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Subject-verb agreement in written English by L1 Norwegian university students

Error patterns, causes, and implication for teaching

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1 Introduction

A great number of studies have shown that L2 learners of English struggle with subject-verb (S-V) agreement due to the complex nature of functional morphology which is a bottleneck of L2 acquisition (Slabakova 2013, 2016). It has been argued that S-V agreement is a stagnant problem even at a later stage of L2 acquisition as advanced leaners often make agreement errors despite their high proficiency in English in general (e.g., Goldschneider and DeKeyser, 2001; Jensen 2016; Lardiere 1998a and b; Lardiere 2000; White 2003a). Research has also shown that even though there is a great deal of variability in S-V agreement and the use of the third person singular *-s* (hereafter 3SG *-s*), this does not mean that the syntax of S-V agreement is impaired in L2 learners' grammar (e.g., Prévost and White 2000; White 2003a; Ionin and Wexler 2002). Evidence for the unimpaired syntax of S-V agreement comes from high proficiency in S-V agreement with the verbs of *be* (e.g. Ionin and Wexler 2002), which is argued to be acquired early in L2 acquisition due to a more economical movement process associated with *be* (Chomsky 1989). While suppletive agreement with the verbs of *be* (e.g., *am*, *are*, *is*, *was*, *were*) is acquired fairly early, affixial agreement with lexical verbs (e.g., *She walk**s***..) is argued to be difficult to master as it involves functional morphology with complex composites of features such as person, number, tense and agreement.

Morphological variability, which refers to L2 learners' inconsistency in supplying an obligatory inflectional morpheme (e.g., 3SG *-s*) (Bañón et. al. 2017), has been one of the key issues in L2 acquisition of S-V agreement, which led to various hypotheses for explaining difficulties with affixal agreement. While some associate morphological variability with syntactic deficits of the agreement feature in L2 learners' grammar (e.g., Hawkins and Chan 1997; Hawkins 2001), others contend that it should be attributed to non-syntactic factors such as mapping between syntax and morphology (e.g., Ionin and Wexler 2002)), prosodic constraints in L1 (e.g., Goad and White 2004), or processing difficulties (e.g., Jiang 2004; Ocampo 2013). A number of studies have also suggested that stagnant problems with S-V agreement even at a later stage of L2 acquisition are associated with different subject types, given that L2 learners demonstrate high accuracy in S-V agreement with personal pronouns (and demonstratives), which are also highly frequent in the input (e.g., Fisher 1985; Garshol 2019; Killie 2019a; Ocampo 2013; Vaurula 2012). On the other hand, noun phrase (NP) subjects are still problematic for young Norwegian learners of English (Garshol 2019; Killie 2019a).

Adopting the view that the syntax of agreement is fully intact in L2 learners' grammar, this study investigates subject-verb (S-V) agreement in written English by Norwegian university students, as a follow-up of the previous studies with younger Norwegian participants. The aim of the study is to analyze agreement errors produced by university students in order to chart out the most difficult conditions for S-V agreement in L2 English at a later stage of language development. It is also expected that the findings of the study would help us gain a better insight into classroom teaching by identifying primary factors for agreement errors which need to be prioritized in teaching and practice.

The study draws on an analysis of learner language (interlanguage) focusing on the feature of subject-verb agreement across different subject and verb types (the most frequent verbs, *be, do, have* versus lexical verbs), based on a corpus of written English produced by L1 Norwegian university students registered in two English courses in year 2018-2019. This study is also part of the research project within the Dept. of teacher education at UiT, which is approved by NSD (Norsk senter for forskningsdata) for using students' texts (see appendix for the approval by NSD). The research project entitled "Teaching and Learning English" (TALE, 2019-2022) aims to gain better knowledge and understanding about how English grammar is learnt and taught for L1 Norwegian learners at a university level, with the aim of contributing to more effective teaching on grammar. The goal is to be able to chart out which aspects of the English grammar are most difficult to learn and which aspects may come for free through language input and uses and hence need less focus in teaching. The studies in this project are based on various data sources such as learner corpora, textbooks, interviews with students and school teachers, among other things, including self-collected learner texts which this master project is based on.

The thesis is organized as follows: In the next chapter, relevant theories are discussed and critically reviewed as a foundation of this research. The theory of learner language (interlanguage), previous research on S-V agreement both in L1 and L2, complexity of number marking of English, and previous research on S-V agreement by Norwegian learners are reviewed, which will be used in the discussion of the findings. Chapter 3 presents methodology of this research and describes how data are collected and analyzed, along with information about the participants. Chapter 4 presents findings and discusses them against the previous research, which lays the basis for answering research questions presented at the end of chapter 2. The implication of the findings for classroom teaching is also taken up in chapter 5 before a conclusion is provided in chapter 6.

2 Theoretical Background

In this chapter, I first review the theory of interlanguage which is a primary source of data used in any L2 acquisition research, highlighting its variability across and within (a) task(s). In the next section, two conflicting hypotheses accounting for morphological variability are presented, namely a representational versus non-representational account. The following session is invested in providing supporting evidence for the non-representational account which this thesis adopts. To highlight the complexity of S-V agreement, apart from functional morphology being the bottleneck of L2 acquisition, I also discuss how complex number marking is in English in the subsequent section. In section 2.5. previous research on S-V agreement in L1 acquisition is further discussed, focusing on difficult agreement conditions for native speakers of English, which are likely to be also challenging for L2 learners. The final section of this chapter reviews previous studies on S-V agreement among L1 Norwegian learners of English, which deal with both comprehension (Jensen 2016) and production tasks (Garshol 2019; Killie 2019a and b). At the end of this chapter, research questions are presented based on the reviewed literature.

2.1 Learner language (or Interlanguage)

As this research is interested in charting out what Norwegian university students struggle most in using S-V agreement in English, an important source of information comes from learner language. Learner language, according to Ellis and Barkhuizen (2005), refers to oral or written language produced by L2 learners, which serves as the primary data for studying second language acquisition. Learner language can be used to inform us about L2 learners' competence and how it develops over the course of L2 acquisition, provided with more input or individual learners' experiences with L2 (e.g., practice, explicit instruction) (see also Vaurula 2012).

Learner language is also called "interlanguage", which is the term first introduced by Selinker (1972).[1] According to Selinker (1972), interlanguage is L2 learners' *developing* or *provisional* knowledge of the target grammar which is independent of both the leaner's native language and the target language. It is a developing system, rather than an incomplete or

[1] According to Song (2012), other terms referring to the same concept of "learner language" have also been used such as "approximative system" (Nemser 1971) and "idiosyncratic dialect" (Corder 1971), both cited in Song (2012). See Song (2012) for further descriptions of these terms.

imperfect version of the target language, which learners construct and revise in the course of L2 acquisition. Interlanguage is argued to be systematic and predictable but at the same time dynamic and permeable as it is subject to change as learners constantly reconstruct their hypotheses about L2 based on the input they receive (Selinker 1972; McLaughlin 1987). Interlanguage is argued to be shaped by several factors partaking in the process of L2 acquisition such as L1 transfer, individual learners' learning strategies, explicit instruction, practice, not to mention linguistic input, among other things (Selinker 1972; Song 2012; Vaurula 2012).

As Song (2012) puts it, interlanguage is neither the system of the learner's native language, nor that of the target language, but rather lies between the two by creating a continuum. The process of leading up to the end of the continuum, i.e., the target system, is gradual and slow as learners' interlanguage does not jump from one stage to the next but gradually reconstructs the provisional system with new hypotheses regarding the target grammar (Song 2012). Many L2 learners' interlanguage, however, does not reach the end of the continuum, but may cease to develop in any point of the developmental stage, which is called "fossilization" (see Lardiere 2000 for a study of an L2 learner with fossilized interlanguage). Despite the permeability (borrowing the term from Selinker 1972) and dynamicity of interlanguage, it is also possible to identify some systemic patterns of interlanguage as learners do make hypotheses on L2 grammar based on input and attempt to construct rules of their own grammar, whether they are target-like or not. With certain syntactic categories learners even attempt to overgeneralize the constructed rules (e.g., past tense *-ed*), similar to what we observe in L1 acquisition (Odlin 1989, 2012).

Another important characteristic of interlanguage is variability which has been well-documented in the previous research on interlanguage (see Schmidt 1980, Tarone 1983, 1985, Song 2012, and references therein). According to these studies, interlanguage varies greatly depending on different contexts and tasks; it may be more accurate and complex in one context/task than in another. Tarone (1985) further asserts that there is a "direct relationship between attention to form required by a task and grammatical accuracy on that task" (p.375). Any L2 learners may experience that they have a tendency to try to be more accurate in the target language when they use it in a more formal setting, while accuracy is of less importance when they are engaged in casual conversation, in particular with non-native speakers. As long as intended meanings are successfully conveyed in oral communication, L2 learners do not pay much attention to language form. The impact of meaning-focused communication on L2 learners' accuracy in oral production has also been observed by Felix

(1980), cited in Tarone (1983). According to Felix (1980), German learners of English have no problems with producing correct English negation in drill exercises in a formal classroom setting. However, as soon as they are engaged in spontaneous (meaningful) communication, non-target-like errors are produced (e.g., *It's no my comb*.). It is argued that such errors are not caused by L1 influence, but rather a part of interlanguage that is constructed by L2 learners which is simplified, similar to many pidgin languages.

The variability of interlanguage is reported to emerge in almost all areas of language, phonology, morphology and syntax. Tarone (1985), for instance, argues that as L2 learners perform different tasks at a single point in time, they exhibit variability in some (but not all) grammatical, morphological and phonological structures in a predictable manner. Schimdt (1980), for instance, discusses variability of interlanguage in syntax, according to which L2 learners with several L1 backgrounds showed different results in their performances across different task types in allowing second-verb ellipsis in a conjoined construction, as in (1).

(1) Mary is eating an apple and Sue -- a pear.

Schimdt (1980) reports that the participants never produce a sentence like (1) with the second verb elided in spontaneous (or free) oral production, while in a grammatical judgement task 50% of the participants accepted the sentence. In an elicited imitation task, only 11% of the participants dropped the second verb, while in a written task where they were asked to combine two sentences with identical verbs, 25% deleted the second verb. It is argued that such variability across different tasks is systematic, given that second-verb ellipsis increases gradually from more spontaneous speech to more careful grammatical judgements.

Another instance of variability influenced by the nature of tasks (relevant for this thesis) is observed in the work by Fairbanks (1982) (cited in Tarone 1983), in which a Japanese learner of English almost always drops 3SG *–s* in casual speech (oral production), producing utterances such as (2a) and (2b). On the contrary, in the leaner's careful style, he/she always supplies the inflectional morpheme both for singular and plural verbs, as seen in (2c-d).

(2) a... …. if she have a ch-children..
b. He live with their ch..
c. ….. each store hu has er own price..
d. .. Um some hu station says uh. Minneapolis..

Based on the observations made Schimdt (1980) and Fairbanks (1982) above, one might conclude that the L2 features are supplied more frequently in careful styles and less frequently in casual styles.

Tarone (1985) further makes an interesting observation that not all syntactic and morphological categories are subject to variability across different tasks but only some categories show task-related variability. In her study, four different grammatical categories are discussed in trying to test the hypothesis regarding the relationship between attention to form required by a task and grammatical accuracy on that task. These grammatical categories include: 3SG *-s*, the plural morpheme *-s*, the third person singular pronoun *it,* and the article[2], which were selected based on the prediction that they were most likely to occur in large enough numbers across a variety of tasks for the purpose of the study. The participants were twenty adults (aged from eighteen to forty-five) attending the University of Minnesota and were considered to be at an advanced level. The participants were asked to perform four tasks: 1) a written grammatical judgement task in which they were asked to judge which sentences are incorrect and to rewrite the erroneous part of the sentences correctly, 2) an oral description task in which the subjects were supposed to describe a series of five objects on a video screen to a non-native listener clearly enough so that the listener could select the correct objects, 3) an oral narration task in which the subjects were asked to tell the story of a sequence of non-verbal events seen on a video screen to a non-native listener, 4) an oral interview with a native speaker of English, focusing on the topic of the subject's field of study, plans for academic work, among other study-related issues (Tarone 1985: 378).

The grammaticality judgement task and the interview with a native speaker of English were considered to provide a context where more attention to language form (accuracy) was required. In the interview task a specific instruction was given to the participants and the interviewer was a native speaker of English. The other two tasks, an oral description and an oral narration task, were considered to require less attention to form, given that the listeners were non-native speakers who might be assumed to be less judgmental in grammatical forms. The tasks were also designed to focus on the subjects´ attention on (meaningful) communication, rather than correctness of language form. It was predicated that the participants would perform more accurately in the grammaticality judgement and the

[2] In Tarone (1985), it is not specified which article between the indefinite *a/an* and the definite *the*, nor examples of the utterances produced by the subjects.

interview task, while they would pay less attention to form in the less formal oral task (description and narration).

The findings show that the four grammatical categories do not behave exactly the same way as predicted when it comes to variability across different tasks. While the third-person singular -*s,* the article, and the pronoun *it,* demonstrate task-related variability, the plural morpheme -*s* is shown to be insensitive to the types of tasks, given that no style shifting (between formal and casual) occurred in the use of the plural among the participants.[3] It is further shown that 3SG –*s* behaves differently from the article and the third person singular pronoun *it* (in the object position), presumably due to their functional differences in the grammar. According to the study, 3SG -*s* shows the expected task-related variability in the participants´ performance as they demonstrate more attention to form (accuracy) in the interview task (with a native speaker) than in the oral narration task (with a non-native speaker). An exactly opposite pattern is, however, observed with the third person object pronoun *it* and the article, given that the accuracy rates are reported to significantly decrease in the tasks which arguably require greater attention to form. A detailed discussion of the reasons behind the different patterns between 3SG -*s* and the two syntactic categories, *it* and the article, is beyond the scope of this thesis. What is interesting and relevant for the current research is that 1) there is no task-related variability in the use of the plural morpheme -*s*, while the inflectional morpheme, 3SG -*s*, is treated differently by L2 learners depending on the nature of tasks, and 2) L2 learners make less attention to the correct form of the inflectional morpheme when the task requires more focus on meaning (as in the oral narration task) than on language form (as in the interview which requires more formality in communication).[4]

To sum up, an important message we can obtain from Tarone´s work is that degrees of attention to form which tend to vary across different contexts and tasks are one of the determining factors for interlanguage variability. In other words, "use of one or another task may lead to contradictory claims about the nature of the interlanguage system" (Tarone 1983:146). This also implies that in order to make claims about certain linguistic behaviors by

[3]This is presumably due to early acquisition of the plural morpheme -*s*, at least compared to the third person singular -*s*.

[4] Interlanguage variability is further divided into systematic and free variation, the latter of which is a result of the incomplete acquisition of grammatical features. The current research is only concerned about systematic variation which is argued to be induced by linguistic, psychological, and social context (see Song 2012 for further discussion of the differences between the two types of variation).

L2 learners in comparison to the results of other studies, one must make sure that the comparison is carried out under the same ground in terms of the tasks/contexts in which the data are drawn from.[5]

The phenomenon of variability in L2 learners' interlanguage is treated differently among linguists from different traditions. Those who work from a Chomskyan perspective to second language acquisition consider interlanguage variability only as part of performance, distinguished from competence or L2 learners' underlying knowledge of L2 grammar, which is homogeneous/invariant. What linguists from the Chomskyan perspective are concerned about in L2 acquisition research is L2 learners' competence, not performance which can be influenced by several external factors such as slips of the tongue, false starts, mistakes (not errors), among other things. Interlanguage variability thus is considered not worthy of systematic investigations under the Chomskyan's tradition (See Tarone 1983). Linguists from socio-linguistic or psycholinguistic perspectives, on the other hand, consider interlanguage variability as an inherent part of L2 learners' grammar, which governs their linguistic behavior (performance). From a socio-linguistic perspective, L2 learners' preference for one particular variant (or feature) over another can be attributed to contextual variables (e.g., the status or role of a discourse partner) (Kasper and Blum-Kulka 1993:8). L2 learners may also prefer certain linguistic variables (e.g., in pronunciation) due to their formality or informality (Fasold 2008; Odlin 1989).

Tarone (1983) also adopts the view that interlanguage variability is an inherent part of L2 learners' grammar and argues that interlanguage consists of a continuum of styles, called the Capability Continuum Paradigm. In this paradigm, "capability" is used as an alternative term to "competence" which refers more broadly to the interlanguage system that underlies all regular linguistic behavior (e.g., perception, production, grammatical judgement), not only L2 learners' linguistic knowledge or intuitions about L2. According to this paradigm, interlanguage is composed of "regularities which underlie phenomena in observed learners' behavior" and is represented in a continuum of different styles from vernacular style (more pidgin-like) on one end to careful style (more target-like) on the other end (Tarone 1983: 152). It is argued that the careful style is produced when L2 learners pay most attention to

[5] Ellis and Barkhuizen (2005) also mention several studies on the acquisition order of morphemes in which different types of tasks (speaking/imitation versus reading/writing tasks) bring conflicting results. It is argued that such conflicting findings confirm that the nature of a method used to elicit samples of learner language can have a significant effect in acquisition research (Ellis and Barkhuizen 2005:75).

language form (such as in academic writing and classroom use of L2), while the vernacular style is used when learners pay least attention to language form (e.g., spontaneous casual conversation). Between the two extreme ends, there exist different styles with different degrees of formality which govern the degree of attention that L2 learners pay to language form depending on contexts/tasks. Variability then emerges as learners resort to different styles in the continuum of interlanguage when they perform tasks with different degrees of formality.

Tarone's (1983) paradigm may explain variability of interlanguage across different tasks, but it does not seem to account for morphological variability observed within a single task (e.g., written production). It is well-documented that variability in inflectional morphology is a predominant phenomenon in L2 acquisition; in one context, they may supply an inflectional morpheme correctly, but in another context, they may omit it having inconsistency in using the inflectional morphology. The inconsistency may as well be observed even in a single sentence, as exemplified below.

(3) And she cleans...the house. And wash the dishes. And, uh, she makes the bed.
(White 2003:134)

As Tarone´s paradigm only discusses style-shifting (between informal and formal) across different tasks, it does not account for variability within a single task or non-target-like sentences in tasks that require a high degree of formality (written tasks). In particular, the paradigm does not seem to explain why L2 learners overgeneralize certain rules, presumably as a result of attending too much to language form, if the formality of the task would lead to more accurate use of L2 features. In what follows, I turn to variability in inflectional (or functional) morphology, in particular, in subject-verb agreement in English, which is known to be problematic for L2 learners even at a later stage of acquisition.

2.2. Subject-verb agreement in English and morphological variability

Subject-verb agreement in English is reported to be one of the most difficult features of grammar in L2 acquisition and has thus received a great deal of attention from researchers working in both acquisition research and language pedagogy. Research on the acquisition of S-V agreement has centered around the question of why L2 learners of English struggle with S-V agreement even at the end-state of L2 acquisition. As shown in Lardiere´s study (1998a & b), investigating an L1 Chinese learner of L2 English (named Patty), inflectional morphemes pose stagnant problems even after 20 years of living in the US. The longitudinal study in Lardiere (1998b) shows that Patty does not make any progress in using the past tense *-ed* and 3SG *-s* between the first recording of her oral production and the second recording after 10 years. Despite her high proficiency in English, she had a tendency to omit these inflectional morphemes in obligatory contexts even after 20 years of experiences with English. The finding thus indicates that certain inflectional morphemes are extremely difficult to be acquired no matter how long L2 learners are exposed to the target language.

Many attempts have been made to identify the locus and nature of morphological variability in S-V agreement with competing views on to what degrees L2 learners still have access to Universal Grammar.[6] These previous attempts can be broadly divided into a representational account versus a non-representational account. Advocates of the representational account argue that the locus of variability lies in the (mental) syntactic representation of L2 learners which is fundamentally different from L1 speakers (e.g., Franceschina 2001; Hawkins and Chan 1997; Hawkins 2001). On the non-representational account, it is assumed that the locus of variability is not on a representational level but is found in elsewhere (e.g., prosodic constraints, mapping between syntax and lexical items,

[6] The current research adopts the generative linguistic theory (Chomsky 1993, 1995), assuming that Universal Grammar (UG) is what operates language acquisition by constraining possible forms of grammar. It is assumed that 1) there is an innate set of constraints that govern possible forms of human language, and 2) that all human beings are equipped with such a genetically determined language faculty, which enables us to develop language under normal circumstances (i.e., sufficient linguistic input). It is further assumed that linguistic properties drawn from UG are easier to acquire than those drawn from properties unique to individual languages (e.g., lexical items).

processing constraints) (Lardiere, 1998 a and b, 2000; Prévost and White, 2000; White 2003; Jiang 2004; Goad and White, 2004).

Those who pursue the representational account posit that any functional categories and their features which are not available in L1 (but are present in L2) are not acquirable by adult L2 learners, i.e., The Representational Deficit Hypothesis (RDH) (or The Failed Functional Features Hypothesis in Hawkins and Chan 1997; Yuan 2009). Hawkins and Chan (1997), investigating L2 acquisition of English restrictive relative clauses by adult Chinese speakers, propose that after a critical period, adult L2 learners no longer have access to the full range of functional features available by UG, based on the assumption that the features not selected by L1 are no longer available for acquisition after a critical period (see also Yuan 2009). This implies that L2 learners are doomed to have representational deficits for L2 (functional) features that are not present in their L1, and hence there will a fundamental difference in underlying syntactic representations between L1 and L2 speakers. Variability in S-V agreement among L2 learners thus is seen as a reflex of the representational deficit which leads to surface inconsistency in the use of 3SG –s.

The non-representational account takes an opposite view from the RDH by assuming that L2 learners have full access to UG in L2 acquisition, which is not constrained by L1 (e.g., Schwartz and Sprouse 1996; Prévost and White 2000). According to The Missing Surface Hypothesis (MSIH) proposed by Prévost and White (2000), there is no syntactic impairment in L2 grammar, but L2 learners have abstract features for finiteness and agreement in their interlanguage representation. Morphological variability then results from difficulties with associating the already established syntax with overt morphology, particularly in spontaneous oral production. In order to explain agreement errors produced by L2 leaners, they adopt the Distributed Morphology (DM, Halle and Marantz, 1993), by asserting that the frequent omission errors in S-V agreement among L2 learners of English are due to problems with mapping between existing abstract features in syntax and lexical items that match feature specifications of these abstract features. While abstract features in syntax are intact, L2 learners may have not fully acquired feature specifications of the associated lexical items, failing to map overt morphology into syntactic (or terminal) nodes. It is argued that robust omission errors in S-V agreement (in spontaneous oral production) are associated with L2 learners' resolution for finding a lexical item with the most compatible features that match those of the terminal node in syntax when a relevant lexical item has not been acquired yet, i.e., an unmarked form (or non-finite form) without inflection.

In DM, for lexical insertion to successfully take place, the features of a lexical item must be compatible with the feature bundle of a syntactic node where it is inserted. While the features of a syntactic node will be fully specified, the lexical item that is inserted may partially satisfy the feature specifications of the terminal node, lacking some of the features in the terminal node or "underspecified". According to the theory, it is sufficient that the features of the lexical item form a proper subset of the feature bundle of the syntactic node; no perfect match is required. Prévost and White (2000) assume that while L2 learners have acquired the relevant (abstract) features of the terminal nodes in the syntax, they may not have acquired the feature specifications of the associated lexical items. In the absence of lexical items that match the feature bundle of the terminal nodes, L2 learners select one with the most features that are compatible with the feature bundle of the terminal node, which is argued to be the non-finite form (non-inflected), underspecified for the finite feature. Since the finite/inflected form (3SG –s) is specified for the finiteness (+finite), it is predicted that the finite form would never be inserted under the terminal node with the non-finite feature due to feature mismatch. On the other hand, since non-finite forms are underspecified for the finite feature (i.e., α finite), these forms can be inserted under the syntactic node with the [+finite] feature as there is no feature mismatch. If these assumptions are correct, L2 learners would only make omission errors as the non-finite forms are a default form or the best candidate for lexical insertion when the correct lexical items are not acquired. Prévost and White (2000) argue that this is indeed the case, given that L2 learners do not normally use the inflected form (3SG *–s*) in non-obligatory contexts. In other words, when the finite/inflected forms are used, they are used accurately, and erroneous agreement is very rare (White 2003a).

Prévost and White (2000) further claim that when fully specified lexical forms are acquired, they do not necessarily "win in the competition for lexical insertion" (p. 129), given that L2 learners do make agreement errors by resorting to underspecified forms even at the end-state of L2 acquisition. They assume that this is due to problems with retrieving a relevant lexical item from the lexicon, presumably due to processing issues or communication pressure as there is little time for lexical retrieval in spontaneous production or in timed tasks. They predict that L2 learners may perform more accurately on an untimed grammatical judgement task (in line with Tarone 1983 discussed in the earlier section).

Although this thesis adopts the non-representational account with the view that L2 learners have full access to UG on a par with L1 speakers, the findings from the previous research on the acquisition of S-V agreement among L1 Norwegian learners and this thesis provide evidence against the MSIH when data are drawn from other kinds of tasks

(grammatical judgement and written tasks). It may as well be the case that the assumptions made in the MSIH apply only for the data drawn from spontaneous oral production. Prévost and White (2000) also admit that an untimed task may bring different results or more accurate performance in S-V agreement. Data drawn from other kinds of tasks, however, still reveal that the MSIH does not account for the complete picture of agreement errors produced by L1 Norwegian learners of English, given that they do demonstrate erroneous use of the finite/inflected form, 3SG –s, in inappropriate contexts. This error pattern is not expected in the MSIH. Previous studies on the acquisition of S-V agreement by Norwegian learners are discussed in section 2.6.

2.3. Suppletive versus affixal agreement

There have been a number of studies which provide evidence in favor of the non-representational account discussed above, according to which L2 speakers have full access to UG in the acquisition of S-V agreement. One important evidence is drawn from numerous studies which demonstrate early acquisition of suppletive agreement with the verbs of *be,* compared to affixal agreement, among L2 learners of English (e.g., Ionin and Wexler 2002, Garshol 2019; Zoble and Licera 1994). According to these studies, suppletive agreement is easier than affixal agreement since "L2 learners of English initially consider morphological agreement to be a reflex of verb raising" (Ionin and Wexler 2002:117). In English, auxiliaries (e.g., *have, do*) and copula verbs are assumed to raise from V to I (Tense), verb raising, while lexical (or *thematic* in Ionin and Wexler 2002) verbs remain *in situ.* Agreement with lexical verbs then is done through "affix-lowering" (or "affix-hopping"), in which an inflectional morpheme (e.g., 3SG -*s*) gets lowered to merge with the verb. These two different processes of agreement are illustrated below.

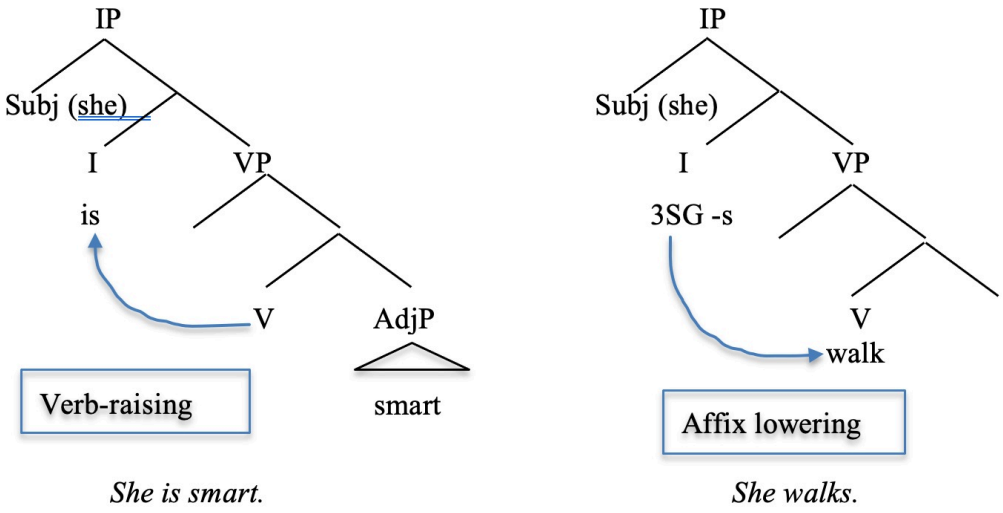

Figure 1. Verb Raising and Affix Lowering

It is argued that verb raising is more economical and easier than affix-lowering (Chomsky 1989). According to Ionin and Wexler (2002), the reason why affixal agreement is more difficult than suppletive agreement is that L2 learners first associate S-V agreement with verb raising, as this operation is more economical for L2 learners. In other words, L2 learners do not initially analyze 3SG *-s* as a morphological reflex of agreement.

Evidence for the early acquisition of suppletive agreement comes from a few observations made in Ionin and Wexler (2002). First, L2 learners, L1 Russian children, demonstrate significantly higher proficiency in using suppletive agreement with the verbs of *be* than affixal agreement; they show great sensitivity to incorrect uses of agreement with the verbs of *be*, which suggests that the learners have mostly mastered the feature specification of *be* forms. In other words, categories and features governing agreement under I(nfl) are intact in L2 grammar. Another potential evidence for L2 learners taking verb raising as an initial step for acquiring agreement is provided by overgeneralization of *be* in non-progressive contexts (e.g., *the lion is go down*.) by Ionin and Wexler (2002) observe that the vast majority examples with the overgeneralized *be* do not intend to be progressives with the missing *-ing* on the main verb, but rather express generic/habitual or past-tense meanings, mostly with stative verbs which do not take the progressive form. Another observation is that when the overgeneralized *be* is used, the main verbs do not carry any inflectional morpheme in most cases. Ionin and Wexler thus conjecture that this overgeneralization of *be* verbs is an

indication of making tense and/or agreement on the main verb when the learners have not acquired affixal agreement.

Based on the findings in their study, Ionin and Wexler (2002) conclude that the syntax of agreement is intact in Chinese learners' L2 grammar and that frequent omission errors are attributed to problems with mapping from existing agreement feature to their surface morphological representation, in line with Lardiere (2000) and Prévost and White (2000). They further demonstrate that omission errors are dominant in spontaneous oral production. When finite forms (inflected forms) are used by L1 Russian children, they are almost always used with the appropriate verb forms with the correct tense-person-number features, which supports findings from Prévost and White (2000).

2.4. Complexity of number marking in English

Apart from functional morphology being the bottleneck of L2 acquisition, what makes S-V agreement challenging for L2 learners has to do with the complexity of number marking in English. The feature of number agreement in English requires that all nouns and other syntactic categories appearing in the subject position need to be categorized as either singular or plural. As Brehm and Bock (2013) point out, the grammatical number of what occupies the subject position governs "the necessity operations of subject-verb agreement that speakers duly implement." (p.149). Killie (2019a) also points out, citing various other works, that having the knowledge about the correct number of various subject types is essential in establishing a correct agreement relationship with verbs. However, number marking in English is far from being transparent with numerous exceptions and idiosyncrasies (see also Bock and Eberhard 1993; Fisher 1985; Killie 2019a).

A rule of thumb in establishing an understanding of number in English noun phrases is that plural nouns are marked by the regular plural morpheme *-s* and mass (e.g., *sugar, water)* and abstract (e.g., *love*, *fear*) nouns are uncountable and always singular. However, there exist many (semantically) plural nouns that that are not overtly marked with the plural morpheme (e.g., *police, people*, *cattle, sheep*). There are also numerous singular nouns that end in *-s* (e.g., *linguistics*, *maths*, *news*, *billiards*) which may be mistaken as plural nouns by L2 learners. Bock and Eberhard (1993) also note that there can be discrepancies in the construal of plurality between the world and English plural marking. For instance, objects like *scissors* and *trousers* are semantically or notionally singular but they are grammatically plural. The reason is that in English the objects that often denote two joined symmetrical parts (e.g.,

glasses) are construed as plurals while these words in other languages are singular nouns (e.g., Norwegian *en saks* 'a scissor', Korean *kawi hana* 'scissor one'). However, not all objects with two joined symmetrical parts are treated as singular as one can say *a jacket* or *a shirt*, which may lead to uncertainty about plurality of the nouns in this group (Bock and Eberhard 1993).

Another group of nouns that can be confusing for L2 learners in the construal of number is collective nouns such as *army, family*, *team*, and *committee*. Despite being in a singular form, these nouns can be treated either as singular or plural depending on whether speakers perceive them as "distributive collective" (an individual-member reading, plural) or "holistic collective" (a group/unit reading, singular), borrowing the term from Bock and Eberhard (1993). Additional challenge with collective nouns is there is dialectal variation in how speakers treat collective nouns in their uses; most speakers in the US treat them as singular with singular verbs, and they tend to add additional plural nouns to express the distributive use of the collective nouns (e.g., *The staff members are in a meeting*). On the other hand, speakers of British English treat them either as plural nouns or singular nouns depending on the aforementioned context (Dypedahl and Hasselgård 2018:116).[7] The following examples illustrate uses of collective nouns by American and British English speakers:

(4) The family is approached [by a physician]… (American)

(5) a. I don't think the royal family are really known for their intelligence. (British)

b. I understand the pressure that the Israeli government are under... (British)

(Bock and Eberhard 1993: 62)

Variation in the input thus may create confusion about how to establish an agreement relation with verbs when the subjects are collective nouns. An interesting observation that Bock and Eberhard (1993) make, which also applies to L2 learners based on a personal observation, is that there can be a discrepancy between verbs and anaphoric expressions in establishing an agreement relationship with subjects. An example is illustrated below.

[7] Bock and Eberhard (1993) report that British English speakers are more willing to employ plural verbs with collective nouns, but there may be variation even among British English speakers.

(6) The committee is going to meet tomorrow. They will decide which candidates to invite then.

Here, the speaker takes a singular verb treating *committee* as a holistic collective, but it is construed as plural in the anaphor-number agreement (by taking the plural pronoun *they*) in the following sentence. A similar observation can be made with indefinite subjects, which is a common error produced by many Norwegian learners of English or perhaps many L2 learners regardless of different L1.

(7) Everyone has their own issues.

Here, the indefinite pronoun takes a singular verb as indefinite pronouns in English are treated as singular, but the anaphoric expression of *everyone* indicates that the indefinite is perceived as plural. Bock and Eberhard (1993) speculate that information that governs verb-number agreement may differ from the information that governs anaphor-number agreement. Although a distinction in number agreement between verbs and anaphoric expressions is beyond the scope of this thesis, these examples seem to illustrate establishing (grammatical) number agreement with verbs can be tricky when there is a conflict between grammatical and notional (or semantic) number in the same noun.

Another problematic area connected to the semantic number of noun phrases is where grammatically marked plural nouns are treated as singular employing singular verbs. This is called notional concord (Dypedahl and Hasselgård 2018: 119), exemplified below.

(8) a. Law and order was very harsh in Medieval English. (seen as one phenomenon)
b. Her love and sympathy was too much for Sophie (can be seen as two sides of the same coin).
c. Four years is a long term for a bad president (referring to the period)
(Dypedahl and Hasselgård 2018: 119)

The examples in (8) illustrate that notional number can surpass grammatical number in determining subject-verb agreement; the verbs agree with the *meanings* of the noun phrase subjects (e.g., phenomenon, period) regardless of their grammatical number. Brehm and Bock (2013) also assert that the relationship between notional and grammatical number may complicate S-V agreement particularly in conjunctions, as in examples like *her sister and best*

friend. If the sister and best friend refer to two separate individuals, the conjoined noun phrase invites plural verbs when it appears in the subject position. If the sister and the best friend refer to the same person, however, the phrase will promote singular verb agreement (e.g., *her sister and best friend is always supportive*). In the latter context, notional concord overrides grammatical number (Brehm and Bock 2013: 150)

Brehm and Bock (2013) further discuss another context in which a noun other than the head noun can influence number on verbs, which is called attraction (or agreement attraction, often mentioned in the literature, e.g., Fisher 1985, Killie 2019). Attraction, according to Brehm and Bock (2013), is an aberrant product of a process that establishes an agreement relationship with a verb as a result of an intrusive plural noun.[8] The intrusion of the plural feature leads to a change in the number feature of the subject. The following examples illustrate instances of attraction, taken from Brehm and Bock (2013).

(9) a. How much correction of syntactic **errors** are there, anyway?
b. The picture on the **postcards** were ugly. (Brehm and Bock 2013)

As seen above, the number marking on the verbs are influenced by the local plural nouns, *errors* and *flowers*, not the singular head noun subjects, *correction* and *drawing.*
Brehm and Bock (2013) argue that in certain cases it can be difficult to distinguish instances of attraction from notional agreement, as seen in the above examples. In sentence (9b), for example, the number marking on the verb as plural can be a reflex of the speaker's uncertainty in interpreting the referent as "multiple picture tokens" due to the plurality of postcards, rather than the unique picture type. The plural verb can also reflect agreement attraction due to the local plural noun, *postcards*. This type of referent is called "Complex Reference Object" in semantic theory, which refers to "a set of individuated elements that can be interpreted as either singular (the set as a whole) or plural (as the individuals in the set) (Brehm and Bock 2013: 150). Similarly, in sentence (9a), the speaker may interpret the referent that establishes an agreement relationship with the verb as the individuals in the set "correction" due to the existence of multiple errors, giving rise to the plural verb *are*. Alternatively, it may as well be the case of attraction in which the verb simply agrees with the local plural noun, *errors*.

[8] Attraction has previously been called "proximity account" or "principles of proximity" (e.g., Quirk et.al. 1985) in which a noun closest to a verb establishes an agreement relationship.

Fisher (1985) also discusses the uncertainty/ambiguity of conjoined nouns (in particular with abstract nouns) in number construal, which leads to variation among native speakers of English. For examples, in the following sentences with conjoined abstract nouns, which normally govern plural verbs, native speakers vary in number marking on the verbs choosing either a singular or a plural form.

(10) a. Your fairness and impartiality ***has/have*** been much appreciated
b. Education and experience ***are/is*** what we are looking for.

In these examples, the qualities of the compound subjects can be seen as separate or a complex unity. Thus, depending on how native speakers interpret these compound subjects, both are considered to be possible (Svartvik and Sager 1980, cited in Fisher 1985; Quirk et. al. 1985). According to Fisher (1985), conjoined abstract nouns are not necessarily semantically close, as she finds examples in which conjoined nouns which are not semantically close nevertheless take a singular verb (e.g., *the* ***number*** *and the* ***importance*** *of such traditional verbal usages, of course,* ***varies*** *from*...).

As has been discussed so far, S-V agreement in English can be complicated by the complexity of number making on subjects, caused by idiosyncrasies in the construal of plurality (e.g., *scissors)*, a conflict between notional and grammatical number, uncertainty in the construal of numerosity associated the subject referent, and so on. According to Fisher (1985), L2 learners of English may experience uncertainty in agreement situations in which 1) attraction plays a role in determining number on verbs, and 2) notional number of subject nouns and their grammatical number are in a competing relation. Attraction is also one of the factors that influence S-V agreement among native speakers of English, but attraction errors are more notable in long-distance agreement as a result of processing difficulties. The following section discusses difficulties with S-V agreement caused by processing constraints among native speakers of English.

2.5. Subject-verb agreement and processing difficulties among native speakers of English

Difficult conditions for S-V agreement for L1 English speakers

It has long been recognized that subject-verb agreement does not only pose difficulties for L2 English learners but also cause problems for native speakers when the subject becomes complex, in particular when the distance between the head of the subject and its agreeing verb becomes long (Bock and Miller 1991; Brehm and Bock 2013; Eberhard 1997; Fisher 1985; Hartsuiker and Barkhuysen 2006). Looking at the contexts of subject-verb agreement with which native speakers have problems is particularly relevant for L2 acquisition as those contexts are most likely to create problems for L2 learners. It can also be used to inform us specific conditions for which L2 learners of English may be more prone to agreement errors, as also emphasized in Fisher (1985).

Based on her corpus of containing agreement errors produced by native speakers of English, Fisher (1985) reports that agreement errors by native speakers of English occur almost exclusively in contexts where the head of the subject noun phrase and the verb are non-contiguous (or non-local). She argues that the non-adjacency between the head of the subject and the verb is a determining factor for creating difficulties in subject-verb agreement among native speakers. She further reports that the majority of the non-contiguous errors occur in contexts which contain a combination of two or more intervening nouns between the head of the subject and the verb. This is also confirmed by Quirk et. al.'s (1985) observation that difficulties with subject-verb agreement among native speakers of English increase in accordance with the length and complexity of the subject structure, as quoted below.

"Conflict between grammatical concord and attraction through proximity tends to increase with the distance between the noun phrase head of the subject and the verb, for example when the postmodifier is lengthy or when an adverbial or a parenthesis intervenes between the subject and the verb." (Quirk, et. al. 1985:10.)

Fisher's corpus of written English by native speakers contains published academic articles in which 94.5% of the errors (120 out of 127 errors) occur in non-contiguous contexts, in particular with an intervening prepositional phrase that contains a noun/nouns in mismatching number. Some of the agreement errors from her corpus are exemplified below.

(11) The **problem** with studies of auxiliary development **are** just the opposite of those involved in morpheme studies...

(12) The **effects** of greater exposure to the unfamiliar family of English **is** less worrying for the native speaker of English..

(13) The **correlation** of the three rank orders **are** again remarkably high..

As seen above, the head of the subject is separated from the verb by different types of intervening elements either with or without matching number. Fisher reports that agreement errors are more robust when the intrusive elements are not marked for the same number as in the subjects and are close to the verbs, as in (12-13), which induces agreement attraction discussed earlier. Fisher argues that attraction is a "powerful factor" in causing agreement errors among native speakers. The findings in this study also show that agreement attraction plays a significant role in agreement errors by Norwegian university students.

Attraction and Plural Markedness Effect

More recent studies investigating processing of S-V agreement suggest that native speakers of English are more prone to errors of the type in (13) above, in which the intrusive noun is plural while the subject is singular, than the type in (12), in which the number marking is the opposite (e.g., Bock and Eberhard 1993; Brehm and Bock 2013; Eberhard 1997; Eberhard, et.al. 2005; Wagers, et. al. 2009). This is called "Plural Markedness Effect". According to various experimental studies on the processing of S-V agreement (e.g., Bock and Miller 1991; Eberhard 1997; Wagers et. al. 2009), there is an asymmetry in attraction errors between singular and plural intervening nouns; native English speakers are more vulnerable to agreement errors when the intervening noun is plural and the subject is singular, than the other way around. For example, native speakers have a robust tendency to use a plural verb when the intervening local noun is plural, producing sentences like (14a). The opposite combination of a plural subject with an intervening singular noun, as in (14b), leads to very few agreement errors (Eberhard et. al. 2005).

(14) a. The key to the **cabinets are** on the table.

b. The keys to **the cabinet is** on the table.

The asymmetry in attraction errors is argued to be due to the marked grammatical feature of plural nouns which disrupts an already established agreement relationship between the

singular subject and the verb. Singular nouns, on the other hand, are unmarked for a number feature so that the "marked (or activated number) feature, as in the case of plural nouns, overrides the default assignment and is used to directly retrieve an agreement verb" (Eberhard 1997: 149). An alternative account, as discussed in Eberhard (1997), is explained by working memory resources, according to which agreement errors are caused by limited resources of working memory which gets exhausted by intrusive elements. Intervening plural nouns place even additional demands on memory resources as they carry more complex semantics and morphology than singular nouns. Eberhard (1997), however, dismisses this alternative account by citing the work by Bock and Cutting (1992) which shows that the complexity of post-modifiers (phrasal versus clausal) does not influence the occurrence of agreement errors; the working memory account predicts that subjects with clausal post-modifiers would induce more errors than those with phrasal post-modifiers regardless of the plurality of intervening nouns. The findings, however, suggest that the determining factor for agreement errors is the presence of intervening plural local nouns, regardless of the complexity of post-modifiers. Eberhard (1997) further notes that the asymmetry between intrusive singular and plural nouns in affecting the occurrence of errors challenges the *proximity* account (e.g., Quirk, et. al. 1985) which does not predict such an asymmetry as it simply attributes errors to agreement between the closest noun and the verb in long-distance agreement.

Bock and Eberhard (1993) investigate which feature of plural number is responsible for plural attraction errors among the following three: semantics of plural nouns (e.g., collective nouns, *choir*), phonological correlate of number marking (e.g., plural-like phonology, as in *hou<u>se</u>*), and grammatical plurality including irregular plurals (*girls, children*, *people).* In their experiment, intervening local nouns were manipulated in terms of these three features, testing sentence preambles such as *The job for the choir* (semantically plural but grammatically singular), *The gardener with the hose* (phonological correlate with the plural *hoes*) and *The game for the children* (with irregular plurals). The participants (native speakers) were asked to repeat presented preambles and complete them into sentences. The results showed that the only condition that elicited plural attraction errors was the plurals which are marked both semantically and grammatically, i.e. regular and irregular plural nouns. There was no effect of phonological resemblance with plurals, nor of semantic plurality with grammatically singular nouns.

Killie (2019) reports a few studies that have attempted to see whether the Plural Markedness Effect is also observed in S-V agreement in L2 acquisition but without any conclusive evidence due to a fairly small proportion data samples containing postmodified

nouns. According to Jensen (2016) and her subsequent works with others (Jensen et. al. 2017 and 2019), L1 Norwegian learners (11-19 years old) of English make in fact more errors with plural noun subjects with singular intervening nouns (e.g., 14b), unlike native speakers. It is thus concluded that there is no plural attraction effect (or the Plural Markedness effect) in S-V agreement among Norwegian learners of English (based on a comprehension task).

Ocampo (2013) tests the Plural Markedness Effect with L1 Spanish learners of English using a moving window self-paced reading paradigm. However, the testing conditions in her study were different from those discussed above (e.g.,14). Instead of testing an asymmetry between singular and plural intervening nouns, she investigates whether there is an asymmetry between singular and plural subjects with intervening post-modifiers. Her study investigates whether plural subjects facilitate stronger retainment of the plural feature in establishing an agreement relationship with the main verb, than singular subjects. The findings reveal that there is a weak Plural Markedness Effect among Spanish learners as they are more sensitive to agreement errors with plural subjects, than with singular subjects, in long-distance agreement. This means that Spanish learners detect agreement errors with plural subjects better than with singular subjects, contrary to the results found in the studies with Norwegian learners. According to Jensen (2016), Norwegian learners have more problems with plural subjects than singular subjects in general, which is discussed in the following section. In what follows, previous studies on S-V agreement among L1 Norwegian learners of English are reviewed.

2.6. Previous research on S-V agreement among Norwegian learners of English

Recent studies on subject-verb agreement among L1 Norwegian learners of English provide further support for the claim that S-V agreement is a stagnant problem in L2 acquisition based on both comprehension (Jensen 2016; Jensen et. al. 2017; Jensen, et. al. 2019; Nygaard 2019) and written production data (Garshol 2019 and Killie 2019a). The findings from these studies further show that there is a correlation between proficiency and the accuracy of S-V agreement; as learners become more proficient in English, they make progress in using S-V agreement, even though certain subject conditions still pose problems (e.g., NP subjects, long-distance agreement). Jensen (2016) and her subsequent works also observe that the singularity/plurality variable of the subject affects the performance of acceptability judgement as participants in her study have more difficulties with plural subjects both in local and long-

distance agreement (contrary to the findings in Ocampo 2013). In what follows, I will give an overview of the previous studies on subject-verb agreement among L1 Norwegian learners of English which unanimously report that subject-verb agreement is problematic for Norwegian learners.

2.6.1. Agreement marking in English and Norwegian

Norwegian and English differ in marking subject-verb agreement; as we know, verbs in English are marked for agreement for person and number, as seen in (15), in which all third person singular subjects trigger overt agreement marking with 3SG *-s* on the verb, *speak* in the present tense, as in (15b). Norwegian, on the other hand, does not have overt agreement marking, as seen in (16) where the verbs remain same regardless of different subjects.

(15) a. I/We/You/They speak Norwegian.
b. He/she/Mary speak**s** Norwegian.

(16) a. Jeg/Vi/Du/De **snakker** Norwegian.
'I/We/You/They speak Norwegian.'

b. Han/hun/Mary **snakker** Norwegian.
'He/she/Mary speaks Norwegian.'

In Norwegian, the inflectional morpheme *-r* only indicates that the verbs are in the present tense (e.g., Jensen 2016), while the English inflectional morpheme 3SG *-s* carries much more complex grammatical information such as person and number of the subject and tense-aspect (i.e., present and habitual aspect). The morpheme also carries an agreement feature that needs to be checked in the course of syntactic derivation (Chomsky 1995). Given that the English inflectional morphology carries much more complex grammatical information than the Norwegian finite marker *-r*, it is expected that Norwegian learners of English would have problems with learning the agreement feature despite high frequency of 3SG *-s* in the input (see Jensen et. al. 2019 for evidence for the high frequency of 3SG *-s*).

Slabakova (2013, 2016) argues that functional morphology is a bottleneck of L2 acquisition, compared to core syntax and semantics, provided that the former is a locus of cross-linguistic variation, while the core syntax and semantic operations are supposedly

universal, being subject to UG. This is called the Bottleneck Hypothesis, according to which functional morphology is the most challenging part of L2 acquisition and is extremely difficult to be acquired merely through exposure to the target language. On the other hand, core syntax and semantics are argued to be easily acquirable as long as sufficient input is provided.

2.6.2. S-V agreement among L1 Norwegian learners: Comprehension study

Jensen (2016)'s master thesis and her subsequent publications with others, Jensen et. al. (2017) and Jensen et. al. (2019), are the first experimental studies designed to directly test the Bottleneck Hypothesis. Her studies are based on the data drawn from acceptability judgement tasks by L1 Norwegian learners of English (aged from 12-19) involving subject-verb agreement (functional morphology) and word order errors (core syntax).[9] The representative constructions that are used for testing the Bottleneck hypothesis in L2 acquisition are illustrated below:

(17) *Subject-verb agreement*

a. The girl drinks wine. [3rd person sg, local agreement]

b. The girls drink wine. [3rd person pl, local agreement]

c. The girl with the heavy books drinks coffee. [3rd person sg, long-distance]

d. The girls in the red car drink coffee. [3rd person pl, long-distance]

(18) *Verb movement* (word order)

a. Yesterday the students drank wine

b. Tomorrow the students will drink wine. (Jensen 2016: 7)

Findings from her master study show that participants have more difficulties identifying ungrammatical sentences with S-V agreement (i.e., functional morphology) than word order errors (narrow syntax). This result is despite higher frequency of 3SG *-s* (positive evidence) and more extensive instruction of the feature, compared to word order, which are argued to be

[9] See Jensen (2016) and Jensen et. al. (2019) for background for choosing word order as a representative construction for testing the acquisition of syntax.

important factors for facilitating L2 acquisition (see Jensen et. al. 2019). The findings therefore lend support to the Bottleneck hypothesis, according to which functional morphological features are more difficult to be acquired than syntactic features.

The study further indicates that certain agreement conditions pose more difficulties in S-V agreement than other conditions. Two variables that influence acceptability judgement in S-V agreement in English by L1 Norwegian learners are argued to be distance between the subject and the agreeing verb and plurality of the subject. This is in line with previous studies on S-V agreement by native English speakers, which have shown that non-contiguity between the head of the subject and the verb and the markedness of plural nouns are primary factors for agreement errors (e.g., Fisher 1985; Bock and Miller 1991; Brehm and Bock 2013; Eberhard 1997).

According to the findings in Jensen (2016), plural subjects in general pose more difficulties in S-V agreement regardless of whether agreement is local or non-local (long-distance agreement in Jensen 2016). Local agreement with plural subjects is found to be as equally difficult as long-distance agreement with singular subjects, which makes long-distance agreement with plural subjects most problematic among the participants. For example, sentences like (17d), repeated below, are more problematic than those in (19b) and (19c), while (19a) is the least problematic condition for S-V agreement.

(19) Subject-verb agreement (local and long-distance agreement)

a. The girl drinks wine. [3rd person sg, local agreement]
b. The girls drink wine. [3rd person pl, local agreement]
c. The girl with the heavy books drinks coffee. [3rd person sg, long-distance]
d. The girls in the red car drink coffee. [3rd person pl, long-distance]

The findings thus suggest that L1 Norwegian learners of English would accept ungrammatical sentences with plural subjects in long-distance agreement such as (19d) more than those with singular subjects in (19c). This means that Norwegian learners are more prone to agreement errors with the overuse of - *s*, than to omission errors (or underuse of *–s*), as illustrated below.

Most problematic condition

(20) *The girls in the red car drink***s** coffee. (overgeneralization)

Less problematic but equally problematic with local agreement with plural subjects

(21) *The girl with the heavy suitcases drink coffee. (omission errors)

Given that Norwegian learners of English under Jensen's study have more trouble rejecting examples like (20) than (21), the findings do not support the Plural Markedness Effect (cf. Ocampo 2013), unlike the patterns found with native English speakers (see section 2.5). According to the Plural Markedness Effect, learners would make more omission errors (dropping *-s* in singular subject contexts with an intervening plural noun) than adding the present tense *-s* in plural subject contexts (overuse of *-s*). Many previous studies (e.g., Ionin and Wexler 2002, , White 2003) have also shown that L2 learners tend to omit 3SG *-s* with singular subjects rather than overusing it in plural subject contexts; when inflection is morphologically observed, it is often appropriate, and faulty agreement (superfluous inflection) is hardly observed (White 2003a:183) (although these studies are based on oral production). Jensen's (2016) findings thus are unexpected based on the previous research on the L2 acquisition of S-V agreement. Considering more difficulties with plural subjects in local agreement, i.e., more overuse errors, Jensen et. al. (2019) conjecture that L2 learners may prefer that the 3SG *-s* be present in general without further explanation.[10]

2.6.3. Corpus-based studies in S-V agreement among L1 Norwegian learners of English

Garshol (2018, 2019) and Killie (2019a, b) are corpus-based studies investigating S-V agreement errors among young Norwegian learners of L2 English. Both studies support the findings from Jensen (2016) and Jensen et. al. (2017, 2019) which suggest that overuse of *–s* is more robust than omission in agreement errors among young Norwegian learners of L2 English.

Garshol (2018, 2019) is a corpus study which investigates subject-verb agreement errors in written English production by Norwegian high school students (15-16 years old). The corpus in her study is semi-longitudinal as the collection period is one year and consists

[10] See Nygaard (2019) which shows conflicting results after an intervention measure (explicit teaching), which demonstrate the Plural Markedness Effect. After explicit instruction, Norwegian learners (at a high-school level) are reported to accept more of the ungrammatical sentences in which subjects are singular and intervening nouns are plural, than those with the opposite combination.

of 430,000 words with three to four texts contributed by 199 participants. The collected materials contain mainly argumentative essays written at school with time limit although a small portion of the materials also includes analytical and descriptive texts (e.g., book reviews) which were analyzed according to 1) verb types (BE-verb/suppletive agreement and lexical verbs/affixal agreement) and 2) subject types (e.g., NPs, personal pronouns, indefinites, demonstratives).

The overall findings in her study are: there is clearly a distinction between suppletive and affixal errors in which the latter is more frequent than the former among L2 learners of English. This finding thus supports the previous claim that the *be*-verbs are acquired early due to their high frequency in both input and output and that young L2 learners of English show higher accuracy in using agreement with *be*-verbs (e.g., Ionin and Wexler 2002, White 2003a).

When it comes to subject types, Garshol's study suggests that NP subjects are more prone to agreement errors than personal pronominal subjects, which is expected by high frequency of the latter. When the types of errors are considered between omission and overgeneralization with affixal agreement, the overall number of agreement errors suggests that omission errors are as equally frequent as overgeneralization errors (913 versus 983) (p. 41). However, when the errors are examined across subject types, a significantly higher proportion of overgeneralization errors is observed with NP subjects (62%), compared to omission errors (38%), which, according to Garshol (2019), supports the findings from the comprehension study by Jensen (2016) and Jensen et. al. (2019). With personal pronoun subjects, however, the pattern is reversed; the majority of the errors are omission errors (307 errors), while 156 instances are overgeneralization errors.

The overgeneralization errors, according to Garshol (2019), are most predominant when the NP subjects are complex (either with post-modifiers containing an intervening noun or with an increased distance between the subject and the verb without any intervening nouns). As there is only a small portion of errors caused by intervening nouns in conflicting number, Garshol (2019) dismisses the possibility of attributing the overgeneralization errors to proximity agreement commonly found in agreement errors by native English speakers. She instead argues that overgeneralization errors are predominant among Norwegian learners of English since the marked finite form of the verb in present tense (with *–s*) is regarded as a default form to resort to when they become uncertain about which verb form to use in complex subject contexts. It is further claimed that the choice of the marked form as a default form is due to cross-linguistic influence; Norwegian learners may perceive the present tense -

s having only a tense/finite feature similar to *-r* in Norwegian, and thus choose the marked form with *-s* as a default choice influenced by their L1.[11] Garshol further suggests that the choice between omission and use of the marked form of the verb can be associated with proficiency among L1 Norwegian learners. As mentioned earlier, omission errors are more predominant with pronominal pronoun subjects, while the majority of the overgeneralization errors is found with NP subjects. Garshol argues that given that less advanced L2 learners tend to make frequent errors with personal pronominal subjects, omission errors are made presumably as a simpler and more economical choice when the less advanced learners become uncertain about which verb form to use or when they have not fully acquired the agreement feature as many young L2 learners of English do (White 2003a).

According to Garshol (2019), the L1 influence account for the more robust overgeneralization errors is further supported when her findings are compared with other studies on S-V agreement with different L1 backgrounds. For example, the Norwegian data are compared to Swedish, a closely related language to Norwegian, and German (spoken by Austrian learners at the 11th grade) which is morphologically rich with overt S-V agreement marking. The scope of the German data is fairly limited (only 15 errors detected), and the samples are based on oral production which may not exhibit exactly the same error patterns as those in written production. The Swedish data based on the work by Fisher (1985) are based on written production by more advanced learners of English (at a university level), which may pose a problem for direct comparison due to potentially different developmental stages for the participants in the two studies. Nevertheless, Garshol (2019) uses the data from these two languages to show that L1 German learners of English make more omission errors than overgeneralization errors while L1 Swedish learners make more overgeneralization errors (based on her reinterpretation of the Swedish data), presumably due to the same L1 influence as argued for Norwegian. In the summary of the data comparison between Norwegian and Swedish (pp 77), however, overgeneralization errors among Swedish learners are shown to be only marginally higher than omission errors (52% versus 47%), while the difference between the two error types among Norwegian learners is much larger (62% versus 38%).

[11] The presence of *-r*, however, to mark tense/finiteness varies across dialects. In many dialects of Norwegian (e.g., Tromsø dialect), verbs are not overtly marked with *-r*, but finite and non-finite verbs share the same form (without the overt morpheme *-r*, e.g., *Æ spis middag* `I eat dinner´, personal communication with Marit Westergård).

Garshol (2019) presents another observation that arguably supports L1 influence in agreement errors. That is, when errors are made with the BE-verbs, there are more erroneous uses of *were/are* in singular contexts than *is/was* in plural contexts. The more frequent use of *were/are* in inappropriate agreement contexts is argued to be due to phonological similarities between *were/are* in English and *er* (present form of *be*) /*var* (past form of *be*) in Norwegian, and thus learners tend to use the form(s) more similar to their L1.

Another interesting observation made from the findings in Garshol (2019) is that agreement errors with *be*-verbs (suppletive agreement) are more frequent among L1 Norwegian learners of English than previously reported in the literature (e.g., Ionin and Wexler 2002 and White 2003). As mentioned in section 2.3, suppletive agreement (with BE-verbs) is acquired before affixal agreement, and L2 learners of English rarely make errors with *be*-verbs. In Garshol's study, however, agreement errors with *be*-verbs occur with almost all subject types under investigation although the majority of the errors occur with NP subjects (Garshol 2019:58). Garshol further reports that unlike with lexical verbs, agreement errors with BE are more prone to proximity agreement. As previously mentioned, Garshol (2019) found only a small portion of errors that can be attributed to the proximity effect (or agreement attraction) with lexical verbs. When suppletive errors are considered alone, however, a high proportion of errors (around 40% with all *be*-verbs) are reported to be due to the proximity effect involving intervening nouns in conflicting number. Garshol (2019) conjectures that the reason why *be*-verbs are more prone to proximity agreement among Norwegian learners of L2 English is that S-V agreement with *be*-verbs is supposedly more automized for L2 learners. In other words, Norwegian learners may have more native-like proficiency in using *be*-verbs than lexical verbs, which may result in error patterns that resemble those by native English speakers, governed by similar processing difficulties.

Killie (2019a and b), which is another corpus study looking at S-V agreement by participants of a similar age group, provide support for some of the findings in Garshol (2019). Killie's findings also suggest that Norwegian young learners have better proficiency with personal pronoun subjects than noun subjects and make more overgeneralization errors than omission errors (in particular at the age of 15-16). The corpus data in both Killie (2019a) and (2019b) are drawn from the Corpus of Young Learner Language (CORYL), which contains texts from the National Tests in English writing complied in the years of 2004 and 2005. The analyses in these two studies are based mainly on the texts produced by pupils in grade 7, 10 and 11 across Norway, whose ages range from 12 to 16. The collected data from

the corpus are categorized in two separate age groups, 12-13 year-olds and 15-16 year olds to see any age group differences in their performance in S-V agreement.

One of the major findings in Killie (2019a) is that young Norwegian learners of English have better proficiency in using S-V agreement with personal pronoun subjects than noun subjects, arguably due to drilling of verb paradigms with personal pronouns and high input and output frequencies (p. 16). In her findings, however, there is no conclusive evidence that suggests that post-modified NP subjects (complex NP subjects) present the most problematic context for S-V agreement as the number of post-modified NP subjects is fairly limited in her corpus. Hence, the Plural Markedness is not testable based on the available data. Her findings, however, suggest that Agreement Attraction, discussed in section 2.5, may be an important source of errors among Norwegian learners, in particular in the context of conjoined subject NPs. According to the findings, young Norwegian learners struggle with S-V agreement when the sentences involve a conjoined NP subject with only about 60% accuracy in the group of 12-13 year-olds and 75% accuracy in the group of 15-16 year-olds, which constitutes the highest error rates across subject types. Killie (2019a) argues that this is due to Agreement Attraction, as learners wrongly use a singular verb which agrees only with the closest noun in the conjoined NP subjects. Some examples are illustrated below.

(22) John, Jack and Ada ***is*** building a house in a tree in Jacks garden.

(23) The robbers and I ***was*** blinded, and then we were through to the ground.

According to Killie (2019a), Agreement Attraction is the primary source for agreement errors in the context of conjoined ("mixed" in her categorization) subject NPs as over 90% of the errors in this context can be attributed to Agreement Attraction. Agreement Attraction, however, is not the only source of errors in general, as young Norwegian learners of English have problems with S-V agreement even with simple noun subjects (19.2% error rate for 12-13 year olds 13.8% for 15-16 year olds). As the number of errors with conjoined subject NPs is relatively low, errors in this category do not impact the overall proportion of errors with all noun subjects including conjoined subjects (21.9% for 12-13 year olds and 14.2% for 15-16 year olds). Killie (2019a) thus concludes, in line with Garshol (2019), that young Norwegian learners of English have a general problem with agreement with noun subjects regardless of whether the noun subjects are complex or not. Garshol (2019) also concludes that "neither the increased distance between the subject and the verb, nor an intervening noun of a different

number is the main problem for young Norwegian learners of English. This is, according to Killie (2019a), arguably due to less drilling of agreement with nouns subjects unlike personal pronouns and less reinforcement of the paradigm in input and output as noun subjects come in a variety of forms with various types of modification in either singular or plural forms. The nature of noun subjects thus would make it difficult for automatization of agreement patterns.

Killie (2019b) tests out the hypothesis that L2 learners of English normally make omission errors and do not unnecessarily mark the verb with 3SG *-s* in inappropriate contexts (e.g., White 2003). Her findings suggest that this hypothesis holds only for the group of L1 Norwegian learners at the age of 12 and 13, but older Norwegian learners (at the age of 15-16) tend to make more overgeneralization errors than omission errors by 12%, in line with the findings in Garshol (2019). But unlike in Garshol (2019), the more frequent overgeneralization errors are not limited to noun subjects, but learners also make more overgeneralization errors with personal and relative pronoun subjects (e.g., *the books which discusses*…). More overgeneralization errors with personal pronouns are, in particular, surprising as the opposite pattern has been observed in Garshol (2019) among the participants in the same age group. More frequent overgeneralization errors with personal pronoun subjects are also observed among the younger group of learners (12-13 year olds) (56.4% overgeneralization versus 43.6% omission), while there are more omission errors when all subject types are considered (67.9%) (see p. 7 in Killie 2019b for detailed error proportions across the subject types). Killie (2019b) speculates that the reason why somewhat unexpected error patterns are observed with the CORYL data could be due to the modest number of tokens, but a more plausible cause of unexpected error patterns could be linked to a great deal of variation in learners' agreement strategies. Some learners may start out by hypothesizing that the base form of the verb (the unmarked form) functions as the only present-tense form in English, making omission errors across the board. At a later stage, learners may form a new hypothesis based on negative input and figure out that some noun subjects take the marked form with -s. Once learners learn the rule of using 3SG *-s,* they may overgeneralize the rule to all noun subjects or only to plural subjects (due to the misconception of the notion "agreement" associating it with morphological copying of the plural *-s* on the verb (e.g., the girl*s* speak*s*..). As various linguistic or non-linguistic factors may influence L2 learners' agreement strategies, it may be hard to locate any general sources for agreement errors that have explanatory power for L2 learners' performance in S-V agreement in English (Killie 2019b).

To summarize what has been discussed so far, despite the syntax of agreement being intact in L2 learners' grammar, certain agreement conditions make S-V agreement to be challenging even for advanced L2 learners, giving rise to frequent agreement errors (i.e., morphological variability). It has been shown that despite high accuracy in S-V agreement in general, young Norwegian learners of English still struggle with agreement with NP subjects, regardless of the complexity of NP subject structure (Garshol 2019; Killie 2019a), while the comprehension study reveals that plural subjects are harder than singular subjects and long-distance agreement causes more problems than local agreement (Jensen 2016). The previous studies on S-V agreement by Norwegian learners also suggest that, unlike common error patterns observed among L2 learners, Norwegian learners tend to overuse 3SG *-s* in non-obligatory contexts, than omitting it, which is argued to be due to L1 influence (Garshol 2019).

Building on the findings from previous research on S-V agreement in English, the research questions for this study are as follows:

1. Is subject-verb agreement with noun subjects still problematic among L1 Norwegian university students of English? [12]
2. If noun subjects still pose problems for N1 Norwegian university students, which sub-conditions are most problematic and in which sub-conditions do L1 Norwegian learners improve over time?
3. Is the overuse of 3SG *-s* still more robust than omission of the morpheme in affixal agreement among older Norwegian learners of English? (based on Jensen 2016, Garshol 2019, Killie 2019b).

Based on the previous research on S-V agreement in English, the following predictions are made.

[12] As a proficiency test for the participants in this study could not be carried out, I intentionally avoid the term "advanced", but instead use "university students" to refer to the subjects participated in this study. Even though the complexity of sentence structure (in particular, subjects) might suggest that university students are more proficient/advanced in English than high-school students (see Vaurula 2012 for a correlation between complexity of sentences and proficiency), I keep the term "university students" throughout the thesis to remain neutral about the level of proficiency of the participants in this study.

Regarding question 1, the proportion of agreement errors with noun subjects will be considerably lower among older Norwegian learners (compared to the results presented in Killie 2019b). This prediction is due to the previous findings that proficiency correlates with the proportion of identifying ungrammatical sentences with agreement errors (Jensen 2016, Jensen et.al. 2017, Jensen et. al. 2019, Nygaard 2019) and with the proportion of agreement errors in written production (Vaurula 2012, Jensen 2016, Kim 2017, Garshol 2019 and Killie 2019a). Regarding question 2, the most difficult sub-condition for S-V agreement are predicted to involve the complexity of NP subjects; the proportion of agreement errors will be higher with complex subjects than with pronominal and simplex subjects. Regarding question three, if Garshol's (2019) argument for L1 influence in agreement error patterns is on the right track, L1 Norwegian university students would still opt for 3SG present *–s* as a default choice when they encounter processing difficulties. In other words, more overgeneralization errors are observed than omission errors as omission errors are argued be found with less proficient L2 learners of English.

3 Methodology and Data collection

To answer the aforementioned research questions, data are drawn from an obligatory occasion analysis (Brown 1973) of the texts produced by Norwegian university students during the period of 2018-2019. Many of the previous studies on S-V agreement among L2 learners only look at the number of errors (e.g., Fisher 1985; Garshol 2019). However, looking at only the number of errors fails to provide a complete picture of learner language, as frequently mentioned as a limitation of error analysis (see Ellis 2008: 60-61). An alternative method for studying learner language is an obligatory occasion analysis, which was first introduced by Brown (1973) for the purpose of studying L1 and had often been used to investigate the order of acquisition (e.g., Dulay and Burt 1973; Krashen 1974; Larsen-Freeman 1976, cited in Ellis and Barkhuizen 2005).

According to Ellis and Barkhuizen (2005), Obligatory Occasion Analysis (OOA) is similar to Error Analysis in involving a comparison between the forms used in interlanguage and target language norms. Unlike Error Analysis, however, OOA offers an "analysis of samples of learner language in their totality" by investigating how accurately learners use specific grammatical features by calculating both correct and incorrect uses of the feature (Ellis and Barkhuizen 2005: 73). As the forms used by L2 learners in collected samples are measured against target language norms, Brown (1973) considers each obligatory context to

be a test item that determines whether L2 learners use the relevant form correctly or not. A criterion for acquisition, according to Brown (1973), is considered to be a 90 per cent accuracy level. With longitudinal data, however, he asserts that for a morpheme to be acquired, a learner has to achieve the 90 per cent accuracy on three consecutive data points, given that children may reach this level at one data point and fall below it at another data point.

A weakness of OOA (or any analysis of production data) is that it does not account for what L2 learners know and are capable of (competence), which may not be reflected in their production due to avoidance. Avoidance is one of the strategies L2 learners employ in L2 acquisition when they find certain structures or features to be difficult to use. Studies have shown that this strategy is prevalent in L2 acquisition (e.g., Kleinman 1978, Dagut and Laufer 1985, cited in Ellis 2008). Overcoming such a weakness is to combine the study with a task that also measures L2 leaners' underlying knowledge of particular structures or conditions that are not attested in production data. Nevertheless, written production data, in particular with a more formal style at an advanced level, would allow us to collect samples of more complex sentences which may be avoided in oral production or by less advanced learners. Furthermore, the purpose of this study is not to investigate what Norwegian learners know but rather to have a better understanding of which agreement conditions are most challenging for Norwegian university students in their written production so that the focus area for teaching can be accommodated. For this reason, studying samples of written production in an academic style will suffice the aim of this research.

More details of the subjects who contributed texts and the process of data collection and analysis are described in the following sub-section.

3.1 Subjects and texts for data collection

The subjects in this study are first- and second-year students at a university level taking English as their first and second choice of the study in teacher education. Since they have not taken any English subject prior to the English courses in which they produced texts, all of the subjects equally had thirteen years of English education at a Norwegian school prior to data collection. All the students have Norwegian as their L1 and none of them speak another language on a daily basis other than English. The age of the participants at the time of data collection varies from 20 to 27 with a mean age of 20.8. Six out of seventeen participants are

male students, and the rest are female students. None of them have any learning difficulties (e.g., dyslexia).

The total of sixty-four texts were collected for the purpose of the TALE project, four texts for each student which were produced as part of the course requirements in year 2018-2019. This research can thus be seen as a quasi-longitudinal study, given that data are collected at four different data points. Two of the students dropped out in 2019 so that there were only two texts produced by these two, which resulted in sixty-four texts in total. The length of each text varies from 800 – 1200 words, and the topics also varied from argumentative texts on linguistic or didactic issues to descriptive (or analytic) texts of literature the participants studied. All texts were written in an academic style. The original aim was to analyze all sixty-four texts, but due to time limit, only thirty-two texts were selected for analysis for the purpose of this thesis, which makes the findings of the current study only a preliminary result of a planned research project. The scope of data is therefore fairly limited and more data need to be added in order to provide a more full-fledged picture of the phenomena presented in this thesis.

The thirty-two texts used for analysis have the total of 32908 word counts, which makes a mean length for each text 1028 words (median value). Seventeen texts were produced in October 2018 where the participants were asked to discuss how chosen literary texts can be used to develop reading and/or writing skills among school children at the level of 5-10. Fifteen texts which were produced approximately three months later, March 2019, were a description text in which the students were asked to describe how *Shakespear* uses language to express characters in *Romeo* and *Juliet.* Due to the nature of the task, the texts produced in March 2019 contain an unusually large number of proper nouns than in those dated in December 2018. Right before the submission of the texts in March 2009, the students received grammar instruction on subject-verb agreement by another teacher (participating in the TALE project) as an intervention measure to see if they make any progress after explicit teaching (as part of the project). The comparison of written production at different points in time, however, is not included in this thesis due to insufficient data.

3.2 Detection of obligatory contexts and errors and categorization

Thirty-two texts were manually inspected for all instances of subject-verb agreement and errors, and all the errors were extracted and copied in a single line as an individual token of an error occurrence in a separate document. In a few instances, the same sentence was repeated due to multiple errors in one sentence. Each error then was annotated according to the date of submission, number given to each text, and subject types, along with comments on potential sources of errors, where possible (see appendix 1). All obligatory agreement occurrences were counted and recorded in a separate excel file categorically by number of agreement contexts and number of errors. Accuracy was then calculated by applying the formula provided by Ellis and Barkhuizen (2005: 80), as seen below.

(24) $$\frac{n \text{ correct suppliance in contexts}}{\text{total obligatory contexts}} \times 100 = \text{per cent accuracy}$$

As screening for all obligatory agreement instances and errors was done manually from text to text, there is a risk of overlooking some tokens of agreement instances or errors, but the texts were screened three times to make sure all instances and errors were counted.

Despite the multiple occurrences of the same token in the texts, the analysis was carried out by the number of tokens of agreement instances and errors, rather than types, since variability was observed in agreement within the same type. For example, a student may use S-V agreement correctly in one context with the same subject (e.g., *Shakespear sees...*), he/she may use it incorrectly in another context (e.g., *Shakespear have..*). Errors with the same type of subject thus are recorded as separate tokens as sources of the errors may be of different nature.

All the agreement contexts were divided into different verb types, the three most frequent verb, *be*, *have*, and *do* (*primary* verbs in Killie 2019a) and lexical/thematic verbs (cf. Garshol 2019 who categorizes *do* and *have* into a lexical verb category). This verb categorization is based on Killie (2019a) who suggests, following White (1992) and Ionin and White (2002), that agreement is easier with auxiliary verbs that undergo verb raising (*be, have, do*) than lexical verbs with affix lowering (see also section 2.3). It is predicted that L2 learners would make more agreement errors with lexical verbs than auxiliary verbs and that there should be no significant differences among the three auxiliaries in the accuracy of S-V

agreement (Killie 2019a). The findings in Killie (2019a) also support the prediction that there would be no large differences in agreement errors among the three auxiliary verbs, but interestingly this prediction holds only for the context in which personal pronouns are subjects, but not for noun subjects. Killie (2019a) attributes the difference between personal pronoun and noun subjects to frequency of personal pronouns and the effect of drilling in L2 acquisition (see section 4.2 for further discussion on the differences in the accuracy of agreement between primary and lexical verbs, which appears to vary across subject types). The categorization of verb types into primary and lexical verbs would also enable us to see a correlation between proficiency and accuracy of S-V agreement by comparing the results of the current study with the findings from Killie (2019a) (although a direct comparison is done with caution due to the differences in the size of the corpus and participants).

All agreement instances are also categorized into different subject types such as Pron (including personal pronouns, wh-subjects, demonstratives)[13], Simplex subjects (including verbal nouns and proper nouns), complex NP subjects with prepositional modifiers, complex NP subjects with clause modifiers, indefinite pronouns, there-construction, NP subject head of a relative clause (NP+Relative Pron + V, e.g., *the book that is about..*), subject coordination, and VP-coordination. This categorization was influenced by some of the previous research and findings which have suggested primary factors to look for, when investigating difficult contexts for S-V agreement (e.g., complex noun subjects with intervening nouns, conjoined subject). Prepositional and clausal modifiers were separated as some of the studies have shown that clausal modifiers create more processing burdens among L2 learners (e.g., Ocampo 2013) although Bock and Cutting (1992), cited in Eberhard (1997), did not find any differences between the two types of modifiers among native speakers of English. An example of each subject type is illustrated below:

(25) Subject Categories

a. Pron: *She is aware of her fate.. This is.... What is interesting is..*
b. Simplex subjects: *The appropriate age group is.. Reading novels requires...*
c. Complex NP subjects with prepositional modifiers: *Her use of language here says.*

[13] These are categorized together based on frequency in the input and previous findings that personal pronouns and demonstratives are acquired quite early. Wh-pronouns are also included in this category since the number of tokens is fairly limited and no errors are observed in the corpus.

d. Complex NP subjects with clause modifiers: *The reason why I focused a lot on three different phrases of reading is that..*

e. Indefinite pronouns: *Everyone agrees that...*

f. NP subject head of a relative clause: *a woman who has a tendency of... is...*

g. Subject coordination: *Reading and writing are important skills.*

h. VP-coordination: *We cover the first competence aim and open up for...*

The reason why verbal subjects are included in the simplex-noun category is because I was interested in seeing the effect of having intervening NPs, i.e. two NPs before the verb. As the number of tokens with verbal subjects is very low and university leaners have no problems with them in S-V agreement, I have decided to merge this category with simplex subjects, instead of having it as an independent category. Even if verbal subjects are removed from this category, it does not influence the overall accuracy rate of this category. In the first round of the analysis with the texts dated in December 2018, proper nouns were categorized separately from simplex subjects, but the two categories were merged into one at a later point as there were no errors with proper nouns in the initial analysis. Including proper nouns in the simplex-subject category, however, affects, to some extent, the overall accuracy rate/error proportion in this category, as the texts dated in March 2019 contain an unusually higher number of errors with proper nouns produced by a few students. Nevertheless, the overall accuracy in this category is over 90%, which is considered to be ceiling performance (Brown 1973).

A total of 145 errors were detected out of 2125 obligatory agreement contexts. Three agreement errors were excluded due to difficulties with categorizing them into established subject types. The excluded errors are:

(26) a. A title and topic that interests (unclear if this belongs to subject coordination or to the noun head of a relative clause)

b. What an open question and what a closed question is.. (conjoined clausal subject)

c. What and how pupils write gives.. (presumably conjoined clausal subject)

If all of these instances are included in the category of subject coordination, they may negatively affect overall accuracy of S-V agreement in this context. In what follows, I will present the findings of the analysis.

4 Findings and Discussion

The overall results of the analysis presented here are based on a small-scale of data samples, which makes it difficult to do any statistical analyses for discussing significances in percentage differences across categories or in comparison with previous studies. Therefore, the results reported here only serve as an indication of certain claims that can be made, provided that more supporting data are available.

The general findings of the analysis show that Norwegian university students demonstrate over 90% accuracy in using S-V agreement when all agreement contexts and correct uses of the agreement feature are considered. This accuracy rate, according to Brown (1973), is an indication that the agreement feature is acquired. In particular, they show ceiling performance in conditions in which the subject and the verb are contiguous, i.e. local agreement, except for conjoined subjects, which seem to be the most difficult condition based on the data available. When looking at more complex subject structure, however, the accuracy rate falls below 90%; conditions in which the subject and verb are not contiguous (non-local) [14]seem to be problematic for university students in using S-V agreement, although the numbers of tokens are too small to make any firm conclusions. When different verb types are considered, it appears that university students generally perform slightly better with the three most frequent verbs (*be, have, do,* primary verbs) than lexical verbs. However, accuracy rates with the primary verbs vary across different subject conditions. In some subject conditions (e.g., non-local agreement), more agreement errors occur with the primary verbs than with lexical verbs, which is not predicted based on previous research (e.g., Ionin and Wexler 20). When looking at error patterns, omission and overgeneralization errors are almost equally observed, although a direct comparison with previous findings (e.g., Garshol 2019; Killie 2019) is difficult due to the low number of tokens available in this study. In what follows, more detailed findings are presented, taking into account different verb types, subject conditions, and error types (omission versus overgeneralization).

4.1 Overall results across different subject conditions

When all verbs are considered together, Norwegian university students use S-V agreement accurately in over 90% of the agreement contexts. This suggests that Norwegian learners at a

[14] I use the term 'non-local' instead of long-distance to cover the condition in which the subject and the verb are separated only by a relative pronoun,

university level have acquired the agreement feature, which lends support to the previous claim that functional morphology is indeed acquirable despite its complexity (e.g., Killie 2019a; Vaurula 2012). The accuracy rate, however, varies across subject types, as has previously been observed by other studies (e.g., Fisher 1985; Killie 2019a; Ocampo 2013). While conditions in which agreement is local do not seem to create problems for university students (with accuracy rates from 93.3% to 100% with the median value of 96.5%), the conditions in which the subject and the verb are non-adjacent (non-local agreement) seem to be still problematic. An exception to this generalization is conjoined subjects which show the lowest accuracy rate (59.1%) among all the subject conditions although the token rate for this category is extremely low, constituting only 2% of all agreement contexts (44 out of 2125 obligatory contexts).

The subject conditions that I consider to be an instance of local agreement include personal pronouns (including demonstratives and wh-subjects), simplex nouns, indefinite pronouns and expletive *there*-subject. The subject conditions for non-local agreement include all types of complex noun subjects with post-modifiers (both phrasal and clausal) and the nominal head of a relative clause in which there is an intrusive relative pronoun between the subject and the verb (e.g., *the girl who wears...*). Conjoined verbs also create a non-local agreement condition in which the second verb is separated from the subject, which also seems to be challenging for university students to establish a correct agreement relationship. The most frequent subjects in the corpus are personal pronoun and NP subjects which constitute 74.5% of all obligatory agreement contexts. The dominance of these two subject types in the corpus thus makes the impact of other subject types that establish non-local agreement rather trivial in the overall accuracy rate, 93.3%. Nonetheless, the fact that there seems to be a large difference in accuracy between local and non-local agreement cannot be overlooked as such a difference lends support to the findings from the previous studies on S-V agreement discussed earlier. The following graph presents accuracy rates across all subject conditions with all verb types, and table 1 presents numbers of obligatory contexts and errors that give rise to the accuracy rates.[15]

[15] I provide numbers of errors, instead of numbers of correct uses of the agreement feature for the sake of convenience.

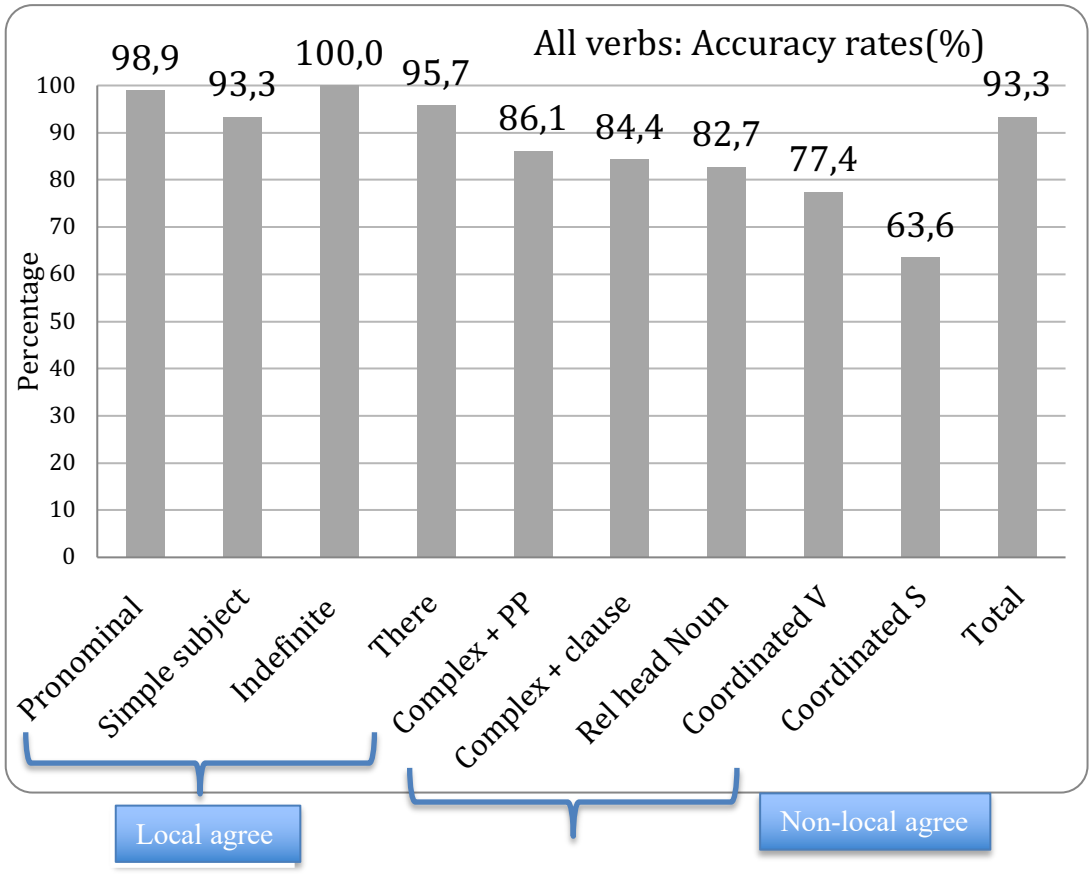

Figure 2. Accuracy Rates across subject types with all verbs

Subject Types	Agreement context	No. of errors
Pronominal (personal pronouns, wh-subjects, demonstratives)	939	10
Simple subjects (including V-ing & Proper Nouns)	645	43
Indefinite pronouns	19	0
Expletive *there* subject	47	2
Complex NP with prepositional postmodifiers	166	23
Complex NP with clausal modifiers	64	10
Noun head + RelPro + V (noun head of a relative clause)	139	24
VP coordination	62	14
Subject coordination	44	16
Total	**2125**	**142**

Table 1. Number of obligatory agreement contexts and errors across subject types with all verbs

As seen above, Norwegian university students rarely make agreement errors with personal pronoun subjects, demonstratives, and wh-subjects (in "Pronominal" category), unlike high school students reported in Garshol (2019) and Killie (2019a). Garshol (2019), for example,

reports that despite the transparent number assignment in personal pronouns, quite a number of agreement errors are observed even when the most frequent verb category (*be*) is considered (Garshol 2019: 49-50). Due to the difference in the size of the corpus and different verb categorizations between this study and the previous studies, a direct comparison is not possible, but the fact that university students rarely make agreement errors with personal pronoun subjects (with all verb types) may indicate that there is a progress over time in using S-V agreement. This is probably not surprising, given that number marking with pronouns should be easier and more transparent than with NP subjects. As Killie (2019a) also points out, agreement with personal pronouns is subject to rote learning or drilling of verbal paradigms in schools so that agreement patterns with this subject category must have been automatized among L2 leaners of English through input and output over time. The number features of personal pronouns are also transparent as either singular or plural unlike nouns, which makes it easier for L2 learners acquire agreement with personal pronoun subjects. Demonstratives and wh-subjects may have also been memorized as a chunk (e.g., *This/That is*, *what is*, *which is*...), and they are also relatively frequent in the input (see also Killie 2019a). Hence, the combination of rote learning, frequency and transparency in number assignment may explain why these categories are easily acquirable. One thing that is worth noticing is that when university students make errors with personal pronoun subjects, they normally make omission errors, meaning that the majority of errors are made with third personal singular pronouns, which is similar to the findings in Garshol (2019) (see section 2.6.3). Examples of the errors with subjects in the pronominal category are illustrated below. There are ten errors in total, and there is only one overgeneralization error, as in (27c).

(27) a. It influence... (Dec18_2_PRON1)
b. It present. (Dec18_10_PRON3)
c. I discloses.. (Dec18_12_PRON5)
d. He use... (Mar19_12_PRON10)

Due to the semantics of indefinite pronouns such as *everybody* and *everyone*, number marking on indefinites can be confusing for L2 learners of English, as discussed in section 2.4. Garshol (2019) and Killie (2019a) also report that high school students have problems with S-V agreement when indefinite pronouns are subjects due to a mismatch between semantic and grammatical number. *Alle* 'everybody' in Norwegian is syntactically plural, according to Garshol (2019), which often leads to omission errors with indefinite pronouns.

Although separate error counts are not provided in Garshol (2019) and Killie (2019a), a number of errors with expletive *there*-subject are also reported to occur among high school students. Due to the extremely low numbers of tokens, it is difficult to confirm whether or not agreement is acquired with indefinite pronouns and expletive *there*-subject among university students. Based on the data available, however, these two subject categories do not seem to pose problems for older learners, although more data are needed to confirm this. There are only two errors found with expletive *there*-subject (out of 47 agreement occurrences) and no errors are observed with indefinite pronouns (out of 19 occurrences). There is one instance where an indefinite pronoun may have caused an agreement error, as seen in (28), but it is unclear if the error occurs due to the semantic and grammatical number mismatch on indefinite pronouns.

(28) There were something. (Dec18_12_THERE1)

In Garshol (2019) and Killie (2019a), S-V agreement with NP subjects are reported to be still problematic among high school students due to various factors discussed in section 2.4 on complexity of number marking in Engish. In Killie (2019a), accuracy for S-V agreement with noun subjects is reported to be below 90% (with an error rate of 14.2%). Although a direct comparison with Killie (2019a) is not feasible due to the different size of the corpus and different participants, Norwegian university students seem to have a better control of S-V agreement with NP subjects as the accuracy rate reaches over 90%. When only the primary verbs are considered, the accuracy rate is even higher (96.4% versus 93.3%). The decrease in the accuracy rate when all verbs are counted is due to an unusually high number of errors made with proper nouns with lexical verbs (see more discussion in section 4.3). The fact that local subjects (no intervening nouns) do not pose problems for Norwegian university students is thus an indication that L2 learners make a progress in using S-V agreement over time.

Non-local agreement is problematic

As seen in the graph above, when the subject conditions are broken down into different categories, the performance by the students becomes rather unstable although the token rates are fairly limited to draw any firm conclusions, as seen in table 1. The subject conditions in which the students demonstrate morphological variability are those that create non-local agreement, given that accuracy rates fall below 90%, with conjoined verbs scoring the lowest accuracy rate, 80.6%. The numbers of tokens involving non-local agreement are fairly low,

compared to those of local agreement (1659 versus 431 obligatory contexts), and thus the problems with non-local agreement do not influence the overall accuracy rate under the current analysis. Nevertheless, the fact that non-local agreement is problematic lends support to the previous claims that non-contiguity is a deciding factor for agreement errors not only for the performance of L1 speakers of English (e.g., Fisher 1985; Eberhard 1997) but also for L2 learners of English (e.g., Ocampo 2013; Jensen 2016; Vaurula 2012). As mentioned earlier, the complex subject conditions in which agreement is non-local include all noun subjects followed by post-modifiers (phrasal and clausal), the nominal head of a relative clause, and conjoined verb constructions (VP coordination). It is unclear which of these conditions is most or least challenging due to low proportions of tokens, but one notable observation one can make is that in most of the errors in non-local agreement contain at least one intrusive noun between the subject and the verb. It is observed that there are sixty-nine instances of non-local agreement (see Appendix 2), and sixty-seven of them contain at least one intrusive noun between the subject and the verb. Some examples that demonstrate agreement errors in non-local agreement are provided below:

(29) NP with phrasal (prepositional) post-modifiers

a. The suitable **age** for the pupils **are** .. (Dec18_1_PM2)
b. The competence **aims** after year 10 **fits**.... (Dec18_1_PM1)
c. The **reason** for such a high age for these books **are**.. (Dec18_17_PM_9)

(30) NPs with clausal post-modifiers

a. The **groups** that stopped at every new word **is**.. (Dec18_6_Clause_long3)
b. The **characters** I will be focusing on **is**.. (Mar19_16_Clause_long9)

(31) Noun head of a relative clause

a. the **pupils** who **struggles.**. (Dec18_7_Clause_short5)
b. **topics** that **does** not depend on.. Dec18_12_Clause_short9

(32) VP coordination

a. The **teacher** tells the story and not just **read**.... (Dec18_1_CorV1)
b. **Her lines** are without rhythm and rhymes and **does not**.. (Mar19_6_CorV10)

As seen above, numerous agreement errors occur in non-local agreement with (e.g., 29) or without (e.g., 31) intervening nouns. Based on the accuracy rates among these conditions, it is

difficult to determine which of the conditions is most or least challenging for Norwegian university students as the low number of tokens makes it difficult to do any statistical analyses. Ocampo (2013), based on an online reading task, shows that L1 Spanish learners of English at an advanced level are more sensitive to agreement violations in noun subjects with phrasal modifiers than in those with clausal modifiers. In other words, noun subjects with clausal post-modifiers are more difficult for Spanish learners to detect agreement violations between the subject and the verb, arguably due to processing limitations. Another study on the processing of S-V agreement among native speakers (Bock and Cutting 1992, cited in Eberhard 1997), on the contrary, did not find any effect of the structural complexity of post-modifiers on agreement errors. As discussed in section 2.5., Eberhard (1997) concludes that a primary factor for agreement errors among native speakers is attributed to the presence of intervening (plural) local nouns regardless of the complexity of post-modifiers. Based on the data available, Norwegian university students seem to have problems equally with phrasal and clausal modifiers, although agreement errors with clausal modifiers occur only with the primary verbs, *be*, *have* and *do* (see section 4.2).

What is worth noticing is that a number of agreement errors in this study indicate that the Plural Markedness Effect may play a role in agreement errors among Norwegian university learners, which was not confirmed (or observed) among younger Norwegian learners (Jensen 2016; Garshol 2019; Killie 2019a, cf. Nygaard 2019). Examples (29a) and (29c), for instance, seem to suggest that the errors occur due to local plural nouns that immediately precede the main verbs, inviting plural verb forms. Examples (29b) and (30a), on the other hand, exhibit instances of agreement attraction, which has been argued to be one of the primary sources of errors made by young Norwegian learners by Killie (2019a). Evidence for agreement attraction in Killie (2019a) is mostly drawn from conjoined subject NPs, not from post-modified NPs due to limited data samples with complex noun subjects in her corpus. Nonetheless, the current finding that agreement attraction is observed in NP subjects with post-modifiers still supports her observation that agreement attraction is one of the primary sources of agreement errors.

As mentioned earlier, unlike in findings from Garshol (2019) and Killie (2019a) which demonstrate that simple NP subjects generally pose problems for S-V agreement among high school students, the findings in this research indicate that university students no longer have problems with simple NP subjects. However, conjoined subjects (coordinated subject constructions in this study) continue to be problematic despite being local to the agreeing verb. This subject category is indeed most problematic, giving rise to the lowest accuracy rate

(63.6%) among all subject conditions. Although coordinated subjects do not occur very often, compared to other subject types, difficulties with this subject type lend support to Killie's observation that conjoined subjects represent a highly problematic agreement context. Killie (2019a) argues that agreement errors made in coordinate subject constructions are due to agreement attraction. Alternatively, L2 learners may interpret conjoined subjects as having the qualities of a complex unity, in particular when the conjoined nouns are abstract nouns which are semantically close (as discussed in section 2.4). Some of the agreement errors with coordinated subjects are illustrated below.

(33) Agreement errors in coordinated subject constructions

a. Only the imagination and creativity puts.. (Dec18_1_CorSUB3)
b. her personality and social ranking makes.. (Mar19_10_CorSUB1)
c. Learning to read extensively and using different reading strategies to understand this book is… (Dec18_4_CorSUB)
d. Reading and writing goes.. (Dec18_1_CorSUB2)
e. Both reading and writing needs… (Dec18_9_CorSUB)

As seen above, one can imagine that L2 learners tend to establish an agreement relationship between the verbs and the local singular nouns (e.g., *creativity*, *ranking*, *writing*), as instances of agreement attraction. These examples can also be seen as instances in which the qualities expressed by the two abstract nouns (or verbal nouns, e.g., *reading*) are seen as a complex unit, as discussed in Fisher (1985), or learners may think that combined abstract nouns are still uncountable and thus singular. For whichever reasons L2 learners establish an agreement relationship between verbs and coordinated subjects, it might be worthwhile to investigate how number associated with conjoined (abstract) subjects is construed among native speakers in order to determine if the examples in (33) indeed exhibit agreement errors. If there is variation in number construal for the conjoined subjects in (33) among native speakers, many of the agreement errors in this subject category may turn out to be acceptable variants.

It has been shown thus far that when different subject conditions are considered, Norwegian university students no longer have problems with local agreement (although token rates for some of the conditions for local agreement are quite limited). In particular, high accuracy with simple noun subjects in S-V agreement is noteworthy as this subject condition has been reported to be problematic for high school students. Non-local agreement, on the other hand, is shown to be still problematic along with agreement in coordinated subject

constructions. Although the subject conditions that create non-local agreement and coordinated subjects do not have high frequency in the current data set, agreement errors from these two categories together constitute over 60% of all the errors that are found in the corpus. The following figures illustrate a distributional difference between the tokens of agreement contexts and those of agreement errors.

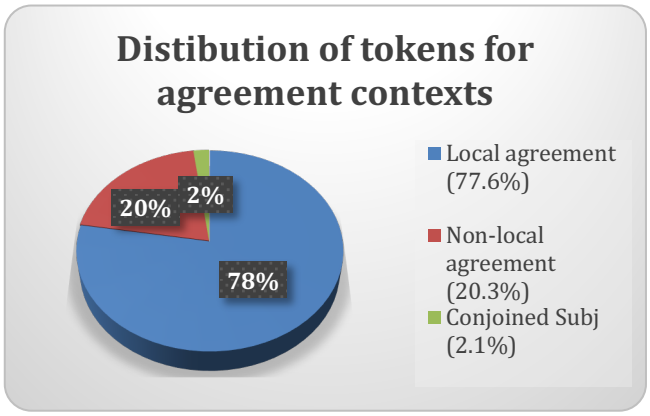

Figure 3. Distribution of tokens for obligatory agreement contexts

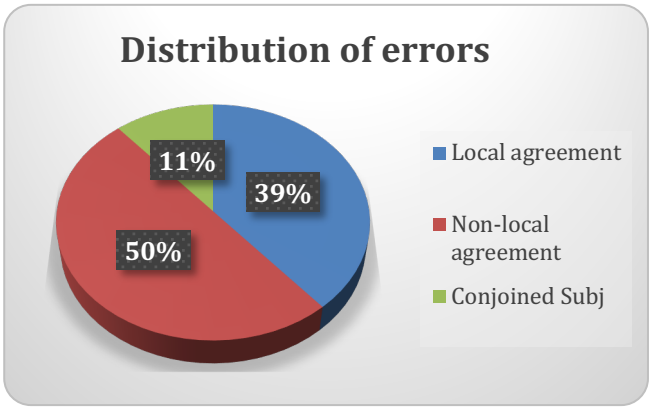

Figure 4. Distribution of errors

As seen above, errors caused by non-local agreement and conjoined subjects constitute a significant portion of agreement errors (61%) despite the low portion of agreement contexts in which these errors occur (22%). Such a distributional difference may indicate that non-local agreement conditions, despite being a minor portion of all agreement contexts, pose non-trivial problems for S-V agreement for university students. In what follows, findings across two different verb types, primary versus lexical verbs, are presented.

4.2 Primary verbs (*be*, *do*, *have*)

As discussed in section 2.3, suppletive agreement is argued to be easier than affixal agreement due to frequency in the input and verb raising associated with it, which is argued to be easier and more economical. It is thus predicted that verbs that undergo verb raising (primary verbs, *be*, *do*, and *have*) are easier to acquire when it comes to S-V agreement. These verbs are also the most frequent verbs in English, which L2 learners often encounter in both input and output so that chances for reinforcement for agreement patterns may be higher than lexical verbs. When only primary verbs are considered, the overall accuracy rate for S-V agreement is, however, only marginally higher than the overall accuracy rate with all verb types, 93.3% (with all verbs) versus 95.3% (with only primary verbs). The following graph presents accuracy rates across different subject conditions when only primary verbs are considered. Table 2 presents numbers of tokens for agreement contexts and errors with the primary verbs.

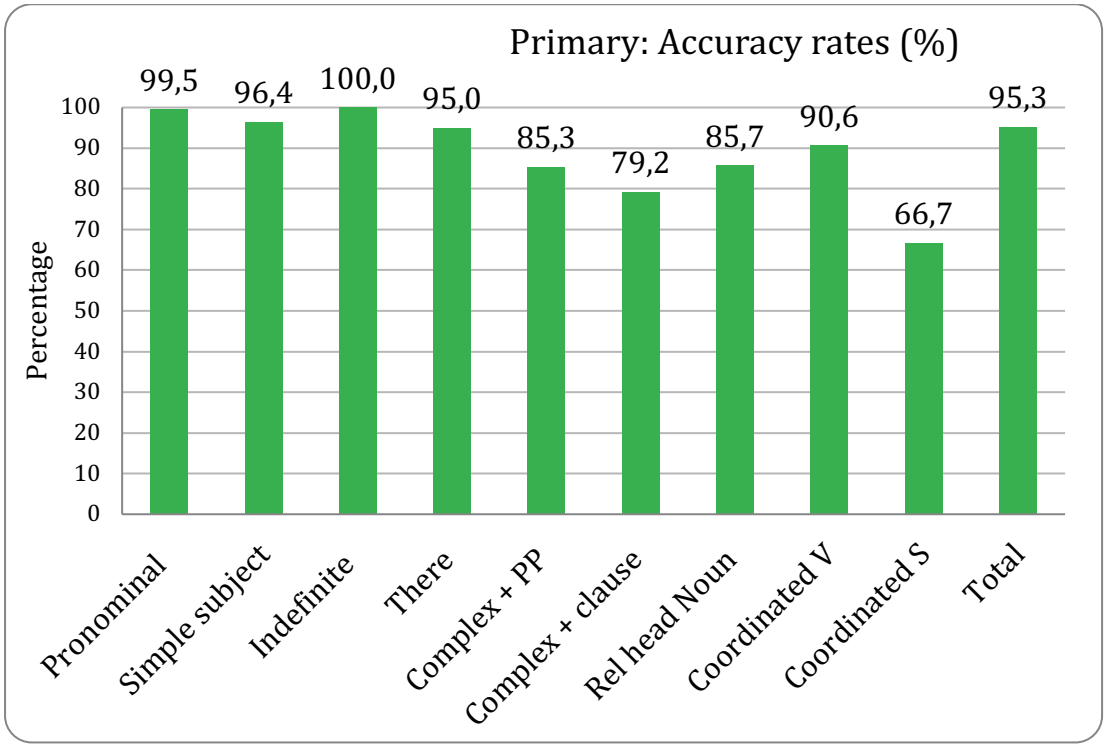

Figure 5. Accuracy rates across subject types with only primary verbs

Subject types	No. Tokens	No. Errors
Pronominal (personal pronouns, wh-subjects, demonstratives)	436	2
Simple subjects (including V-ing & Proper Nouns)	413	15
Indefinite pronouns	10	0
Expletive *there* subject	40	2
Complex NP with prepositional postmodifiers	68	10
Complex NP with clausal modifiers	48	10
Noun head + RelPro + V (noun head of a relative clause)	63	9
VP coordination	32	3
Subject coordination	6	2
Total	1116	53

Table 2. Agreement errors across subject types in the Primary verb corpus

While university students rarely make agreement errors in local agreement with even higher accuracy rates than when all verbs are considered, non-local agreement still presents difficulties with accuracy rates below 90%. The coordinated-subject condition is also still problematic with the lowest accuracy rate among all subject conditions. It may appear that that university students do slightly better with the primary verbs in coordinated verb constructions, but it is difficult to say if this is indeed the case due to the low token rate. More data will be needed to confirm this. What is worth noting is that even if the agreement feature is fully acquired, given that university students have no problems with local agreement, certain subject conditions make it difficult to establish a correct agreement relationship between the subject and the verb. This indicates that agreement errors are induced not by the syntactic deficits of the agreement feature, but by external factors that many previous studies have also suggested (e.g., Jiang 2004; Ocampo 2013; Vaurula 2012).

Differences in the size of the corpus, error categorization and participants do not allow a direct comparison with Killie (2019a), but when loosely comparable categories are considered, such as pronominal subjects, simplex subjects, and indefinite pronouns, university students seem to make improvement in using S-V agreement. This may lend support to a previously recognized correlation between proficiency and accuracy in S-V agreement (e.g., Jensen 2016; Vaurula 2012; Killie 2019a). For the sake of comparison with Killie (2019a), error rates are provided in the table below.

	12-13 year-olds (Killie 2019a)	15-16 year-olds (Killie 2019a)	20-27 year olds (current study)
Personal pronouns + demonstratives	9.4%	4.3%	0.5%
Simple NP subjects	21.9%	14.2%	3.6%
Indefinite pronouns	8.6%	16.1%	0%

Table 3. Error rate for each age group for personal pronouns/demonstratives, simple NP subjects, and indefinite pronouns

The findings in the current study and Killie (2019a) may suggest that L2 learners eventually overcome difficulties with NP subjects in S-V agreement over time. Due to lack of information regarding the participants' experiences with English in this study, it is difficult to say whether the progress is attributed only to input (and output) or there are other factors that may have helped facilitate L2 acquisition of the agreement feature. What is important to note is that it is indeed possible to acquire features that are known to be notoriously difficult in L2 acquisition, given that university students, who are presumably at the final stage of L2 development, reach ceiling performance with (simple) NP subjects.

4.3. Primary vs lexical verbs

Based on the previous research on S-V agreement in L2 acquisition (e.g., Lardiere, 1998; Ionin & Wexler, 2002), it is predicted that L2 learners would perform better with the primary verbs than lexical verbs in S-V agreement. When looking at overall performance with the primary verbs, this prediction seems to be borne out, given that an overall accuracy rate reaches over 95%, while the accuracy of S-V agreement with lexical verbs reaches the 90% threshold only marginally. University students seem to make much less agreement errors with the primary verbs than lexical verbs, given that errors with the primary verbs make up only about 37% of all agreement errors, as illustrated below.

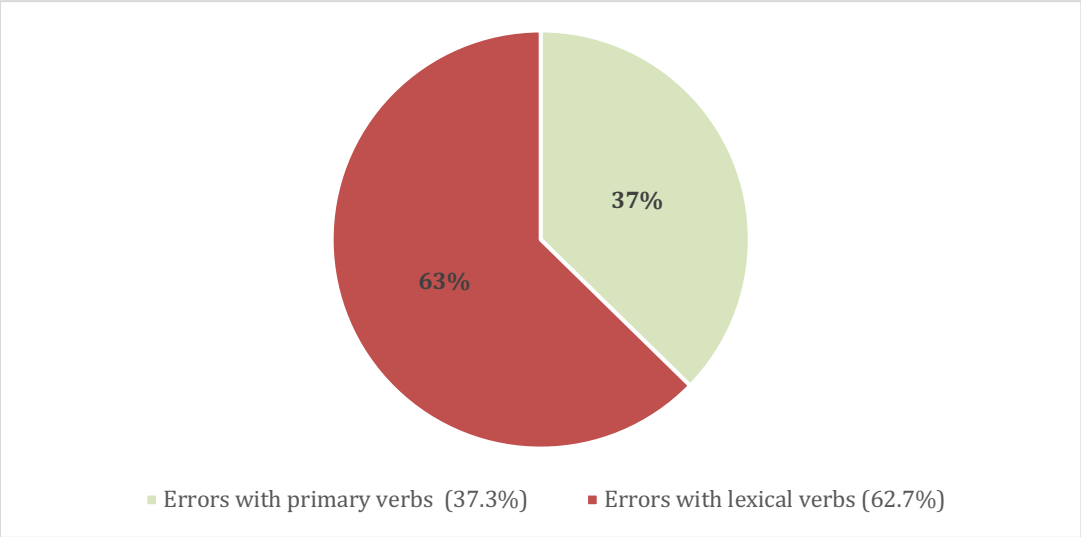

Figure 6. Difference in error proportion between primary and lexical verbs

When accuracy rates are examined across subject types, however, not all subject conditions guarantee a better agreement context for the primary verbs. While university students excel at local agreement with the primary verbs, non-local agreement continues to be problematic. For example, more agreement errors are observed with primary verbs than with lexical verbs when the subjects involve clausal post-modifiers. The following graph and table compare accuracy and error rates between the two verbs types.

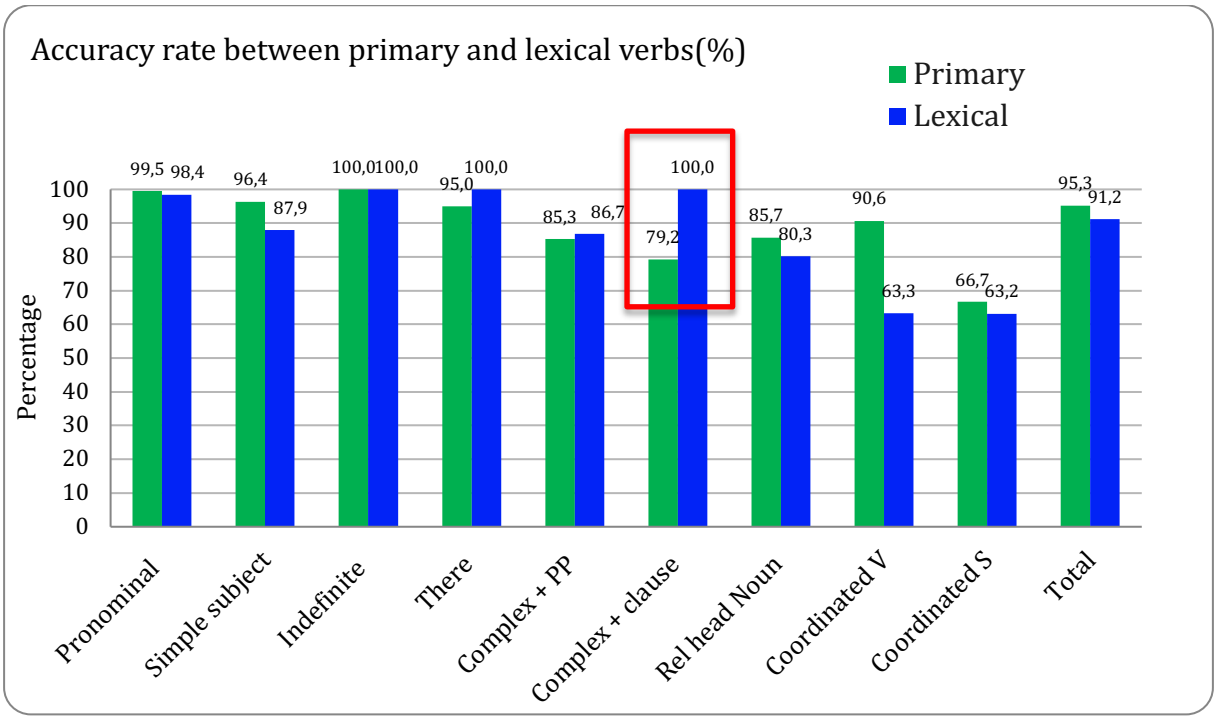

Figure 7. Accuracy rates between Primary and Lexical Verb

	Primary verbs		Lexical verbs	
Subject Types	Error rate	Tokens/Errors	Error rate	Tokens/Errors
Pronominal (personal pronouns, wh-subjects, demonstratives)	0.5%	436/2	1.8%	503/9
Simple subjects (including V-ing & Proper Nouns)	3.6%	413/15	12.1%	232/28
Indefinite pronouns	0%	10/0	0%	9/0
Expletive *there* subject	5%	40/2	0%	/0
Complex NP with prepositional postmodifiers	14.7%	68/10	13.3%	98/13
Complex NP with clausal modifiers	20.8%	48/10	0%	16/0
Noun head + RelPro + V (noun head of a relative clause)	14.2%	63/9	19.7%	76/15
VP coordination	9.4%	32/3	36.7%	30/11
Subject coordination	33.3%	6/2	36.8%	38/14
Total	4.7%	1116/53	8.8%	1009/89

Table 4. Comparison between primary and lexical verbs in error rate

As seen in the graph and table above, all agreement errors with NP subjects followed by clausal post-modifers are made with the primary verbs (mostly *be*-verbs). This does not probably mean that university students have a full control of non-local agreement with clausal post-modifers when lexical verbs are involved. It may just be the case that no errors are observed with lexical verbs due to limited data samples. What is worth noticing is that despite the early acquisition of S-V agreement with the primary verbs (e.g., Ionin and Wexler 2002), non-local agreement may intefere the processing of S-V agreement causing errors to occur in written production by university students. In other words, agreement errors in non-local agrement are most likely induced by external factors (e.g., limited working memory resources or processing limitations), rather than syntactic deficits in L2 learners' grammar. The fact that other non-local agreement contexts also present difficulties for university students even with the primary verbs further indicates that external factors may play a role in their performance in S-V agreement, who otherwise seem to demonstrate a full control of the agreement feature. In the next sub-section, I present an analysis of agreement patterns between omission versus overgeneralization, in comparision with the findings from previosu studies on S-V agreement among Norwegian learners.

4.4. Omission versus overgeneralization

As discussed in section 2.6.3, previous findings from the studies on S-V agreement by Norwegian learners (at a high-school level) have demonstrated that overgeneralization errors are more frequent than omission errors, which is seen as a unique pattern, compared to earlier studies on L2 acquisition of agreement. The findings from the current research, on the other hand, indicate that university students make slightly more omission errors than overgeneralization errors. When only affixal agreement is considered, 56% errors are omission errors with singular noun subjects, while 44% are overgeneralization errors, as illustrated below.

	No. errors with affixal agreement
Overuse	42 (43.8%)
Omission	54 (56.2%)
Total	96

Table 5. Proportions of omission versus overgeneralization errors among Norwegian university students

The higher number of omission errors might have been influenced by a few texts where there is an unusually high number of errors with proper nouns (e.g., *Shakespeare express*) which seem to be idiosyncratic errors produced by only a few students. If the number of these idiosyncratic errors is removed, university students also seem to make slightly more overgeneralization errors, but the difference in the number of omission and overgeneralization errors is only marginal.

	No. errors with affixal agreement
Overuse	42 (51.9%)
Omission	39 (48.1%)
Total	81 (excluding 15 omission errors with proper nouns)

Table 6. Proportions of omission versus overgeneralization errors among Norwegian university students (without putatively idiosyncratic errors)

Due to the difference in the size of the corpus, it is difficult to compare with the findings from Garshol (2019) and Fisher (1985), but the proportions of omission versus overgeneralization errors observed in the current study seem to be more comparable to those found in Fisher (1985) with university students, than to those found in Garshol (2019) with high-school students. A three-way comparison among Fisher (1985), Garshol (2019) and the current study is illustrated below.

	Fisher (1985) with Swedish learners (university students)	Garshol (2019) with Norwegian learners (15-16 year olds)	Current study with Norwegian university students
Overuse	82 (52.9%)	788 (62%)	42 (51.9%)
Omission	73 (47.1%)	483 (38%)	39 (48.1%)
Total	155	1271	81 (excluding 15 omission errors with proper nouns)

Table 7. Overuse versus Omission: Comparison with Swedish university students and Norwegian high-school students

As seen in the table above, the difference in the proportions of overgeneralization and omission errors in Garshol (2019) is much larger (24%) than in Fisher (1985) (5.8%) and the current study (3.8%). The current finding thus suggests that Garshol's argument that robust overgeneralization errors are due to the 3SG -*s* being selected as a default form of S-V agreement is difficult to be maintained. Norwegian university students may make frequent overgeneralization errors, but since omission errors also constitute a large number of errors in affixal agreement, there must be other reasons for why this is the case, other than L1 influence. Although more data would be needed in order to confirm that both overgeneralization and omission errors are equally frequent among university students, one can speculate that the reason why omission errors are robust among high-school students is that they may start overgeneralizing the 3SG -*s* across the board shortly after they have learned or noticed the marked feature. However, as they become more proficient over time, they may reconfigure their hypothesis about 3SG -*s* being applied only in a singular context and start having a better control of using the agreement feature. Agreement errors at a later stage of L2 acquisition then may be influenced more by other external factors such as processing difficulties, giving rise to error types similar to those produced by native speakers (e.g., agreement attraction). Processing difficulties may also explain why university students struggle most with non-local agreement, but not with local agreement, as we have observed earlier.

Supporting evidence against the account of L1 influence for explaining predominant overgeneralization errors may come from two different sources: 1) frequent overgeneralization errors among L2 speakers of English with other L1 background, and 2) a phenomenon of hypercorrection commonly found in L2 acquisition from a sociolinguistic perspective.

In section 2.1., it was pointed out that different types of tasks may bring conflicting results in any acquisition studies (e.g., Tarone 1985; Ellis and Barkhuizen 2005). The previous studies in which overgeneralization errors among Norwegian learners are seen as unexpected are often compared with earlier research on S-V agreement in which data are drawn from (spontaneous) oral production (Prévost and White 2000; Ionin and Wexler 2002). Studies using oral production data have demonstrated that L2 learners normally make omission errors (as discussed in section 2.3), which makes error patterns produced by Norwegian learners in S-V agreement rather surprising. Provided that different types of tasks or contexts may reveal different linguistic behaviors by L2 learners, such conflicting findings from Norwegian learners may not be surprising after all. Furthermore, when looking at other studies in which data are drawn from similar types of tasks (e.g., written production, reading tasks), it is shown that overgeneralization errors are in fact also frequent among L2 learners with different L1 background (other than Swedish).

Shibuya and Wakabayashi (2008), for example, have demonstrated, based on a self-paced word-by-word reading task, that L1 Japanese learners of English at an intermediate and advanced level are insensitive to erroneous S-V agreement with morphologically marked plural subjects (e.g., *The chefs cooks...*). This suggests that Japanese learners also prefer to have the 3SG *-s* in plural subject contexts, although this preference is observed only with noun subjects with plural *-s*, but not with syntactically marked plural subjects (e.g., *Tim and Paul, these two secretaries...*). L1 Finnish learners of English at A2 level (aged from 13 to 16) have also been reported to make more errors with plural noun subjects than singular noun subjects; they show lower accuracy in S-V agreement with plural subjects (85.6%), compared to singular subjects (91%), which means overgeneralization errors are more frequent than omission errors among L1 Finnish learners as well. Vaurula (2012) speculates that lower accuracy with plural subjects might be due to overgeneralization of a non-native morpheme among L2 learners once they have learned or acquired it.[4] These findings with L1 Finnish and L1 Japanese learners therefore suggest that frequent overgeneralization errors among L1 Norwegian learners cannot be attributed to L1 influence but may be linked to a

cross-linguistic phenomenon that emerges in the course of L2 acquisition regardless of learners' L1 background.

As Vaurula (2012) points out, overgeneralization errors may be indeed a phenomenon of over-applying a newly learned non-native grammatical feature, which is also called hypercorrection errors. Hypercorrection errors are argued to be one of the common errors exerted by L2 learners, in particular at a later stage of L2 acquisition (of phonology).

Hypercorrection has been observed in various stages through which L2 learners develop and internalize a target language feature, in particular in the acquisition of L2 phonology (Odlin 1989, 2012, Eckman et. al. 2013).[16] According to Eckman et. al. (2013), hypercorrection errors occur when L2 learners overuse the patterns found only in the target language, but not in L1. They further argue that hypercorrection errors do not occur randomly and follow certain conditions at a later stage of L2 acquisition, given that it occurs as a result of the incorrect extension of a newly learned linguistic feature. For example, they discuss the findings from Janda and Auger (1992) in which French-speaking learners of English incorrectly produce initial /h/ in words that begin with a vowel in English as in /heɪk/ for *ache*.[17] French lacks the initial sound /h/, so if L1 French learners of English would follow the L1 sound pattern, they would correctly produce the target form /eɪk/ for *ache* with no initial /h/, but instead they overuse the L2 sound pattern in the wrong environment, giving rise to a non-target-like pronunciation. They further argue, along the lines of the socio-linguistic view on hypercorrection, that the phenomenon of hypercorrection arises out of the 'linguistic insecurity' that drives learners to overuse a newly learned feature in order to avoid previously recognized errors or emulate the standard form of L2. For example, one can imagine a situation where French learners of English would incorrectly pronounce *house* with no initial /h/, /aʊs/, by applying the native language sound pattern in the early stage of acquisition. After learning the new sound pattern with the initial /h/, they would then try to extend the use of the initial /h/ beyond its regular context in order to avoid previously recognized errors. Thus, according to Eckman et. al. (2013), there is a positive correlation between the occurrence of hypercorrection errors and L2 learners' proficiency as errors occur only after the L2 learners have acquired a new feature in the target language.

[16] The discussion on "hypercorrection" is adapted and developed from my term paper for ENG-3050 (Fall 2016).

[17] The phonetic transcriptions here are slightly modified from the original paper following the international phonetic alphabets of Received Pronunciation.

Similarly, L1 Norwegian learners of English may prefer the presence of the 3SG -s (in comprehension), as also noted by Jensen et. al. (2019), or overuse it in production as a result of hypercorrection. The reason why overgeneralization errors in S-V agreement are found only in written English, but not in oral production, may also indicate that L2 learners may use different strategies in written and oral production when they become unsure or insecure about which agreement form to use. For instance, in an untimed written task, learners may have a better monitoring possibility than in an oral production task, which may lead to a hypercorrection strategy when they are insecure about the correct form. In a spontaneous oral production task, on the contrary, learners may opt for an omission strategy due to time pressure or difficulties in pronouncing consonant clusters in plural verb forms (e.g., wal**ks**).[18]

To sum up, I have argued that overgeneralization errors are not unique to Norwegian learners but are observed in errors produced by L2 learners with other L1 background as a cross-linguistic phenomenon. A high proportion of overgeneralization errors among L1 Norwegian learners thus is not a result of L1 influence, but rather can be linked to L2 learners' strategy exerted when they become insecure about a correct target form, which normally emerges at a later stage of language development.

4.5. Multifaceted causes of errors

One of the most challenging tasks in analyzing interlanguage might be to try to tap into learners' minds and figure out sources for non-target forms in the products of their interlanguage. One can speculate why certain errors are produced based on various L2 theories, inferences from native speakers' linguistic behaviors, learners' L1 backgrounds (transfer), among other things, but one can never be sure of what mechanisms or strategies L2 learners employ in language production. These mechanisms or strategies may be intentional or unintentional (subconscious), influenced by a number of unforeseeable factors. Killie (2019b) also points out that "finding explanatory factors for agreement errors is not easy" (p.13), due to variation in learners' developmental stage of a certain grammatical feature even with the same level of proficiency and their strategies in resolving the uncertainty of correct target forms.

[18] See also Goad and White (2006) who discuss the influence of L1 prosodic constraints in L2 acquisition of agreement to account for omission errors.

Even if it is difficult to determine the exact nature of causes (sources) for agreement errors, this section attempts to analyze potential causes of errors, which may help us gain better insights into why L2 learners make specific errors and what to prioritize in language teaching accordingly. Based on the previous studies on S-V agreement (e.g., Fisher 1985; Killie 2019b), each error is analyzed into one of the following categories: agreement attraction (with an intervening *singular* noun), the plural markedness effect, relative pronoun, *s*-preservation (or preservation of -*s*, Fisher 1985), notional concord, preference for an unmarked form (omission), and miscellaneous in which sources of errors are indeterminable or idiosyncratic. The category of "relative pronoun" is where agreement is disrupted by an immediately preceding relative pronoun promoting a singular verb (e.g., *the books that is*…). This type of errors is reported to be also found among learners at the age of 15-16, normally with singular verb forms (see Killie 2019b). Preservation -*s*, according to Fisher (1985), is a type of an error which is influenced by the morphology of preceding plural nouns, the plural -*s*, due to insufficient automatization of the agreement rule (e.g., *The girl**s** speak**s***..). Alternatively, L2 learners may misconfigure S-V agreement to be in the morphological forms of the subject and the verb, by coping the -*s* morpheme to the verb. Fisher (1985) notes that preservation of -*s* is rarely found among native speakers but occurs often among L2 learners of English. Notional concord errors are those induced by a mismatch between semantic and grammatical number, as discussed in section 2.4. The category "preference for an unmarked form" is where learners seem to choose an unmarked or uninflected form as their strategy for marking S-V agreement, i.e., omission errors. Those errors that are difficult to be categorized are analyzed as miscellaneous or idiosyncratic errors. It should be noted that causes of certain errors can be ambiguous between two or more than two categories. For instance, the agreement error in the following sentence is categorized as the Plural Markedness Effect due to the plural local noun, *people*.

(34) .. the lower class of society such as the serving **people** speak.. (Mar19_17_PM1)

This error can also be categorized as notional concord, provided that *the class* might be interpreted as "distributive collective" (having plural meaning) in the sense of Bock and Eberhard (1993), as discussed in section 2.4. If *the class* is treated as plural due to its semantics, example (34) may as well be an acceptable variant. However, given that the same learner treats *class* as singular in another sentence, as seen in (35), the agreement error in (34) is assumed to be induced by the intrusive plural noun in my analysis.

(35) The Capulets and Montagues (The higher class of society) also uses..

(Mar19_17_CorSUB)

Examples of each category are illustrated below (See also appendix 1 for a full categorization of all errors).

(36) Agreement Attraction

a. The competence aims after **year 10 fits**… (Dec18_1_PM1)
b. …the groups that stopped at every new **word is.**. (Dec18_6_Clause_long)
c. A few examples of **this is**... (Mar19_15_PM)

(37) Plural Markedness Effect

a. The suitable age for the **pupils are**... (Dec18_1_PM2)
b. The reason I picked the novel…. and why I think it is suitable for 10 **graders are.**.
(Dec18_2_Clause_long)
c. ..focus on these **lessons are**.. (Dec18_15_PM_2)

(38) Relative pronoun intervener

a. ..topics **that does** not depend on… (Dec18_12_Clause_short)
b. If one of the pupils **that explains**.. (Dec18_15_Clause_local_3

(39) *s*-preservation

a. Cultural boarder**s** and other specific field**s needs**… (Dec18_1_CorSUB1)
b. ..the more important character**s** often **uses.**. (Mar19_17_PM2)
c. The strong and weak reader**s reads**.. (Dec18_10_SIM1)

(40) Notional concord

a. **Every** teacher that **teach**.. (Dec18_10_Clause_short1)
b. A **class consist**… (Dec18_15_SIM_1)
c. One **group get**… (Dec18_6_SIM)

(41) Preference for an unmarked form (omission)

a. The teacher **engage**.. (Dec18_1_SIM1)

b. This **strengthen**…. (Mar19_1_SIM)

(42) Miscellaneous

a. The character that **are** in the… (Mar19_1_Clause_short)
b. The dialog in the sonnet **are**.. (Mar19_12_PM1)

Unlike in the previous studies which could not confirm the Plural Markedness Effect in S-V agreement among Norwegian learners, the current findings indicate that intervening local plural nouns disrupt an agreement process when the subject and the verb establish long-distance agreement. Even though the number of errors caused by the Plural Markedness Effect is fairly low (thirteen errors), these cases seem to indicate that local plural nouns influence number assignment on the verb when university learners experience processing difficulties or limited working memory resources, as often observed among native speakers. Seeing the Plural Markedness Effect in the errors produced by university students may be an indication that as L2 learners become more proficient, their performance errors may also approximate to those by native speakers.

Errors caused by agreement attraction are fairly frequent among university students, constituting 20.4% of all errors including errors in both local and non-local agreement. If errors caused by local relative pronouns (e.g., *books that sells*) are also considered to be agreement attraction, the proportion of errors in this category may increase up to 28.1% of all errors. The reason why relative pronouns, in particular, *that*, may disrupt agreement between the head noun of a relative clause and the verb may be related to number assignment of *that* a demonstrative, which is singular. It is reported that Norwegian learners master S-V agreement with demonstratives fairly early due to frequency and rote-learning along with personal pronouns (Killie 2019a). The current findings also show that university students make no agreement errors with demonstratives, which means that the combination of demonstratives and their verbs may have been automatized. Some learners thus may use the automatized forms of agreement in relative clauses as well. If this is indeed the case, agreement errors caused by relative pronouns may as well be regarded as instances of agreement attraction.

As seen in example (40), some of the errors seem to be produced by a mismatch between semantic and grammatical number. The presence of *every*, the indefinite article *a*, and the numeral *one* makes the NP subjects grammatically singular, but the learners may assign plural meanings on the head nouns due to the semantics of *every*, *class* and *group*. Such examples of errors caused by a semantic-grammatical number mismatch are not frequent

(only eight instances), but these examples demonstrate that L2 learners may get confused by number marking in English which is not always straightforward, as discussed in section 2.4.

A large portion of errors are omission errors, as in (41), in which an unmarked or uninflected form of the verb is erroneously used. The large number of omission errors is influenced, in part, by the unusually high number of errors with proper nouns by a few students (as mentioned earlier), but even if these (supposedly) idiosyncratic errors are removed, omission errors are fairly frequent among university students. The reason why omission errors still take up a large portion of errors may be related to individual learners' proficiency or different stages in the acquisition of S-V agreement. Even though a thorough analysis of individual texts has not been carried out (due to time limit), it appears that a large portion of omission errors are found only in a limited number of students' texts. It may be the case that these students are less proficient than other students in using the agreement feature, often resorting to an uninflected form of the verb when they are unsure which form to use.

A number of errors, in particular with *be*-verbs and *have*, remain indetermined regarding the sources of errors due to the suppletive (or semi-suppletive) nature of inflection (e.g., 42). Some of the errors could have been analyzed, for example, as *s*-preservation (e.g., *writing skill**s is***..) and a selection of an unmarked form (e.g., *A teacher have.*.), but I have decided to categorize them separately as idiosyncratic errors as these verbs are also excluded from the analysis of omission versus overgeneralization errors. The verb *have* does not give rise to typical affixal agreement since there is a change in the final consonant when the verb is inflected, *have* to *has*. It is thus unclear if *have* might be perceived as more unmarked than *has*. It also appears that university students vary in terms of which form of *be*-verbs they consider to be more unmarked, or "a default form" when the subject is a third person singular. Some learners may use *is* more often across all third person subjects, while some may use *are* more often as a default form of *be* (see Garshol 2019 who argues that agreement errors with *are* are more frequent than other *be*-verbs among high-school students due to phonological resemblance with Norwegian *er* 'be').

The following chart illustrates the distribution of sources of errors discussed so far, and the number of error tokens in each source category is given in table 8.

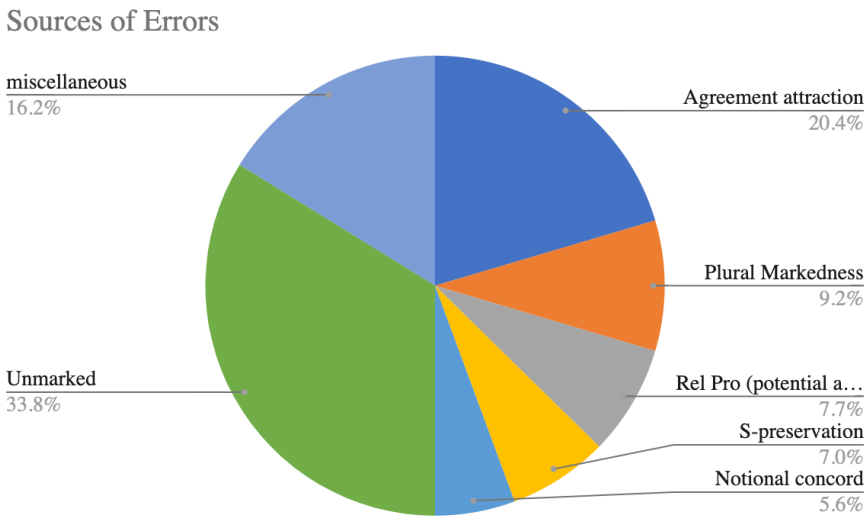

Figure 8. Distribution of sources of errors I

Sources of Errors	No of Errors
Agreement attraction	29
Plural Markedness	13
Rel Pro (potential agreement attraction)	11
S-preservation	10
Notional concord	8
Unmarked	48
miscellaneous	23
Total	142

Table 8. Number of errors across different sources of errors

As seen above, the multifaceted nature of agreement errors makes it difficult to identify one major source of errors with a large number of idiosyncratic errors. Nonetheless, one thing that seems to be clear is that S-V agreement is influenced, to a large extent, by an intervening local element (mostly nouns in conflicting number), given that the combination of errors produced by agreement attraction, the Plural markedness effect, and an intervening relative pronoun seems take up the largest proportion of agreement errors, giving rise to 37.3% or all sources of errors, as illustrated below.

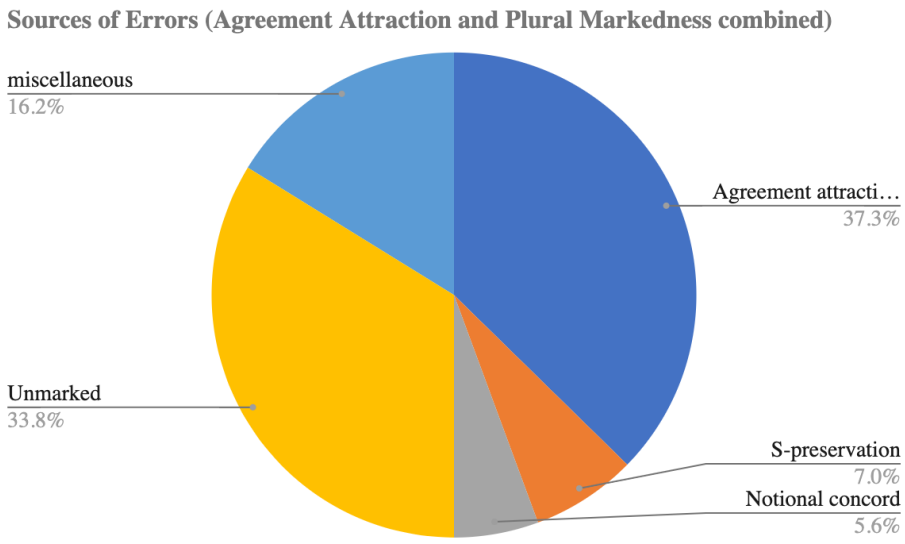

Figure 9. Distribution of sources of errors II

Although the size of the data sample is too small to make any general claims about the sources of agreement errors, the findings in this study seem to support the previous claim that one of the primary factors in agreement errors is an intervening noun between the subject and the verb in conflicting number (e.g., Fisher 1985; Eberhard 1997). The current analysis has extended the type of an intervener to relative pronouns, by also treating them to be a potential agreement attractor which invites singular verbs. For L1 speakers, there is an asymmetry between singular and plural nouns with only the latter interfering established agreement between the subject and the verb. For L2 speakers, on the other hand, it seems that any intervening element that has conflicting number assignment can disrupt non-local agreement, suggesting "agreement attraction in a broader sense" or "the principle of proximity" (Quirk et. al. 1985) to be largely responsible for agreement errors for Norwegian university students.

Having presented and discussed the findings thus far, the answers to the research questions are presented below. The research questions are also repeated here:

1. Is subject-verb agreement with noun subjects still problematic among L1 Norwegian university learners of English?
2. If noun subjects still pose problems for N1 Norwegian university students, which sub-conditions are most problematic and in which sub-conditions do L1 Norwegian learners improve over time?

3. Is overuse of 3SG -*s* still more robust than omission of the morpheme in affixal agreement among older Norwegian learners of English? (based on Jensen 2016, Garshol 2019, Killie 2019).

Regarding question one, it was predicted that the proportion of agreement errors with noun subjects will be considerably lower among Norwegian university students, compared to high-school students reported in earlier studies. Although a direct comparison with the previous research is not feasible due to the different size of the corpus, the current findings indicate that university students no longer have problems with simple noun subjects (as long as they appear in local agreement contexts). Thus, this prediction is (tentatively) confirmed by the data.

Regarding question two, it was predicted that the complexity of NP subjects would be a significant factor in agreement errors based on the findings from various studies in S-V agreement both in L1 and L2 acquisition. This means that personal pronouns and simple NP subjects are predicted to be easier than complex NP subjects. The findings have shown that the most difficult agreement condition is non-local agreement which includes complex NP subjects, while local agreement including personal pronoun and simple NP subjects is not problematic. The findings thus confirm this prediction, although more data with complex NP subjects are needed in order to be able to make a more general claim about non-local agreement.

To answer question three, agreement errors in affixal agreement were analyzed, and the result has shown that overgeneralization errors are not as predominant as previously been reported among high-school students. Based on the data available, there is no sign of overuse of 3SG -*s* being more frequent than omission errors among university students, although this observation needs to be confirmed with a larger scale of data samples. The observation that omission errors are as frequent as overgeneralization errors thus challenges the claim that the supposedly unique error pattern by Norwegian learners (i.e., overgeneralization) is due to L1 influence in which the 3SG -*s* is seen as a default form of the agreement feature, comparable to Norwegian finite morpheme -*r*. By considering L2 studies on S-V agreement with learners from different L1 background, it was suggested that overgeneralization of the 3SG -*s* may be a cross-linguistic phenomenon that emerges at a later stage of L2 acquisition when L2 learners have acquired the feature or at least have noticed it either in the input or as a result of explicit teaching. Conflicting results regarding whether omission or overgeneralization errors are robust in the production of S-V agreement by L2 learners were attributed to the different

nature of tasks that may elicit learner language with a different degree of formality, complexity and opportunities for monitoring.

5 Implication for classroom teaching[19]

One of the most debated issues in L2 acquisition research with pedagogical considerations is whether explicit grammar instruction takes any important role in successful L2 acquisition. Even though a widely accepted belief among researchers, methodologists, practitioners, and learners is that successful L2 acquisition cannot happen without some degree of explicit grammar teaching, the question of whether explicit grammar instruction (or language instruction in general) has any effect on developing implicit linguistic knowledge is still an open question with considerable controversy. Some researchers in L2 acquisition disvalue the role of explicit grammar instruction and favor more naturalistic and implicit language learning (e.g., Krashen 1982). This approach takes a non-interface position of "acquired" knowledge, which is underlying competence that leads to spontaneous production, and "learned" knowledge (from explicit teaching or correction), a distinction proposed by Krashen (1982). According to the non-interface view of acquisition and learning, learned knowledge cannot become part of acquired knowledge but only monitors the output of language for correctness and makes necessary changes in the form. Thus, the effect of traditional, conscious, learning-based instruction plays a very limited role in L2 acquisition.

A growing body of research, however, has shown that explicit instruction or attention to linguistic forms (in meaningful contexts) leads to better results in developing proficiency in both comprehension and production in the L2 (e.g., Schmidt 1990; Swain 1985; Ellis 2002a,b, 2005; Hinkel and Fotos 2002; Lyster 2004; DeKeyser 2007). DeKeyser (2007), for instance, argues that automatized knowledge (or acquired knowledge) can be achieved by a large amount of practice accompanied by feedback and a great deal of attention to form, an interface approach to acquisition and learning. Explicit teaching of grammar and practice thus are necessary ingredients of L2 acquisition, contrary to Krashen (1982).

What we have learned from many L2 studies is that certain grammatical features (functional morphology) are extremely difficult to be acquired through incidental exposure to the target language. We have also seen from the findings of this research and previous studies on S-V agreement that although L2 learners may overcome problems with certain subject

[19] Part of this chapter is adapted from my semester paper submitted for the course ENG-3090 (Fall 2016).

conditions (local agreement) over time, certain agreement conditions continue to be problematic even at a later stage of L2 acquisition (after at least 13 years of exposure to English and English education at school). According to Slabakova (2016), while core syntax and semantics (operated by UG) can be acquired effortlessly and thus may not require much attention in language teaching[20], functional morphology cannot be acquired through naturalistic acquisition but needs to receive a special focus in a language classroom; functional morphemes should be explicitly taught or need to be at least attended by L2 learners followed by considerable practice, since these grammatical features do not come for free from UG. She further emphasizes that "teaching and practicing functional morphology in language classrooms should take place in meaningful, plausible sentences where the syntactic effects and the semantic import of the morphology are absolutely transparent and unambiguous" (Slabakova 2016: 410). Simple drilling of the 3SG *-s*, for example, independent from meaningful contexts, does not lead to automatized use of the morpheme in language production. Slabakova (2016) further points out that practicing functional morphology is much like learning lexical items, and in order to learn new lexical items, one must always attend to how these lexical items are used in appropriate contexts.

Another reason why explicit instruction of functional morphology (agreement) might be necessary is that the agreement conditions that are reported to be difficult are not easily available in the input for positive evidence. As Jensen, et. al. (2019) note, the frequency of constructions or features can facilitate rate of acquisition, as a “more frequent construction/feature provides more positive linguistic evidence for learners, which can facilitate earlier or more accurate acquisition” (Ellis 2002, cited in Jensen, et. al. 2019:5). Most of the agreement conditions that are challenging, however, may not be easily available in the input unlike personal pronouns and simple noun subjects. It is thus important for teachers to gain a better insight into difficult agreement conditions and provide relevant input that will help learners attend to those difficult constructions and receive sufficient practice. According to Slabakova and Mayo (2013), even for those constructions with syntactic complexity that lead to processing difficulties, practice may help acquire them by increasing ease of processing. Thus, explicit instruction and sufficient drilling/practice of concerned

[20] This does not, however, mean that all syntactic and semantic features are acquirable effortlessly. Those syntactic and semantic properties that are complicated but are not easily available through positive evidence (e.g., subtle semantic notion of specificity) may need explicit instruction (see Snape and Yusa 2013).

functional morphemes may be essential for learners to be able to turn the externally-driven input to implicit knowledge for spontaneous use in production with better accuracy (Slavakova 2016: 408).

6 Conclusion

This thesis has looked into S-V agreement in written production by Norwegian university student, building on findings from various L2 studies on the same topic by younger Norwegian learners of English. The primary goal of the thesis was to be able to systematically examine learner language at a later stage of L2 acquisition, focusing on S-V agreement, which has been argued to be the locus of morphological variability even among advanced learners of English.

The findings have indicated that S-V agreement no longer seems to be problematic for Norwegian university students with over 90% accuracy in written production. However, when agreement errors are examined across different subject types, certain agreement conditions still pose problems for learners to correctly use the agreement feature, the 3SG *-s*. It has been shown that non-local agreement (including conjoined subjects) is still problematic, regardless of verb types, while local agreement no longer seems to be subject to morphological variability. The findings have also indicated that S-V agreement by university students is influenced, to a large extent, by intervening nouns in conflicting number between the subject and the verb, which gives rise to both omission and overgeneralization errors. Unlike the findings from previous studies on S-V agreement by younger Norwegian leaners, the current research does not reveal any indication that overgeneralization errors are more predominant than omission errors, which challenges the previous claim that error patterns by Norwegian learners reflect L1 influence. I have instead argued that overgeneralization of the 3SG *-s* is a cross-linguistic phenomenon that emerges at a later stage of L2 acquisition, by referring to studies on S-V agreement by L2 learners with L1 background, which is linguistically unrelated to Norwegian (e.g., Finnish and Japanese). It was also pointed out that in order to make general claims about learners' certain linguistic behaviors, one should bear in mind that different types of tasks (e.g., oral versus written production) may give rise to conflicting results.

One of the limitations of this study is that the findings are based on a very limited scale of data samples, which runs the research findings into danger for being nullified if conflicting results are presented with more data samples. However, given that many of the

findings and observations made in this study lend support to previous findings both from L1 and L2 studies on S-V agreement, it is expected that major findings (e.g., difficulties with non-local agreement) would remain valid even if more data samples are added to the analysis. Another limitation of the study is that since the data are drawn from written production, there may be agreement conditions which are difficult but are not reflected in the findings as a result of avoidance or lack of data samples. In particular, due to the low number of tokens involving complex NP subjects with modifiers, it is not possible to identify whether difficulties with non-local agreement may also be influenced by structural complexity, as has been previously claimed (Ocampo 2012). One may only be able to answer such a question dealing with complex linguistic structure by tapping into learners' underlying knowledge (competence) or carrying out controlled production tasks, since it is unlikely that such complex constructions would frequently emerge in uncontrolled production data for a reliable quantitative analysis. In order to be able to obtain a more complete picture of what L2 learners can or cannot do at an end-state of L2 acquisition, a combination of a comprehension and a production study would be desirable, which remains for future research.

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Appendix 1: All errors annotated

Abbreviations for annotation:

PRON	Pronominals including demonstratives/wh-subjects
Clause_short	Nouns agreeing with the verb in a clausal modifier (NP + Relative Pro + V), short-distance agreement (e.g., ***the book*** that ***is***..)
Clause_long	Nouns modified with a clause agreeing with its verb (NP + Clause modifier + V), long-distance agreement (e.g., ***the reason*** why I picked this novel ***is*** that..)
THERE	agreement in there-construction
PM	Non-clausal post modifier
SIM	Simple subjects (including verbal subjects and proper nouns)
CorSUB	Agreement in subject coordination
CorV	Agreement in verb coordination

Sources of Errors	No of Errors
Agreement attraction	29
Plural Markedness	13
Rel Pro (potential agreement attraction)	11
S-preservation	10
Notional concord	8
Unmarked	48
miscellaneous	23
Total	142

Texts from December 2018

	Errors	Error types 1	Comment	Cause
1	Their lessons who fits	Dec 18_ 1_Clause_short1	Overuse 1	Rel pro 1
2	The competence aim that are	Dec18_1_Clause_short2	SUP1 (suppletive)	IDIO(idosyncratic) 1
3	The age group that are suitable for this novel..	Dec18_1_Clause_short3	SUP2	Notional 1
4	The age group that are suitable for this novel are	Dec18_1_Clause_long 1	SUP3	Notional 2
5	The competence aims after year 10 fits....	Dec18_1_PM1	Overuse 2	Agreement attraction (AA)1
6	The suitable age for the pupils are...	Dec18_1_PM2	SUP4	Plural markedness 1
7	The teacher engage	Dec18_1_SIM1	Omission1	Unmarked1
8	The teacher have	Dec18_1_SIM2	SUP5	IDIO2
9	Cultural boarders and other specific fields needs	Dec18_1_CorSUB1	Overuse3	S-preservation1
10	Reading and writing goes	Dec18_1_CorSUB2	Overuse4	AA2

11	Only the imagination and creativity puts	Dec18_1_CorSUB3	Overuse5	AA3
12	The teacher tells the story and not just read	Dec18_1_CorV1	Omission2	Unmarked2
13	it influence	Dec18_2_PRON	Omission3	Unmarked3
14	The reason I picked the novel…. and why I think it is suitable for 10 graders are..	Dec18_2_Clause_long	SUP6	Plural markedness 2
15	The choice of novel and before, during and after reading activities are	Dec18_2_PM1	SUP7	Plural markedness 3
16	Extensive reading have	Dec18_2_SIM11	SUP8	Unmarked4
17	Which cover	Dec18_3_PRON	Omission4 (sentential reference)	Unmarked5
18	This book appeal	Dec18_3_SIM1	Omission5	Unmarked6
19	A teacher have	Dec 18_3_SIM2	SUP9	IDIO 3
20	Wilson uses humor and create..	Dec18_3_CorV1	Omission6	Unmarked7
21	native Americans has...	Dec18_4_SIM	SUP10	S-preservation?
22	Learning to read extensively and using different reading strategies to understand this book is..	Dec18_4_CorSUB	SUP11	Agreement attraction4
23	a template that include	Dec18_5_Clause_short	Omission 7	Unmarked 8
24	The pupils get an introduction of the text and triggers their curiosity of what is..	Dec18_5_CorV	Overuse6	AA5
25	the groups that stopped at every new word is	Dec18_6_Clause_long	SUP12	Agreement attraction 6
26	The rest of the sentence mean	Dec18_6_PM	Omission 8	Notional 3
27	One group get...	Dec18_6_SIM	Omission 9	Notional 4
28	the pupils who struggles	Dec18_7_Clause_short1	Overuse7	Rel pro 2
29	an exercise that focus..	Dec18_7_Clause_short2	Omission 10	Unmarked 9
30	Writing skills is....	Dec18_7_SIM	SUP13	IDIO, -s preservation? 4
31	The main-character of Dustbin Baby (Wilson, 2013) cares a lot about her friends´opinions and*are afraid..	Dec18_7_CorV1	SUP14	Plural markedness 4

32	The pupils write the summary in the right order and only includes	Dec18_7_CorV2	Overuse8	AA 7
33	Struggling readers is..	Dec18_8_SIM1	SUP15	IDIO or s-preservation? 5
34	criteria for the project is...	Dec18_8_SIM2	SUP16	AA8 (plurality of noun)
35	Both reading and writing needs	Dec18_9_CorSUB	Overuse 9	AA 9
36	Writing skills are not built in a day and takes years	Dec18_9_CorV1	Overuse 10	AA 10
37	It present	Dec18_10_PRON1	Omission 11	Unmraked10
38	we will cover the first competence aim and opens up for reflection and discussion	Dec 18_10_PRON2	Overuse 11	AA11
39	Every teacher that teach	Dec18_10_Clause_short1	Omission 12	Notional 5
40	a few pages that is important.	Dec18_10_Clause_short2	SUP17	Rel pro 3
41	The strong and weak readers reads	Dec18_10_SIM1	Overuse12	S-preservation 2
42	the teacher prepares 3-6 sentences that express opinions about the topic and stick them on different walls	Dec18_10_CorV1	Omission13	Plural markedness 5
43	It mean	Dec18_11_PRON	omission14	Unmarked 11
44	the words means	Dec18_11_SIM	Overuse13	S-preservation 3
45	I discloses	Dec18_12_PRON	Overuse 14	IDIO6
46	There were something	Dec18_12_THERE	SUP18	IDIO7
47	topics that does not depend on..	Dec18_12_Clause_short	Overuse 15	Rel Pro4
48	this project focus	Dec18_12_SIM	Omission15	Unmarked12
49	This age group is mostly still pre-pubertal and are at still at the points..	Dec18_12_CorV	SUP19	IDIO8
50	This in turn help	Dec 18_13_PRON	Omission16	Unmarked13
51	some alternatives for them is…	Dec18_14_PM_1	SUP20	IDIO9, s-preservation?
52	There is three skills....	Dec18_15_THERE_1	SUP21	IDIO10
53	...three skills which is.....	Dec18_15_Clause_short_1	SUP22	Rel pro5
54	A book that fit	Dec18_15_Clause_short_2	Omission17	Unmarked14
55	Other lessons that you can do is...	Dec18_15_Clause_long_1	SUP23	IDIO11
56	If one of the pupils that explains...	Dec18_15_Clause_local_3	Overuse16	Rel pro6

57	If one of the pupils that explains have	Dec18_15_Clause_long_2	SUP24	Plural markedness6
58	focus on these lessons are	Dec18_15_PM_2	SUP25	Plural markedness 7
59	A class consist...	Dec18_15_SIM_1	Omission 18	Notional 6
60	It also do help	Dec 18_17_PRON1	Omission19	Unmarked15
61	It have..	Dec18_17_PRON2	SUP26	IDIO12
62	First thing that are important..	Dec18_17_Clause_short_1	SUP27	IDIO13
63	Something that are suitable	Dec18_17_Clause_short_2		IDIO14
64	The suitable age group for the books Dustbin Baby (2013) and The Absolutely True Diary of a Parti-time Indian (2015) are..	Dec18_17_PM_1	SUP29	Plural markedness 8
65	The reason for such a high age for these books are	Dec18_17_PM_2	SUP30	plural markedness9
66	The character April have	Dec18_17_SIM_1	SUP31	IDO15
67	The book have	Dec18_17_SIM_2	SUP32	IDO16

Texts, March 2019

1	She speaks… and interrupt Lady..	Mar19_1_PRON	Omission 20	Unmarked16
2	The character that are in the..	Mar19_1_Clause_short	SUP33	IDIO17
3	This strengthen..	Mar19_1_SIM	Omission 21	Unmarekd17
4	Their personalities, their social rank and their development throughout the play comes to..	Mar19_1_CorSUB	Overuse17	AA12
5	Their different personalities, social rank and their development, appears	Mar19_1_CorSUB	Overuse18	AA13
6	Romeo develop	Mar19_1_SIM(Proper)	Omission22	Unmarked18
7	Someone that do not	Mar19_3_Clause_short1	Omission 23	Unmarked19
8	Special thing that happen	Mar19_3_Clause_short2	omission24	Unmarked20
9	Some has...	Mar19_3_SIM1 (plural context, not indefinite)	SUP34	Notional 7
10	Romeo express	Mar19_3_SIM2(proper)	omission25	Unmarked21
11	Shakespeare use	Mar19_3_SIM3(proper)	omission26	Unmarked22

12	Shakespeare use	Mar19_3_SIM4(proper)	omission27	Unmarked23
13	Romeo finish	Mar19_3_SIM5(proper)	omission28	Unmarked24
14	Romeo finish	Mar19_3_SIM6(proper)	omission29	Unmarked25
15	Romeo often use	Mar19_3_PM	omission30	Unmarked26
16	.words that makes...	Mar19_4_Clause_short1	Overuse19	Rec pro 7 (or s-preservation
17	...words that seems..	Mar19_4_Clause_short2	Overuse 20	Rec pro 8 (or s-preservation)
18	Her thoughts about love and marriage changes	Mar19_4_PM	Overuse 21	AA14
19	Capulet and County Paris talks	Mar19_4_CorSUB	Overuse 22	AA 15
20	the values that people had in this period are tested to the limit and *creates	Mar19_4_CorV	Overuse23	AA 16
21	The Nurse´s lines often ends	Mar19_6_PM1	Overuse24	S-preservation4
22	The differences between the women comes	Mar19_6_PM2	Overuse 25	S-preservation5
23	Rhythm, rhyme, choice of words and use of imagery/humour differs	Mar19_6_CorSUB1	Overuse 26	AA17
24	Lady Capulet and The Nurse discusses	Mar19_6_CorSUB2	Overuse27	AA18
25	Her lines are without rhythm and rhymes and does not..	Mar19_6_CorV	Overuse 28	S-preservation 6
26	An example of lower-class people who speak in prose, are..	Mar19_9_Clause_long	SUP35	Plural markedness 10
27	The stress in the sentences are	Mar19_9_PM	SUP36	Plural markedness 11
28	His feelings does	Mar19_9_SIM1	Overuse29	S-preservation 7
29	All of these helps	Mar19_9_SIM2	Oeruse30	S-preservation8
30	where the characters that belong to the upper class has.	Mar19_10_Clause_long	SUP37	Agreement attraction19
31	The first act that indicate...	Mar19_10_Clause_short1	Omission31	Unmarked27
32	major role that contribute	Mar19_10_Clause_short2	omission32	Unmarked28
33	Her use of rhyme and rhythm indicate	Mar19_10_PM1	omission33	Unmarked 29

34	Her way of talking and making of jokes create.	Mar19_10_PM2	Omission 34	Plural Markednes12
35	The lower class, such as the nurse, tend to.	Mar19_10_PM3	Omission35	Notional 8
36	her personality and social ranking makes	Mar19_10_CorSUB1	Overuse 31	AA 20
37	the social rank and their personality shows	Mar19_10_CorSUB2	Overuse 32	AA 21
38	Juliet´s development and personality through the play creates…	Mar19_10_CorSUB3 (+ PM)	Overuse 33	AA 22
39	Shakespeare express	Mar19_10_SIM1	Omission36	Unmarked 30
40	Shaskespeare present	Mar19_10_SIM2	Omission 37	Unmarked31
41	He use..	Mar19_12_PRON	omission38	Unmarked32
42	Jokes that makes	Mar19_12_Clause_short	Overuse 34	Rel pro 9
43	The dialog in the sonnet are	Mar19_12_PM1	SUP38	IDIO18
44	The characters from lower class in the play talks	Mar19_12_PM2	Overuse 35	AA23
45	his love life affect	Mar19_12_SIM1	Omission 39	Unmarked33
46	his father, Montague and his nephew, Benvolio talks	Mar19_12_CorSUB	Overuse 36	AA 24
47	Shakespeare use	Mar19_12_SIM2 (Proper)	Omission 40	Unmarked34
48	Shakespeare characterize	Mar19_12_SIM3 (Proper)	Omission 41	Unmarked35
49	Shakespeare also express	Mar19_12_SIM4 (Proper)	omission42	Unmarked36
50	Shakespeare use	Mar19_12_SIM5 (Proper)	omission43	Unmarked37
51	Shakespeare have	Mar19_12_SIM6 (Proper)	SUP39	Unmarked38
52	Romeo vary	Mar19_12_SIM7 (Proper)	Omission 44	Unmarked39
53	Romeo perceive	Mar19_12_SIM8 (Proper)	omission 45	Unmarked 40
54	Shakespeare make	Mar19_12_SIM9 (Proper)	omission46	Unmarked41
55	Shakespeare use	Mar19_12_SIM10 (Proper)	Omission 47	Unmarked42
56	Shakespeare use	Mar19_12_SIM11 (Proper)	omission48	Unmarked43
57	The words that the characters are saying is..	Mar19_13_Clause_long	SUP40	AA25
58	Two young lovers who loves	Mar19_15_Clause_short	Overuse37	Rel pro 10

59	A blindfolded boy that shoot	Mar19_15_Clause_short	Omission 49	Unmarked44
60	A few examples of this is	Mar19_15_PM	SUP41	AA26
61	Romeo and Mercutio who talks	Mar19_15_CorSUB	Overuse 38	Rel pro 11
62	Romeo and Juliet start flirting in a sonnet and quickly falls in love..	Mar19_15_CorV	Overuse 39	AA27
63	Romeo kiss	Mar19_15_SIM_1 (Proper)	omission50	Unmarked45
64	Romeo speak	Mar19_15_SIM_2(Proper)	omission51	Unmarked46
65	The characters I will be focusing on is..	Mar19_16_Clause_long1	SUP42	IDIO19 (AA?)
66	The characteristics I will be looking at is..	Mar19_16_Clause_long2	SUP43	IDIO20 (AA?)
67	People of higher class speaks	Mar19_16_PM	Overuse 40	AA28
68	the lower class of society such as the serving people speak	Mar19_17_PM1	Omission52	Plural marked13
69	the more important characters often uses	Mar19_17_PM2	Overuse41	S-preservation9
70	The Capulets and Montagues (The higher class of society) also uses.	Mar19_17_CorSUB	Overuse42	AA29
71	Romeo for example speaks with rhythm and use	Mar19_17_CorV	Omission53	Unmarked47
72	Shakespeare have	Mar19_17_SIM1 (Proper)	SUP44	IDIO21
73	Shakespeare do	Mar19_17_SIM2 (Proper)	Omission54	Unmarked48
74	Shakespeare have	Mar19_17_SIM3 (Proper)	SUP45	IDIO 22
75	Shakespeare have	Mar19_17_SIM4 (Proper)	SUP46	IDIO 23

Appendix 2: Categorization of errors into local vs non-local agreement

1. Non-local agreement errors (A: original number assigned to each token)

	A	Error Tokens	Annotation
1	1	Their lessons who fits	Dec 18_ 1_Clause_short1
2	2	The competence aim that are	Dec18_1_Clause_short2
3	3	The age group that are suitable for this novel	Dec18_1_Clause_short3
4	4	The age group that are suitable for this novel are...	Dec18_1_Clause_long1
5	5	The competence aims after year 10 fits....	Dec18_1_PM1
6	6	The suitable age for the pupils are...	Dec18_1_PM2
7	12	The teacher tells the story and not just read	Dec18_1_CorV1
8	14	The reason I picked the novel…. and why I think it is suitable for 10 graders are..	Dec18_2_Clause_long2
9	15	The choice of novel and before, during and after reading activities are	Dec18_2_PM3
10	20	Wilson uses humor and create..	Dec18_3_CorV2
11	23	a template that include	Dec18_5_Clause_short4
12	24	The pupils get an introduction of the text and triggers their curiosity of what is..	Dec18_5_CorV3
13	25	the groups that stopped at every new word is	Dec18_6_Clause_long3
14	26	The rest of the sentence mean	Dec18_6_PM4
15	28	the pupils who struggles	Dec18_7_Clause_short5
16	29	an exercise that focus...	Dec18_7_Clause_short6
17	31	The main-character of Dustbin Baby (Wilson, 2013) cares a lot about her friends´opinions and are afraid..	Dec18_7_CorV4
18	32	The pupils write the summary in the right order and only includes	Dec18_7_CorV5
19	34	criteria for the project is...	Dec18_8_PM5
20	36	Writing skills are not built in a day and takes years	Dec18_9_CorV6
21	39	Every teacher that teach	Dec18_10_Clause_short7
22	40	a few pages that is important.	Dec18_10_Clause_short8
23	42	the teacher prepares 3-6 sentences that express opinions about the topic and stick them on different walls	Dec18_10_CorV7
24	47	topics that does not depend on..	Dec18_12_Clause_short9

25	49	This age group is mostly still pre-pubertal and are at still at the points..	Dec18_12_CorV8
26	51	some alternatives for them is…	Dec18_14_PM_6
27	53	...three skills which is.....	Dec18_15_Clause_short_10
28	54	A book that fit	Dec18_15_Clause_short_11
29	55	Other lessons that you can do is...	Dec18_15_Clause_long_4
30	56	If one of the pupils that explains...	Dec18_15_Clause_short_12
31	57	If one of the pupils that explains have	Dec18_15_Clause_long_5
32	58	focus on these lessons are	Dec18_15_PM_7
33	62	First thing that are important..	Dec18_17_Clause_short_13
34	63	Something that are suitable	Dec18_17_Clause_short_14
35	64	The suitable age group for the books Dustbin Baby (2013) and The Absolutely True Diary of a Parti-time Indian (2015) are..	Dec18_17_PM_8
36	65	The reason for such a high age for these books are	Dec18_17_PM_9
37	2	The character that are in the..	Mar19_1_Clause_short15
38	7	Someone that do not…	Mar19_3_Clause_short16
39	8	Special thing that happen	Mar19_3_Clause_short17
40	16	.words that makes...	Mar19_4_Clause_short18
41	17	...words that seems..	Mar19_4_Clause_short19
42	18	Her thoughts about love and marriage changes	Mar19_4_PM10
43	20	the values that people had in this period are tested to the limit and creates	Mar19_4_CorV9
44	15	Romeo often use	Mar19_3_PM11
45	21	The Nurse´s lines often ends	Mar19_6_PM12
46	22	The differences between the women comes	Mar19_6_PM13
47	25	Her lines are without rhythm and rhymes and does not..	Mar19_6_CorV10
48	26	An example of lower-class people who speak in prose, are..	Mar19_9_Clause_long6
49	27	The stress in the sentences are	Mar19_9_PM 14
50	30	where the characters that belong to the upper class has.	Mar19_10_Clause_long7
51	31	The first act that indicate...	Mar19_10_Clause_short20
52	32	major role that contribute	Mar19_10_Clause_short21
53	33	Her use of rhyme and rhythm indicate	Mar19_10_PM15
54	34	Her way of talking and making of jokes create.	Mar19_10_PM16
55	35	The lower class, such as the nurse, tend to.	Mar19_10_PM17
56	42	Jokes that makes	Mar19_12_Clause_short22
57	43	The dialog in the sonnet are	Mar19_12_PM18
58	44	The characters from lower class in the play talks	Mar19_12_PM19

59	57	The words that the characters are saying is..	Mar19_13_Clause_long8
60	58	Two young lovers who loves	Mar19_15_Clause_short23
61	59	A blindfolded boy that shoot	Mar19_15_Clause_short24
62	60	A few examples of this is	Mar19_15_PM20
63	62	Romeo and Juliet start flirting in a sonnet and quickly falls in love..	Mar19_15_CorV11
64	65	The characters I will be focusing on is..	Mar19_16_Clause_long9
65	66	The characteristics I will be looking at is..	Mar19_16_Clause_long10
66	67	People of higher class speaks	Mar19_16_PM21
67	68	the lower class of society such as the serving people speak	Mar19_17_PM22
68	69	the more important characters often uses	Mar19_17_PM23
69	71	Romeo for example speaks with rhythm and use	Mar19_17_CorV12
70	38	we will cover the first competence aim and opens up for reflection and discussion	Dec 18_10_PRO+CorV13
71	1	She speaks… and interrupt Lady..	Mar19_1_PRON+CorV14

2. Conjoined Subjects

1	9	Cultural boarders and other specific fields needs	Dec18_1_CorSUB1
2	10	Reading and writing goes	Dec18_1_CorSUB2
3	11	Only the imagination and creativity puts	Dec18_1_CorSUB3
4	22	Learning to read extensively and using different reading strategies to understand this book is..	Dec18_4_CorSUB
5	35	Both reading and writing needs	Dec18_9_CorSUB
6	4	Their personalities, their social rank and their development throughout the play comes to..	Mar19_1_CorSUB
7	5	Their different personalities, social rank and their development, appears	Mar19_1_CorSUB
8	19	Capulet and County Paris talks	Mar19_4_CorSUB
9	23	Rhythm, rhyme, choice of words and use of imagery/humour differs	Mar19_6_CorSUB1
10	24	Lady Capulet and The Nurse discusses	Mar19_6_CorSUB2
11	36	her personality and social ranking makes	Mar19_10_CorSUB1
12	37	the social rank and their personality shows	Mar19_10_CorSUB2

13	38	Juliet´s development and personality through the play creates…	Mar19_10_CorSUB3 (+ PM)
14	46	his father, Montague and his nephew, Benvolio talks	Mar19_12_CorSUB
15	61	Romeo and Mercutio who talks	Mar19_15_CorSUB
16	70	The Capulets and Montagues (The higher class of society) also uses.	Mar19_17_CorSUB

3. Local Agreement Errors

1	7	The teacher engage	Dec18_1_SIM1
2	8	The teacher have	Dec18_1_SIM2
3	13	it influence	Dec18_2_PRON1
4	16	Extensive reading have	Dec18_2_SIM3
5	17	, which cover	Dec18_3_PRON2
6	18	This book appeal	Dec18_3_SIM4
7	19	A teacher have	Dec 18_3_SIM5
8	21	native Americans has...	Dec18_4_SIM6
9	27	One group get..	Dec18_6_SIM7
10	30	Writing skills is....	Dec18_7_SIM8
11	33	Struggling readers is..	Dec18_8_SIM9
12	37	It present	Dec18_10_PRON3
13	41	The strong and weak readers reads	Dec18_10_SIM10
14	43	It mean	Dec18_11_PRON4
15	44	the words means	Dec18_11_SIM11
16	45	I discloses	Dec18_12_PRON5
17	46	There were something	Dec18_12_THERE1
18	48	this project focus	Dec18_12_SIM12
19	50	This in turn help	Dec 18_13_PRON6
20	52	There is three skills....	Dec18_15_THERE_2
21	59	A class consist...	Dec18_15_SIM_13
22	60	It also do help	Dec 18_17_PRON7
23	61	It have..	Dec18_17_PRON8
24	66	The character April have	Dec18_17_SIM_14
25	67	The book have	Dec18_17_SIM_15
26	3	This strengthen..	Mar19_1_PRON9
27	6	Romeo develop	Mar19_1_SIM(Proper)16
28	9	Some has...	Mar19_3_SIM (plural context)17
29	10	Romeo express	Mar19_3_SIM(proper)18
30	11	Shakespeare use	Mar19_3_SIM(proper)19
31	12	Shakespeare use	Mar19_3_SIM4(proper)20
32	13	Romeo finish	Mar19_3_SIM5(proper)21
33	14	Romeo finish	Mar19_3_SIM6(proper)22
34	28	His feelings does	Mar19_9_SIM23
35	29	All of these helps	Mar19_9_SIM24
36	39	Shakespeare express	Mar19_10_SIM25
37	40	Shaskespeare present	Mar19_10_SIM26
38	41	He use...	Mar19_12_PRON10

39	45	his love life affect	Mar19_12_SIM27
40	47	Shakespeare use	Mar19_12_SIM(Proper)28
41	48	Shakespeare characterize	Mar19_12_SIM (Proper)29
42	49	Shakespeare also express	Mar19_12_SIM (Proper)30
43	50	Shakespeare use	Mar19_12_SIM5 (Proper)31
44	51	Shakespeare have	Mar19_12_SIM6 (Proper)32
45	52	Romeo vary	Mar19_12_SIM7 (Proper)33
46	53	Romeo perceive	Mar19_12_SIM8 (Proper)34
47	54	Shakespeare make	Mar19_12_SIM9 (Proper)35
48	55	Shakespeare use	Mar19_12_SIM10 (Proper)36
49	56	Shakespeare use	Mar19_12_SIM11 (Proper)37
50	63	Romeo kiss	Mar19_15_SIM_1 (Proper)38
51	64	Romeo speak	Mar19_15_SIM_2(Proper)39
52	72	Shakespeare have	Mar19_17_SIM1(Proper)40
53	73	Shakespeare do	Mar19_17_SIM2(Proper)41
54	74	Shakespeare have	Mar19_17_SIM3(Proper)42
55	75	Shakespeare have	Mar19_17_SIM4(Proper)43

Appendix 3: NSD application

NSD NORSK SENTER FOR FORSKNINGSDATA

NSD sin vurdering

Prosjekttittel

Teaching and Learning English (TALE)

Referansenummer

756433

Registrert

07.02.2019 av Kristin Killie - kristin.killie@uit.no

Behandlingsansvarlig institusjon

UiT Norges arktiske universitet / Fakultet for humaniora, samfunnsvitenskap og lærerutdanning / Institutt for lærerutdanning og pedagogikk

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Kristin Killie, kristin.killie@uit.no, tlf: 97794819

Type prosjekt

Forskerprosjekt

Prosjektperiode

11.02.2019 - 31.12.2022

Status

11.03.2019 - Vurdert

Vurdering (1)

11.03.2019 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 11.03.2019 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

Teaching and Learning English (TALE)

The project aims to provide more knowledge about how English is learnt and taught, with the aim of contributing to more effective teaching. The focus is on learners with a Norwegian language background, but other language backgrounds will be discussed as well.

Language teaching in Norwegian schools is to a large extent anchored in general learning theories and concepts such as Vygotsky's Zone of Proximal Development and Dewey's Learning by Doing. While the contributions of such theories are valuable and provide a setting for learning to occur, they do not help teachers to decide which topics should be made the focus of teaching. Learning a language is a highly complex and demanding task, but this is not reflected in the number of teaching hours dedicated to the subject of English (or other foreign languages) in (Norwegian) school. It is therefore essential for teachers to know which aspects of the language are most difficult to learn, so that teaching time can be spent efficiently. The present project aims to make a contribution to this end. Another important goal is to produce knowledge about the efficacy (or lack of such) of various teaching methods and activities in language learning.

The project includes a number of studies focusing on the acquisition/learning and teaching of various topics within English grammar, vocabulary, pronunciation, spelling etc.

Some central research questions are:

- Which areas (or specific points) of English (grammar, pronunciation, vocabulary etc) are most difficult to learn and hence require explicit focus in the classroom?
- Which areas or points of English seem to fall into place by themselves?
- Do learners resort to the same (kinds of) overgeneralization or simplification strategies when they learn English?
- Do learners make the same (kinds of) incorrect assumptions and the same kinds of errors?
- Are there language learning methods and activities that are generally more effective than others, or do different topics require different methods and activities?

Knowledge about questions such as these can potentially be very useful to teachers of English as it may help them select topics, methods and activities for their classes. In addition, knowledge of typical problems and errors and typical sources of errors will enable teachers to give better feedback.

Even though the project focuses on the acquisition of English in Norway, this research will, of course, build on international research. We also aim to give a contribution to international research by testing existing hypotheses, developing new hypotheses and exploring topics and areas within language acquisition and didactics which are not sufficiently explored.

Data sources

The studies in this project will be based on data sources such as:

- learner corpora, such as the Corpus of Young Learner Language (CORYL)
- learner texts that we collect ourselves
- interviews of learners and teachers
- textbooks
- acceptability judgements from learners
- observations of learners and teachers
- action learning projects

NSD NORSK SENTER FOR FORSKNINGSDATA

Meldeskjema 756433

Sist oppdatert

14.02.2019

Hvilke personopplysninger skal du behandle?

- Lydopptak av personer

Type opplysninger

Skal du behandle særlige kategorier personopplysninger eller personopplysninger om straffedommer eller lovovertredelser?

Nei

Prosjektinformasjon

Prosjekttittel

Teaching and Learning English (TALE)

Begrunn behovet for å behandle personopplysningene

Vi ønsker å klarere prosjektet med NSD fordi vi planlegger å bruke enkelte metoder som kan bidra til at personer kan identifiseres, som bruk av båndopptaker (muligheter for gjenkjenning av stemmer). Vi vil imidlertid sørge for at alle innsamlede data blir behandla forsvarlig og etter forskriftene. Lydopptak vil for eksempel bli sletta straks de er transkribert, og før den tid vil de bli oppbevart i et låst skap i UiTs lokaler. Innsamlede data vil aldri bli koblet opp mot noen personopplysninger i eventuelle publikasjoner. Vi vil tilstrebe maksimal anonymitet.

Ekstern finansiering

Type prosjekt

Forskerprosjekt