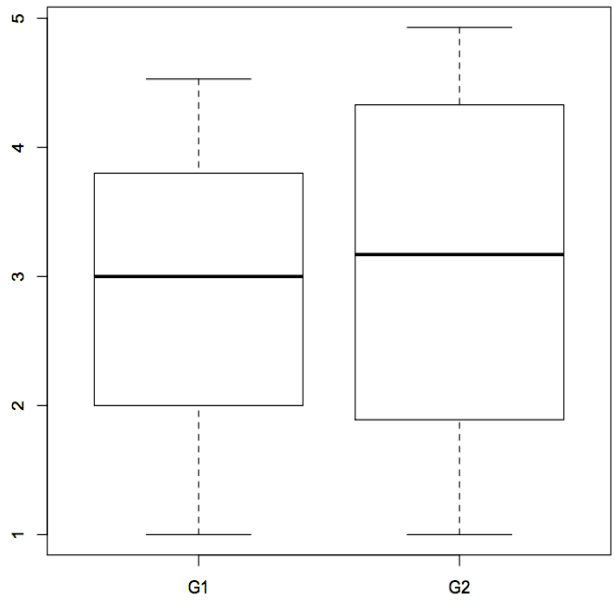
Figure 12: *Performance by the groups combined in all three conditions*



Note:C1: condition 1, C2: condition 2, C3: condition 3

Figure 12 illustrates results from the ANOVA, but only looking at variance between conditions regardless of group. Figure 12 illustrates well how the various types of anaphoric expressions have been judged and how the judgments reflect the L2 competence. The L2 competence becomes particularly clear when figure 12 is compared to figure 11 where the more proficient group judges condition 1 and 3 more native-like than the group with a lower proficiency level. Both figures 11 and 12 illustrate a great insecurity with regards to condition 2 however. The syntactic analysis in chapter 2., section 2.2 demonstrates the differences between English and Norwegian and arguably insecurity regarding condition two can be related to these differences. This will be elaborated on in chapter 5.

Figure 13: *Total performance of the separate groups regardless of condition*



Note: G1: VG2 pupils, G2: UNI students

Figure 13 shows the performance by each group in all conditions combined. The boxplot reveals that both groups have used the majority of the scale. The university students have used all possible ratings whereas the VG2 pupils seem to have avoided the very top end of the scale.

4.2.3 Average sentence ratings

The mean judgment per sentence was calculated for the 21 VG2 pupils, 23 university students and for the 44 participants in total. The average judgment per sentence is shown in figures 14, 15 and 16 below.

Figure 14: Average Likert scale ratings: acceptable English sentences

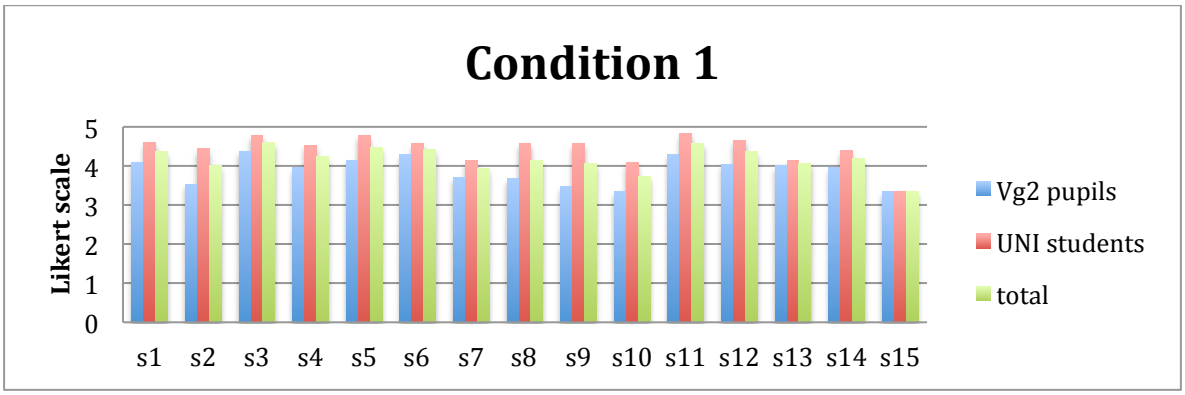
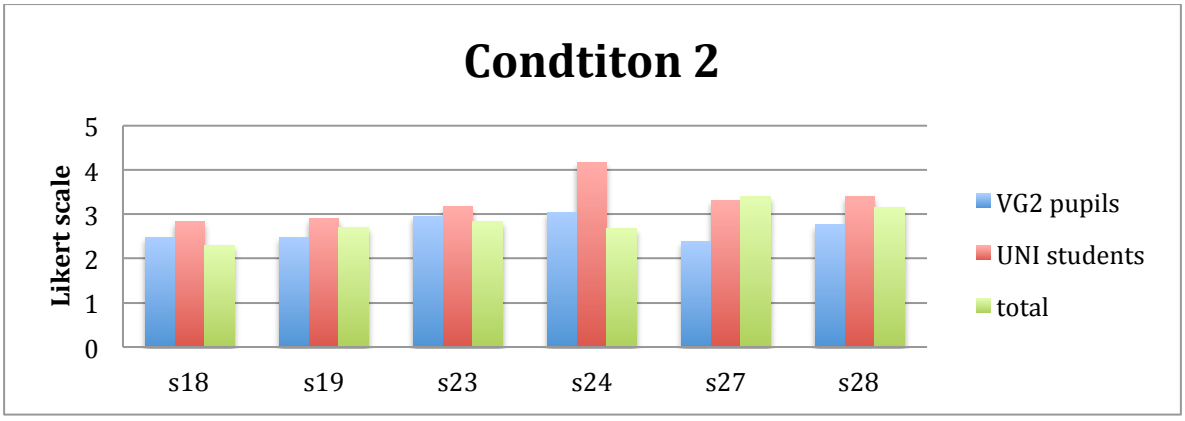


Figure 14 shows that the university students rate sentence type 1 higher than the VG2 pupils. The VG2 pupils did not rate any of the sentences in this category beneath 3 on the Likert scale. The university students rated all sentences above 4, except for sentence 15 (see appendix 2 for exact values and standard deviations).

Figure 15: Average Likert scale ratings: unacceptable/odd English sentences



In figure 15 it is evident that the participants are unsure about their judgements. In this category the VG2 pupils have rated the sentences lower than the university students (see appendix 2 for exact values and standard deviations).

Figure 16: Average Likert scale ratings: unacceptable English sentences

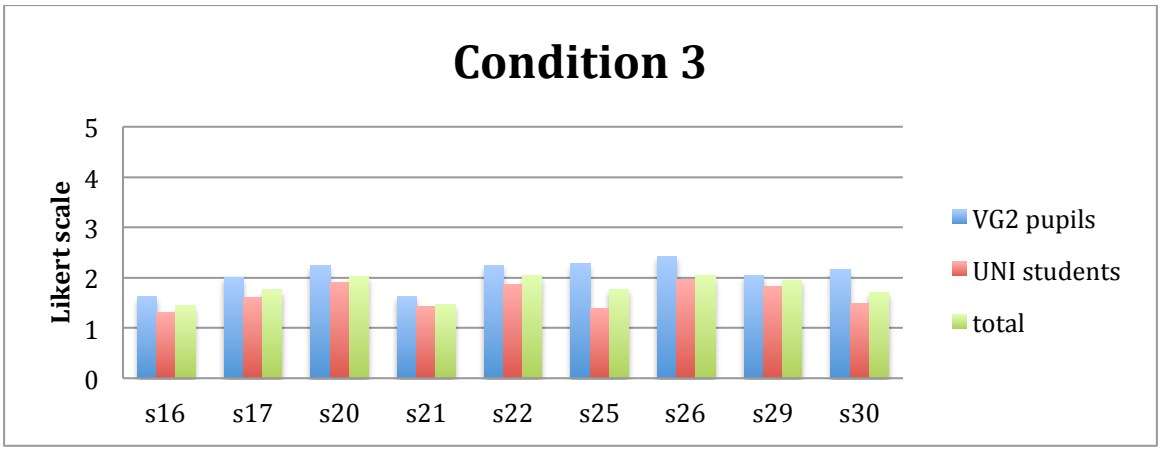


Figure 16 shows that the average judgments on this sentence type are generally low. The VG2 pupils have rated the sentences higher than the university students (See appendix 2 for exact values and standard deviations).

5. Discussion

The research questions and hypothesis in the present thesis, mentioned in chapter 1, are repeated here. 1) How will Norwegian L1 speakers with English as their L2 rate English anaphoric expressions with Norwegian structure? In case they accept them as grammatical, can this be explained in terms of transfer from L1?

The university students were believed to judge the sentences in the acceptability judgement test more according to the native speaker standard (closer to L1 competence) than the pupils in upper secondary due to a higher level of proficiency and longer exposure to target language. However, it was expected that some participants from both groups would accept the stative verb in combination with *do so* construction, but that it would be mostly pupils from upper secondary. 2) Can the Norwegian L1 speaker's judgements in the test be explained in terms of the Full Transfer/Full Access model or the Interface Hypothesis? And finally; 3) Does level of proficiency in the target language affect the participant's judgements?

Because the levels of proficiency were relatively high in both groups there were reasons to believe that they have received a substantial amount of input to provide them with abilities to judge the sentences native-like. However the university students were assumed to perform better on this task due to the assumption that they have reached a higher level of proficiency.

The main hypothesis has partly been confirmed; however there were some surprising judgements in the acceptability judgement test. First of all, there was a higher acceptance for sentences in condition 2 among the participants overall than expected, and more surprisingly the acceptance was higher among the more proficient group. In condition 2, the university students accepted the stative verb in combination with *do so* construction to a greater extent than the VG2 pupils. This finding contradicts the original hypothesis, which expected this to be the other way around. However, the rest of the judgements are consistent with the hypothesis, in that the university students judge the other sentence categories more native-like than the VG2 pupils. This discussion aims to address whether or not the judgments illustrate native-like mastery of the underlying parameters and whether or not these parameters rely on L1 intuitions or are L1 independent. In addition the discussion investigates if it is possible to see the judgements in relation to the Full Transfer/Full Access model or the Interface hypothesis.

The hypothesis is inconclusive with regards to the last research question, whether or not the level of proficiency will affect the participant's judgements. This is due to the fact that the grammar and vocabulary tests provided unreliable results. This matter will be mentioned in section 5.1.1.

5.1 Main findings

In chapter 4 the results from the ANOVA show that there is significant difference between the two groups in all three experimental conditions. Condition 1 included grammatical English sentences and these were rated as expected; relatively high by both groups but higher by the university students. The ungrammatical sentences in condition 3 have also been rated according to what was expected and the university students have rated them more native-like than the VG2 pupils. The most interesting condition however is condition 2, which also contained ungrammatical sentences. Looking at figure 11 in section 4.2.2 the differences between the groups in each condition become clear. Figure 12 also illustrates that the participants agree the most on the fact that sentences in condition 1 are acceptable. Condition 2 contains judgements from the whole scale indicating a variety amongst the participants with regards to whether or not the sentences are acceptable, hence it is difficult to interpret whether or not the participants have internalised this condition or not. Finally, figure 13 indicates that the university students are more nuanced in their ratings and use the whole scale to a greater extent than the VG2 pupils suggesting more confidence and a higher level of proficiency. Nevertheless, it is important to keep in mind that condition 1 contained more sentences than the other two experimental groups. This fact can have influenced the results.

5.1.1 Grammar and vocabulary test

The purpose of the grammar and vocabulary test was to get a picture of the participant's proficiency level in the target language. Unfortunately, the grammar and vocabulary test did not show a correlation between scores on the background tests and the judgements given on the acceptability judgement test. It seems like the tests were not sensitive or challenging enough to capture the possibly minor distinctions between participants. This is clearly indicated in section 4.1 in figures 1 and 2 showing the results from the grammar test. However, the mean scores are higher for the university students in both tests, indicating that they have a higher level of proficiency than the VG2 pupils. This is particularly the case for

the vocabulary test where the mean score is much higher for the university students than the VG2 pupils. Due to these results it is safe to say that the university students in general terms have a higher level of proficiency than the VG2 pupils. This is also expected for natural reasons such as age, but it is also crucial that these participants have studied English at university level. In spite of that, it is not possible to conclude whether or not the proficiency affected the judgements in the acceptability judgment test within the groups with the current results.

5.1.2 Condition 1

Condition 1 contained 15 sentences with English VPE. This sentence type is not grammatical in Norwegian when it is directly translated because it would typically require the pronoun *det* after a modal auxiliary or the pro-verb *gjøre* as proposed by Bentzen et al.(2013) and discussed in section 2.2.3. Furthermore, this particular *det,* which operates as a surface *det* has the distribution of a predicate. The results in chapter 4 indicate that this particular distinction between English and Norwegian is familiar to the participants, having said that, more so for the university students. 14 out of 15 sentences in the category received average scores above 4 from the university students whereas only 6 sentences were rated above 4 in the VG2 group. In addition the standard deviations are lower in the group of university students further indicating more native-like judgements made by this particular group. Sentence 3) below received the highest rating in the VG2 group (4.38 on the Likert scale) and sentence 11) received the highest rating in the group of university students (4.83 on the Likert scale). In terms of the Full Transfer/Full Access model it seems reasonable that the participants have been able to restructure their parameters settings to fit those of L2.

3) Ann was asked to vacuum every week. Sometimes she did and sometimes she didn't.

* Anne ble spurt om å støvsuge hver uke. Noen ganger gjorde hun, andre ganger

Anne was asked about to vacuum every week. Some times did she, other times

gjorde hun ikke.

did she not.

Anne ble spurt om å støvsuge hver uke. Noen ganger gjorde hun det, andre ganger

Anne was asked about to vacuum every week. Some times did she it, other times

gjorde hun det ikke.

did she it not .

"*Ann was asked to vacuum every week. Sometimes she did it and sometimes she didn't it".

11) Jake and Louisa are talking about getting a dog. Perhaps they will.

*Jake og Louisa snakker om å skaffe seg en hund. Kanskje vil de.

Jake and Louisa talk about to get them a dog. Perhaps will they.

Jake og Louisa snakker om å skaffe seg en hund. Kanskje kommer de til å gjøre det.

Jake and Loisa talk about to get them a dog. Perhaps will they to do it.

" *Jake and Louisa are talking about getting a dog.Perhaps they will that."

5.1.3 Condition 2

Condition two contained six sentences with a stative verb followed by a *do so* construction. In these cases *do* functions as a main verb. This particular deep anaphor does not accept stative antecedents hence the sentences in this condition were ungrammatical English sentences.

Based on the judgements made in this category there is a basis for suggesting that this structure is not internalised within the participant's English set of grammar rules. The assumption is drawn from the fact that the university students rated four out of six sentences in the category above 3 on the Likert scale. None of them were rated below 2. Surprisingly the VG2 pupils rated the sentences lower overall with only sentence 24 rated above 3 (3.05 on the Likert scale). However, none of the VG2 pupils rated below 2 on the scale either. Sentence 24) was rated the highest by both groups (VG2: 3.05, UNI: 4.17). Sentence 27) and 28) also received high ratings indicating that these sentences were acceptable to the

Norwegian participants in the experiment. However, there are a few ratings indicating non-acceptance.

24) *The children adore him. His colleagues do so too.

Barna forguder ham. Det gjør kollegene hans også.

Children.the adore him. So does colleagues his too.

"The children adore him. His colleagues do, too".

27) *Kate finally understands the science homework. Does Sam do so?

Kate forstår endelig naturfagleksa. Gjør Sam det?

Kate understand finally science homework.the. Does Sam it/do so?

"Kate finally understands the science homework. Does Sam?"

28) *Sarah and Ella strongly dislike broccoli. Luke does not do so.

Sarah og Ella misliker brokkoli svært sterkt. Men det gjør ikke Lars.

Sarah and Ella dislike broccoli very strong. But it/so does not Lars.

"Sarah and Ella strondly dislike broccoli. Lars does not".

It is possible that both groups have overgeneralised the *do so* constructions. Moreover, they are aware of this particular construction but they are not familiar with the fact that it cannot be used in combination with a stative predicate. It seems like the participants believe that the construction can be used with any type of verb. Sorace (2008) found that near-native speakers of Italian with English as their L1 are not sensitive to the constraints on post-verbal indefinite subjects in Italian due to the fact that English does not have a similar restriction. Sorace (2008) suggests that too little robust input which favours the right option can lead to divergence from target language options. Moreover, the construction is highly constrained. This can possibly explain the high level of acceptance of this structure amongst both test groups. It may be the case that they have not been able to restructure their L1 settings, hence transferring their knowledge of this type of structure from Norwegian to the English one.

5.1.4 Condition 3

The final experimental condition consisted of nine ungrammatical English sentences. These were ungrammatical because a pronoun such as *it* or *that* was added to the VPE. In Norwegian sentences with the same anaphor type, such a pronoun is usually required.

According to Bentzen et al (2013) this pronoun is the surface *det,* which has the distribution of a predicate and must be added in "Norwegian VPE's". The participant's judgment's in the test seem to convey that both groups are sensitive to this particular distinction between English and Norwegian. Condition 3 is closely related to condition 1 because they are only distinguishable with regards to pronouns such as *it* or *that* being present or not. By looking at the overall judgements in condition 1 as well, the assumption is even more reliable because they are generally rated as acceptable. And as concluded for the sentence type in condition 1, the fact that the participants reject the construction in this condition further indicates that the participants are at a proficiency level in the target language whereas they have successfully restructured their parameters settings to fit those of target language and can act independently from their L1. However it is important to notice that there is quite a difference between the two groups with regards to their ratings. The university students have rated all sentences below 2 on the Likert scale. The VG2 pupils on the other hand have rated two out of nine sentences below 2 on the scale. This indicates that both groups have in general judged the sentences unacceptable however the more proficient group, the university students are more determined in their judgements.

5.2 General Discussion

It is still open for interpretation whether or not the unexpected high ratings in condition 2 are due to transfer from L1 or just variable knowledge of the particular L2 construction in both test groups. However, it seems plausible to suggest that there may be some evidence of transfer from L1 in condition 2 while the judgements in condition 1 and 3 only can be explained in terms of varied levels of proficiency among the participants and between the two groups. A general tendency throughout the whole acceptability judgment test is that the university students show a stronger notion of confidence in all their judgments in all three conditions. Their judgements are more sensitive in the sense that they make use of the whole scale in opposition to the VG2 pupils who seem much more insecure from the fact that their ratings are much centred on the middle part of the scale. These findings are similar to those made by Listhaug (2015) in her doctoral thesis about the acquisition of spatial prepositions in French by native speakers of Norwegian. She compared acceptability judgments by French native speakers and a group with intermediate/high proficient French L2 users with Norwegian as their L1. The Norwegian group did not rate the judgements very different from

the native group, however the native group showed a more nuanced rating. In other words, they were more sensitive to the level of acceptability in the various utterances. Listhaug has interpreted this in such a way as the L2 users in her experiment are capable of choosing the right prepositions but not with the same graded meaning distinction as the native speakers, indicating that they have not mastered the relevance of geometric features, which the French L1 speakers do (2015).

In relation to this particular thesis it can be argued that it is the native-like sensitivity the participants lack, and therefore they rate certain ungrammatical anaphoric expressions, such as those in condition 2, higher than what native speakers of the target language would.
However the university students show a greater sensitivity than the VG2 pupils, indicating that they have a higher level of proficiency.

The surprising results in category 2 where university students rate sentences less native-like than the assumed lower proficiency group are however difficult to explain. Nevertheless it is possible that the more nuanced ratings made by the university students also can explain this matter. They are more sure of themselves and their level of proficiency hence they give judgements accordingly, also when they are wrong. In this case, they believe the sentences in condition 2 are grammatical and therefore express this by giving them a high level of acceptance. The fact that this condition has received high ratings of acceptance suggests that not all participants have internalised the conditions for this particular construction. Arguably the more native-like ratings given by the VG2 pupils in condition 2 do not indicate that they are more proficient English users than the university students. Rather the ratings can possibly reflect their judgements throughout the test which are less determined and more centred around the middle part of the scale.

It is however important to note that condition 1 and 3 have overall received native-like ratings with some exceptions. This suggests that most of the participants in the experiment have much knowledge of the anaphoric expressions they were asked to judge. Listhaug adds that the difference between native speakers and advanced L2 users are often not qualitative, but a matter of degree (Listhaug, 2015). In other words, at this level of proficiency it is not the making of major mistakes that distinguish the L2 user from the native speaker, rather it is the minor differences that require a great level of sensitivity. This can further be supported by the

fact that there may be maturational constraints as to what extent L2 speakers become native-like in a target language (Hyltenstam & Abrahamsson, 2000). In addition, the Interface Hypothesis claims that there is more to language acquisition than syntax. Other cognitive aspects in the L2 users' mind will therefore interface and result in non-native like features even in advanced L2 users. In terms of answering research question 2): can the Norwegian L1 speakers' judgements in the English test be explained in terms of the Full Transfer /Full Access model or the Interface hypothesis? It is difficult to interpret whether or not the judgments illustrate native like mastery of the underlying parameters and whether or not these parameters rely on L1 intuitions or are L1 independent. In other words, the question is still open for interpretation despite the fact that some assumptions have been possible to make. If a Full Transfer/Full Access Model is assumed it seems condition 1 and 3 are internalised within the Norwegian L1 speaker's English vocabulary. They have access to their L1, they have received substantial input and have been able to restructure their parameter settings. It may seem like the participants rely on their L1 intuitions when judging sentences in condition 2 due to absence of more comprehensible input and in view of the highly specific nature of the construction in condition 2 indicating that the conditions for this particular structure is not internalised.

The results reveal that Norwegians in general are familiar with English verb phrase anaphora patterns despite the fact that they show less native-like behaviour in particular constructions. Future research should include a similar study with better and more sensitive proficiency tests. At higher levels of proficiency predictors of grammar and vocabulary skills are limited. However, correlations between grammar and vocabulary levels and knowledge of anaphoric expressions could be investigated further due to the inconclusive correlation between these factors in this experiment. In addition, it could be helpful to include a control group with native speakers English to compare judgements. It could also be useful to include more participants. Another interesting approach to the same topic would be to investigate Norwegians' production of anaphoric expressions in English. It would be interesting to find out if production would lead to different results than what this thesis has found. In particular, would Norwegians produce sentences with *stative* verbs and *do so* anaphors?

6 Conclusions

The study of language processing and behaviour within speakers with more than one language stored in the brain is interesting because these language users have to juggle between their languages and activate the right one at the right time. The task may result in the appearance of features from the non-target language and this is referred to as transfer (Treffers-Daller & Sakel, 2012). Researchers within the field of SLA have argued that it is crucial to study transfer because it can help us understand the bilingual mind and the functioning of attentional control they must comprehend (Treffers-Daller & Sakel, 2012).

This thesis has looked at English acceptability judgement ratings of English anaphoric expressions made by Norwegian L1 speakers with English as their L2, and questioned whether or not there can be found evidence of transfer from Norwegian into English. It is an interesting topic to study because not much research has been done in comparing English and Norwegian, especially not in relation to anaphoric expressions. The acquisition of complex expressions that include anaphors are developed late even by children acquiring their native language (Ginzburg & Kolliakou, 2009). Hence, it is interesting to investigate whether or not Norwegians are sensitive to English grammar to such an extent that they are able to capture these differences.

In the acceptability judgement test, the participants were exposed to three different experimental conditions containing three different sentence types. In light of previous research done on transfer amongst proficient L2 users the thesis investigated whether ratings in the various conditions could be explained in terms of the Full Transfer/ Full Access model or in terms of the interface hypothesis. This question is still open for interpretation, however the results arguably suggest that English conditions for VPE seem to be familiar to the participants in both groups. This conclusion is drawn from the fact that both groups accept English VPE and reject utterances, which have the pronoun *that* added to the VPE despite the fact that this feature is required in similar anaphoric expressions in Norwegian. This further tells us that the underlying parameters probably are L1 independent. Anyhow, it is important to notice that the university students are more confident in their judgements indicating that the level of proficiency plays a role.

Sentences with a stative predicate in combination with *do so* anaphors on the other hand accepted by both groups. In the hypothesis, it was predicted that this particular sentence type would be the most challenging construction for the participants to judge. However it was not expected that the pupils in upper secondary would rate this particular sentence category more native-like than the university students. Rather, it should be the other way around.
Why the university students rated the particular category higher is not yet clear. Having said that throughout the test the university students are more determined in their ratings, in other words they show more confidence. The VG2 pupil's rating of this construction reflects their ratings throughout the whole test hence it is not taken as a predictor for higher levels of proficiency among this group. It is rather concluded that both groups arguably depend on their L1 knowledge resulting in transfer.

Lack of correlations between scores on the background tests and the acceptability judgement test provides inconclusive results with regards to whether or not proficiency plays a role in performance in the acceptability judgement test. Despite of that the presupposed higher level of proficiency group has in general higher scores on both the grammar and the vocabulary test. The results therefore indicate that a higher level of proficiency leads to more native-like ratings in the particular constructions excluding the stative verb and *do so* construction.

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Appendices

Appendix 1: Relevance for teaching

Because I attend the teacher-training programme, I wanted my research question to be somewhat relevant for my later career as an English teacher for Norwegian pupils with English as their second language. The thesis has looked at Norwegian pupil's and student's judgements on anaphoric expressions in English, and whether or not these structures are internalised within the learner's mind. Investigating this matter can tell me as a future teacher something about how Norwegians acquire English. In other words, to what extent Norwegians make use of their Norwegian grammar when using English.

A study such as this one emphasises the great advantage Norwegian children, teenagers and adults have when it comes to input in that it reveals that Norwegians have much knowledge of complex syntactic structures in another language than their mother tongue. The fact that Norwegians in general have a high level of proficiency is connected to the great exposure of target language input Norwegians receive every day. As a teacher it is valuable to be aware of the influence quality input have on second language learners in order to continuously improve the level of proficiency among Norwegian pupils. The English education children and teenagers receive in school must continue to focus on comprehensible input as a crucial supplement to the already present primary linguistic data. The thesis also reveals where Norwegians show non-native like judgements and also this is useful because being aware of weaknesses makes it possible to work on improvement.

Finally, working on this thesis has given me valuable insight in the event of planning and implement a project of substantial size. This experience I believe is beneficial for my future career as a teacher because the profession requires a structured mind and good planning skills.

Appendix 2: Average rating for each individual sentence

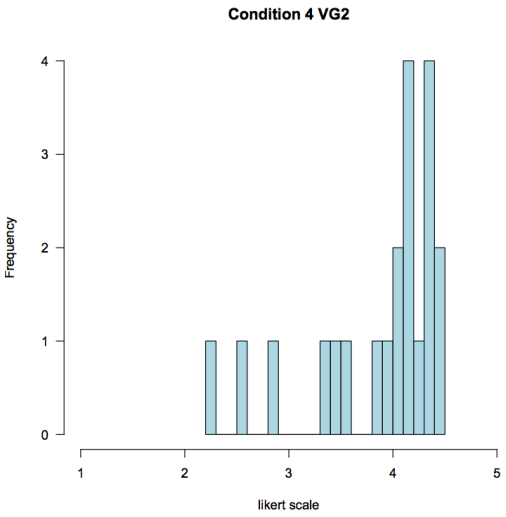
Condition	Sentence	Mean VG2	Std.deviation VG2	Mean UNI	Std.deviation UNI
1	**1**	4.10	1.00	4.61	0.94
	2	3.52	1.36	4.43	0.84
	3	4.38	1.02	4.78	0.42
	4	3.95	1.12	4.52	0.99
	5	4.14	1.42	4.78	0.52
	6	4.29	1.01	4.57	0.66
	7	3.71	1.55	4.13	1.10
	8	3.67	1.35	4.57	1.04
	9	3.48	1.36	4.57	0.59
	10	3.33	1.53	4.09	1.12
	11	4.29	0.85	4.83	0.39
	12	4.05	0.97	4.65	0.71
	13	4.00	1.18	4.13	1.22
	14	3.95	1.07	4.39	0.72
	15	3.33	1.28	3.35	1.56
2	**18**	2.48	1.40	2.83	1.44
	19	2.48	1.25	2.91	1.41
	23	2.95	1.40	3.17	1.11
	24	3.05	1.32	4.17	1.03
	27	2.38	1.43	3.30	1.36
	28	2.76	1.45	3.39	1.20
3	**16**	1.62	0.97	1.30	0.63
	17	2.00	1.18	1.61	0.99
	20	2.24	1.34	1.91	1.12
	21	1.62	0.80	1.43	0.66
	22	2.24	1.37	1.87	1.22
	25	2.29	1.45	1.39	0.72
	26	2.43	1.21	1.96	1.11
	29	2.05	1.02	1.83	1.27
	30	2.17	1.37	1.48	0.79
4	**31**	3.19	1.44	4.61	0.78

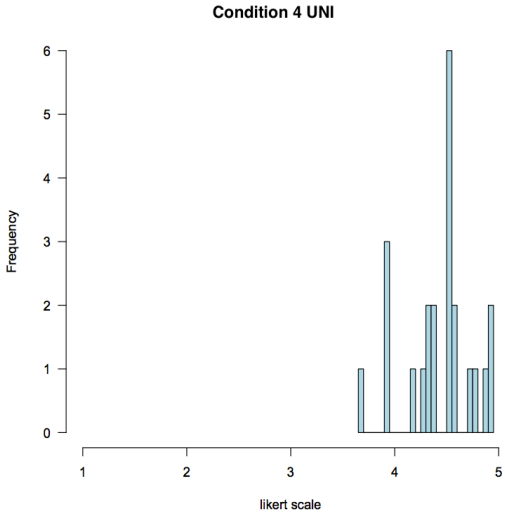
	32	3.19	1.63	4.61	0.58
	33	3.81	1.44	4.35	1.07
	34	4.24	0.83	4.30	1.02
	35	4.62	0.92	4.52	0.90
	36	4.48	1.12	4.83	0.65
	37	3.90	1.41	4.00	1.00
	38	4.57	0.60	4.22	1.20
	39	3.86	1.31	4.26	1.29
	40	4.76	0.44	4.78	0.42
	41	4.00	1.14	4.30	1.15
	42	3.76	1.30	4.39	1.03
	43	4.29	1.14	4.78	0.67
	44	4.19	1.12	4.61	0.58
	45	3.43	1.25	4.09	0.79
5	**46**	2.86	1.39	1.91	1.20
	47	2.19	1.36	1.78	1.17
	48	1.29	0.56	1.30	0.63
	49	1.19	0.40	1.04	0.21
	50	1.24	0.54	1.09	0.29
	51	1.29	0.56	1.09	0.29
	52	1.38	0.59	1.48	1.20
	53	1.33	0.73	1.26	0.86
	54	1.14	0.36	1.13	0.46
	55	1.48	0.98	1.30	0.63
	56	1.29	0.56	1.17	0.49
	57	1.19	0.40	1.09	0.29
	58	1.48	1.08	1.30	0.93
	59	1.55	0.74	1.35	0.71
	60	1.29	0.46	1.22	0.52

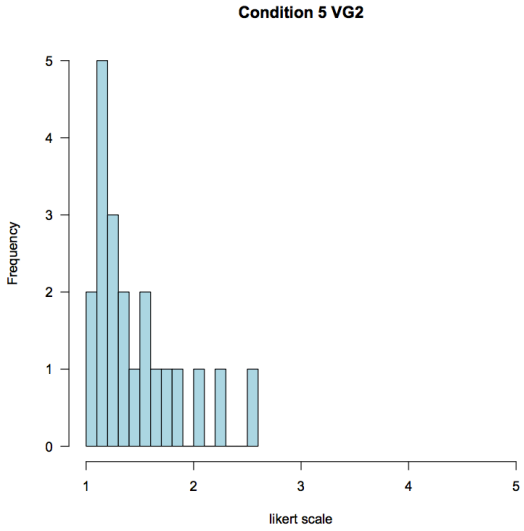
Appendix 3: Mean judgements in the filler conditions in the acceptability judgement test

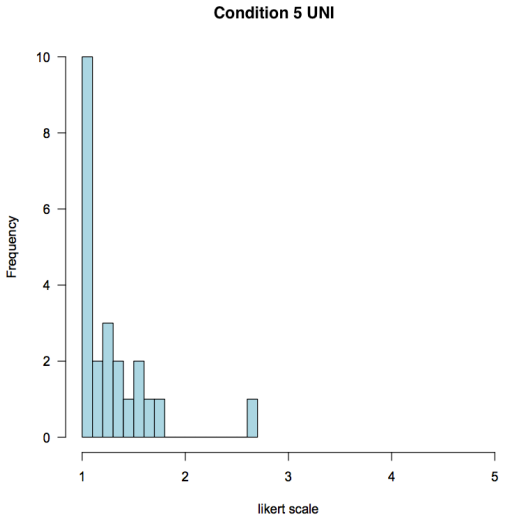
Sentence	Group	Mean	Std.Deviation	Participants
Condition 4 Acceptable Engl. and Norw.	VG2 students	3.876	0.640	21
	University students	4.438	0.335	23
	Total	4.170	0.573	44
Condition 5 Unacceptable Engl. and Norw.	VG2 students	1.480	0.421	21
	University students	1.301	0.381	23
	Total	1.387	0.406	44

Appendix 4: Frequency distributions of the filler categories

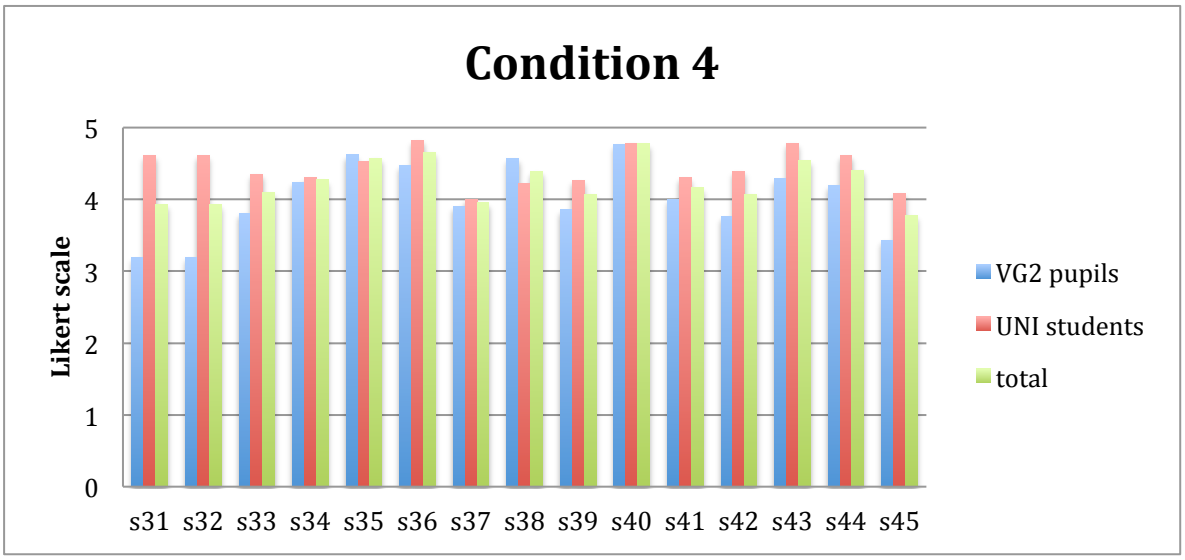


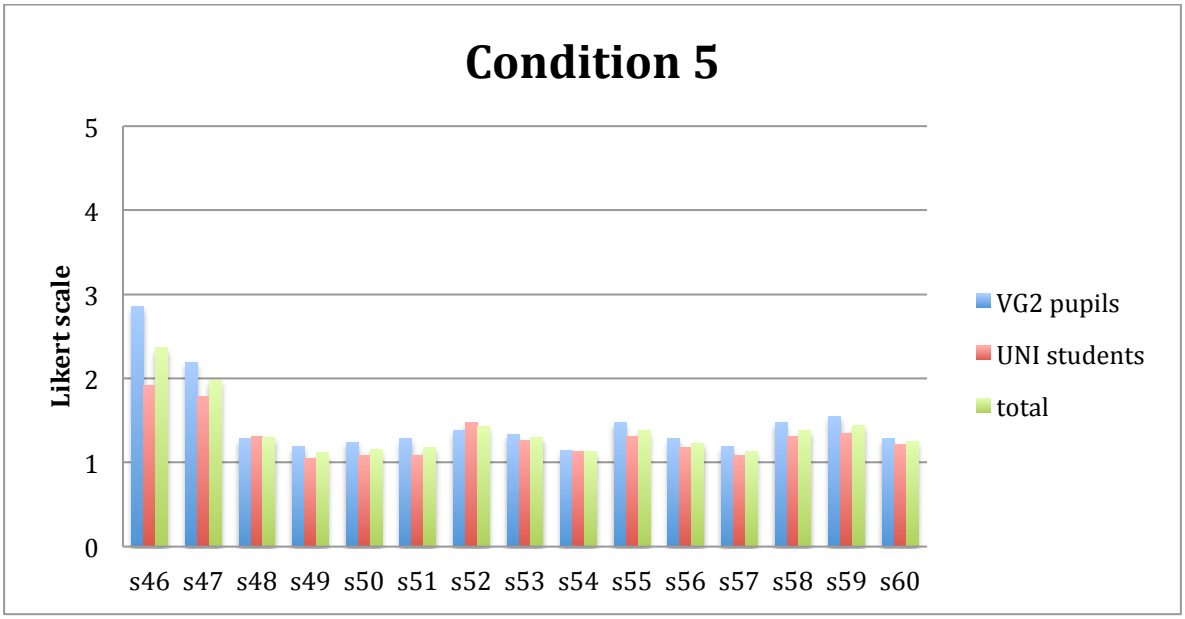






Appendix 5: Average Likert scale ratings: filler categories





Appendix 6: Acceptability judgement test sorted after condition

Test sentences:
1) John loves music. Does Mary do so?

Not acceptable 1 2 3 4 5 Acceptable

2) 9th grade is saving money for a school trip. I know that 10th grade, too.

Not acceptable 1 2 3 4 5 Acceptable

3) Kate always eats all of her packed lunch. Henry never does so.

Not acceptable 1 2 3 4 5 Acceptable

4) Eric and Peter didn't manage to fix everything they had planned, but I don't see how they could have done it, with such short notice.

Not acceptable 1 2 3 4 5 Acceptable

5) Eric claimed he didn't care about his grade. But his friends knew he did.

Not acceptable 1 2 3 4 5 Acceptable

Category 1: acceptable in English, not acceptable in Norwegian

1) I would not be doing this if I did not think I was able to.

Not acceptable 1 2 3 4 5 Acceptable

2) I asked if it would be ok to order tickets now. They said it would.

Not acceptable 1 2 3 4 5 Acceptable

3) Ann was asked to vacuum every week. Sometimes she did and sometimes she didn't.

Not acceptable 1 2 3 4 5 Acceptable

4) Peter is worried, and he has reasons to be.

Not acceptable 1 2 3 4 5 Acceptable

5) Elsa claimed she didn't like him. But secretly she did.

Not acceptable 1 2 3 4 5 Acceptable

6) They didn't know what had happened, but as soon as they did they understood the situation.

Not acceptable 1 2 3 4 5 Acceptable

7) I have never meant to treat you badly. If I have, let me know.

Not acceptable 1 2 3 4 5 Acceptable

8) People didn't think she was capable of climbing Mount Everest. But she knew she was.

Not acceptable 1 2 3 4 5 Acceptable

9) They displayed no signs of impatience. There was no reason why they should.

Not acceptable 1 2 3 4 5 Acceptable

10) It was me who broke the vase. They had not figured it out yet, but they would.

Not acceptable 1 2 3 4 5 Acceptable

11) Jake and Louisa are talking about getting a dog. Perhaps they will.

Not acceptable 1 2 3 4 5 Acceptable

12) We want to buy a new house. I don't think we will, but we might.

Not acceptable 1 2 3 4 5 Acceptable

13) He didn't know if she had any idea of his plan, but he hoped she didn't.

Not acceptable 1 2 3 4 5 Acceptable

14) Frank is always complaining. Mary never does.

Not acceptable 1 2 3 4 5 Acceptable

15) I have never been mistaken about it before, but this time I admit I have.

Not acceptable 1 2 3 4 5 Acceptable

Category 2: unacceptable/odd in English, acceptable in Norwegian

18) Ann loves chocolate. Does Ola do so?

Not acceptable 1 2 3 4 5 Acceptable

19) They knew what was going to happen. Did Ted also do so?

Not acceptable 1 2 3 4 5 Acceptable

23) He was arrested for possessing illegal drugs. And his friend was so too.

Not acceptable 1 2 3 4 5 Acceptable

24) The children adore him. His colleagues do so too.

Not acceptable 1 2 3 4 5 Acceptable

27) Kate finally understands the science homework. Does Sam do so?

Not acceptable 1 2 3 4 5 Acceptable

28) Sarah and Ella strongly dislike broccoli. Luke does not do so.

Not acceptable 1 2 3 4 5 Acceptable

Category 3: unacceptable in English, acceptable in Norwegian

16) I asked if it would be ok to order tickets now. They said it would that.

Not acceptable 1 2 3 4 5 Acceptable

17) You might think that Kate and Oliver have eaten the cake, but they haven't that.

Not acceptable 1 2 3 4 5 Acceptable

20) The pupils were cold after being outside for three hours. The teachers were that too.

Not acceptable 1 2 3 4 5 Acceptable

21) He knows what his present will be. Mona does not that.

Not acceptable 1 2 3 4 5 Acceptable

22) Can Norah spend the night with you tonight? Of course she can that.

Not acceptable 1 2 3 4 5 Acceptable

25) Mary has been practicing getting dressed on her own. Now she can it without help.

Not acceptable 1 2 3 4 5 Acceptable

26) The teacher asked me if I was disappointed. I said I was that.

Not acceptable 1 2 3 4 5 Acceptable

29) John asked if she would be annoyed by the noise. She said she would that.

Not acceptable 1 2 3 4 5 Acceptable

30) Pete was surprised, but Mona was not that.

Not acceptable 1 2 3 4 5 Acceptable

Category 4: acceptable in both English and Norwegian

31) I would not have mowed the lawn if I had known I didn't have time to do it.

Not acceptable 1 2 3 4 5 Acceptable

32) 94 per cent of people living in these villages have done so for the past ten years or so.

Not acceptable 1 2 3 4 5 Acceptable

33) Anna won the race. If I practice like she did, I can win it too.

Not acceptable 1 2 3 4 5 Acceptable

34) Elsa and Johanna are hired as extra waitresses. They don't help as much as they feel they should.

Not acceptable 1 2 3 4 5 Acceptable

35) They had prepared everything in detail. Therefore they could focus on stealing as much as they could.

Not acceptable 1 2 3 4 5 Acceptable

36) People don't always behave the way they should.

Not acceptable	1	2	3	4	5	Acceptable

37) Kate doesn't have a ticket, but Julie has.

Not acceptable	1	2	3	4	5	Acceptable

38) I didn't expect them to support me in the way they did.

Not acceptable	1	2	3	4	5	Acceptable

39) John jumped from the tallest cliff. I want to do it, too.

Not acceptable	1	2	3	4	5	Acceptable

40) You shouldn't complain. Henry would have loved to go if he could.

Not acceptable	1	2	3	4	5	Acceptable

41) I didn't have time to inform them, but Sarah will do it.

Not acceptable	1	2	3	4	5	Acceptable

42) I am not sure how we will solve the problem. But someone has to do it!

Not acceptable	1	2	3	4	5	Acceptable

43) I need to clean the house today, even though I had planned to do it tomorrow.

Not acceptable	1	2	3	4	5	Acceptable

44) The owners feel the dog is not growing as fast as they think she should. They want to take her to the vet.

Not acceptable	1	2	3	4	5	Acceptable

45) If the authorities recommend her going home, she will do it.

Not acceptable	1	2	3	4	5	Acceptable

Category 5: unacceptable in both English and Norwegian

46) Eric prepared a fabulous meal. If I prepare it like he, I can serve it too.

Not acceptable 1 2 3 4 5 Acceptable

47) I would not have mowed the lawn if I had known I didn't have time to do.

Not acceptable 1 2 3 4 5 Acceptable

48) Sarah was angry with me. I think that Bill, too.

Not acceptable 1 2 3 4 5 Acceptable

49) Thomas wants a new tent for Christmas. Henry it, too.

Not acceptable 1 2 3 4 5 Acceptable

50) Sarah bought a ticket for the concert, because Bill.

Not acceptable 1 2 3 4 5 Acceptable

51) Anna wasn't at school today, although Tina.

Not acceptable 1 2 3 4 5 Acceptable

52) Perhaps you heard Hannah got accepted to the school, and that Anna, too.

Not acceptable 1 2 3 4 5 Acceptable

53) Henry joined the party because Julia.

Not acceptable 1 2 3 4 5 Acceptable

54) Martha was upset because she missed the show. Erica it, too.

Not acceptable 1 2 3 4 5 Acceptable

55) John bought groceries today. I don't know whether Sarah too.

Not acceptable 1 2 3 4 5 Acceptable

56) I have been to the library today. I don't know if Frank.

Not acceptable	1	2	3	4	5	Acceptable

57) I had heard of the film which Sarah discussed today. I hadn't heard of the book which she.

Not acceptable	1	2	3	4	5	Acceptable

58) Jack didn't participate in the survey, although Susan it.

Not acceptable	1	2	3	4	5	Acceptable

59) The Norwegian team practiced their technique today. I don't know whether the Swedish team, too.

Not acceptable	1	2	3	4	5	Acceptable

60) Kate and Simon want to travel around the world. They think Lisa too.

Not acceptable	1	2	3	4	5	Acceptable

Appendix 7: Background questionnaire

Bakgrunnsinformasjon for forskningsprosjekt om nordmenns vurderinger av anaforiske setninger og uttrykk

Tusen takk for at du har sagt ja til å delta i forskningsprosjektet. I dette skjemaet ber vi om bakgrunnsinformasjon som er nødvendig for at resultatene fra undersøkelsen skal kunne brukes. Alle opplysningene du gir her, vil senere bli behandlet uten direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger gjennom en deltakerliste. Det er kun autorisert personell knyttet til prosjektet som har adgang til deltakerlisten og som kan finne tilbake til infoen. Del B og C av dette skjemaet vil bare oppbevares med koden. All informasjon vil bli anonymisert ved prosjektslutt. Det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres.
Legg merke til at skjemaet har 4 sider.

Med takknemlig hilsen,

Masterstudent Mie Marie Grønning,

Professor Christopher Wilder og professor Mila Vulchanova, NTNU

Del A: Personlig informasjon

Fag/Yrke/Linje/Studieretning?: _____
Fødselsår: _____
Kjønn ☐ Kvinne ☐ Mann
Bostedskommune: _____

Deltakerkode: (Fylles inn av prosjektleder)

Del B: Språklig bakgrunn

Morsmål

Er norsk morsmålet ditt?

☐ Ja ☐ Nei

Hvis ja, har du andre morsmål i tillegg?

☐ Ja ☐ Nei

Hvis ja, hvilke(t) språk? _____

Hvilket språk bruker dere hjemme? _____

Hvor ofte leser du tekst skrevet på norsk?

□ hver dag □ flere ganger per uke □ et par ganger i uken
□ av og til □ aldri

Hvor ofte skriver du tekst på norsk?

□ hver dag □ flere ganger per uke □ et par ganger i uken
□ av og til □ aldri

Engelsk og andre fremmedspråk

I **engelsk**, hvordan vurderer du ferdighetene dine på hvert av disse områdene?

	Grunnleggende	**Middels**	**Avansert**	**Flytende**
Lesing				
Skriving				
Snakke				
Lytte				
Totalt				

Har du bodd i, eller hatt lengre opphold i, et land hvor engelsk er hovedspråk?

☐ Ja ☐ Nei

Hvis ja, hvor lenge varte oppholdet/oppholdene? _____

Har du vært på kortere (under 14 dager) reise i et land hvor engelsk er hovedspråk?

☐ Ja ☐ Nei

Har du bodd i, eller hatt lengre opphold i, et land hvor annet enn engelsk er hovedspråk?

☐ Ja ☐ Nei

Hvis ja, hvor var det, og hvor lenge varte oppholdet/oppholdene?

_____

Hvilke språk kan du utover morsmålet ditt og engelsk?
(Hvis du ikke snakker andre språk, hopp over denne)

Språk	**Nivå**			

	Grunnleggende	Middels	Avansert	Flytende
Tysk				
Fransk				
Spansk				
- angi språk				
- angi språk				
- angi språk				

Hvor ofte leser du tekster på engelsk?
hver dag flere ganger pr uke et par ganger i uken av og til aldri

Hvor ofte skriver du tekster på engelsk?
hver dag flere ganger pr uke et par ganger i uken av og til aldri

Hvor ofte lytter du til/hører du engelsk?
hver dag flere ganger pr uke et par gagner i uken av og til aldri

Hvor ofte ser du engelskspråklige serier/filmer?
hver dag flere ganger pr uke et par ganger i uken av og til aldri

Når du ser engelskspråklige filmer, hvilken av disse alternativene bruker du oftest?
undertekst på norsk (morsmål) undertekst på engelsk ingen undertekst

Hvor ofte ser du engelskspråklige tegneseriefilmer/serier?
hver dag flere ganger pr uke et par gagner i uken av og til aldri

Hvor ofte spiller du engelskspråklige dataspill?
hver dag flere ganger pr uke et par ganger i uka av og til aldri

Hvilken type spill spiller du? _____

Del C: Andre faktorer i språklæring

Har du, eller har du hatt, problemer med synet utover normal brillebruk?

☐ Ja ☐ Nei

Har du, eller har du hatt, problemer med hørselen?

☐ Ja ☐ Nei

Har du, eller har du hatt, språkvansker av noe slag (spesifikke språkvansker, lese-/lærevansker eller lignende)?

☐ Ja ☐ Nei

Hvis ja, spesifiser: _____

Har du, eller har du hatt, andre diagnoser som kan tenkes å påvirke språklæring (ADHD, autisme eller lignende)?

☐ Ja ☐ Nei

Appendix 8: Consent form university students

Forespørsel om deltakelse i forskningsprosjekt:

Acceptability Judgements of English Anaphoric Expressions made by Norwegian L1 Speakers

Til studenter ved x universitet.

Jeg er en masterstudent ved NTNU som søker deltakere til et forskningsprosjekt i forbindelse med masteroppgaven min i engelsk. Formålet med prosjektet er å undersøke i hvilken grad nordmenn skiller engelsk og norsk setnings-oppbygning fra hverandre når det gjelder anaforiske setninger og uttrykk.

I den forbindelse trenger jeg studenter med norsk som morsmål til å delta i studien.

Dersom du ønsker å delta, blir du bedt om å gjennomføre tre tester. De to første testene er mindre tester som skal gi en indikasjon på grammatikk og vokabularkunnskaper i engelsk. Den tredje testen, hovedtesten, vil bestå av en rekke setninger som du skal vurdere. Du vurderer dem ved hjelp av en skala ut i fra hvor akseptable du synes de er. Til sammen vil alt ta omtrent en time og 30 minutter. De samme testene skal gjennomføres av elever ved videregående skole. Resultatene fra testene vil sammenlignes for å se om det finnes relevante forskjeller mellom setninger som blir vurdert akseptable eller ikke.

Testene vil være fullstendig anonyme. Resultatet fra testene vil kun bli brukt i forbindelse med masterprosjektet og vil være fullstendig anonymiserte før de blir publisert. Mine medarbeidere i prosjektet er mine veiledere på NTNU; professor Christopher Wilder og professor Mila Vulchanova. I første omgang lagres alle resultatene med en personkode som tilsvarer hver deltaker på en atskilt navneliste slik at navn på deltaker og resultater på testene ikke oppbevares på samme sted. Prosjektet avsluttes i mai 2016, og da vil data og deltakers personopplysninger bli slettet helt.

Det er helt frivillig å delta i studien, og ved å ikke svare på dette skjemaet tolkes det som en indikasjon på at du ikke ønsker å delta. Dersom du ønsker å være med kan du likevel velge å trekke seg når som helst. Det trenger ikke gis noen begrunnelse for en eventuell reservering. Ønskes mer informasjon om studien spør gjerne!

Hvis du velger å si ja til å delta i forskningsprosjektet, vil du få utdelt et spørreskjema som må besvares før utførelsen av testene. Her vil du bli spurt om relevant informasjon med tanke på din bakgrunn for engelsk. Spørsmålene vil blant annet omhandle hvor ofte du ser, hører eller bruker engelsk i hverdagen, men også om du har hatt noen relevante utfordringer med tanke på språklæring. Dette kan for eksempel gjelde syn eller eventuelle diagnoser. Denne informasjonen vil behandles konfidensielt på lik linje med all annen personlig informasjon som kommer fram gjennom prosjektet. Skulle du se at du ikke ønsker å fylle ut dette

skjemaet, kan du la være å returnere det, og du vil da regnes som å ha trukket deg fra prosjektet uten at du trenger å foreta deg noe mer.

Med vennlig hilsen,

Mie Marie Grønning,
Mastergradsstudent ved institutt for språk og litteratur, NTNU
Tlf: 97021741, email: miemg@stud.ntnu.no

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

Samtykke til deltakelse i studien

Ja, jeg er villig til å delta i forskningsprosjektet

_____ _____

deltakers underskrift sted og dato

Appendix 9: Consent form VG2 pupils

Forespørsel om deltakelse i forskningsprosjekt:

Acceptability Judgements of English Anaphoric Expressions made by Norwegian L1 Speakers

Til elever ved X videregående skole.

Jeg er en masterstudent ved NTNU som søker deltakere til et forskningsprosjekt i forbindelse med masteroppgaven min i engelsk. Formålet med prosjektet er å undersøke i hvilken grad nordmenn skiller engelsk og norsk setnings-oppbygning fra hverandre når det gjelder anaforiske setninger og uttrykk.

I den forbindelse trenger jeg elever med norsk som morsmål til å delta i studien.

Dersom du ønsker å delta, blir du bedt om å gjennomføre tre tester. Det er viktig å understreke at dette ikke er tester som har noe med skolen å gjøre, men tester som har forskningsmessig hensikt. De to første testene er mindre tester som skal gi en indikasjon på grammatikk og vokabularkunnskaper i engelsk. Den tredje testen, hovedtesten, vil bestå av en rekke setninger som du skal vurdere. Du vurderer dem ved hjelp av en skala ut i fra hvor akseptable du synes de er. Til sammen vil alt ta omtrent en time og 30 minutter. De samme testene skal gjennomføres av studenter ved x universitet. Resultatene fra testene vil sammenlignes for å se om det finnes relevante forskjeller mellom setninger som blir vurdert akseptable eller ikke.

Testene vil være fullstendig anonyme. Resultatet fra testene vil kun bli brukt i forbindelse med masterprosjektet og vil være fullstendig anonymiserte før de blir publisert. Mine medarbeidere i prosjektet er mine veiledere på NTNU; professor Christopher Wilder og professor Mila Vulchanova. I første omgang lagres alle resultatene med en personkode som tilsvarer hver elev på en atskilt navneliste slik at navn på eleven og resultater på testene ikke oppbevares på samme sted. Prosjektet avsluttes i mai 2016, og da vil data og elevers personopplysninger bli slettet helt.

Det er helt frivillig å delta i studien, og ved å ikke svare på dette skjemaet tolkes det som en indikasjon på at du ikke ønsker å delta. Dersom du ønsker å være med kan du likevel velge å trekke seg når som helst. Det trenger ikke gis noen begrunnelse for en eventuell reservering. Ønskes mer informasjon om studien, spør meg!

Hvis du velger å si ja til å delta i forskningsprosjektet, vil du få utdelt et spørreskjema som må besvares før utførelsen av testene. Her vil du bli spurt om relevant informasjon med tanke på din bakgrunn for engelsk. Spørsmålene vil blant annet omhandle hvor ofte du ser, hører eller bruker engelsk i hverdagen, men også om du har hatt noen relevante utfordringer med tanke på språklæring. Dette kan for eksempel gjelde syn eller eventuelle diagnoser. Denne informasjonen vil behandles konfidensielt på lik linje med all annen personlig informasjon som kommer fram gjennom prosjektet. Skulle du se at du ikke ønsker å fylle ut dette

skjemaet, kan du la være å returnere det, og du vil da regnes som å ha trukket deg fra prosjektet uten at du trenger å foreta deg noe mer.

Med vennlig hilsen,

Mie Marie Grønning,
Mastergradsstudent ved institutt for språk og litteratur, NTNU
Tlf: 97021741, email: miemg@stud.ntnu.no

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

Samtykke til deltakelse i studien

Ja, jeg er villig til å delta i forskningsprosjektet

_____ _____

Elevens navn sted og dato