



# The three-gender system in two varieties of Jämtlandic

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# Abstract

This master's thesis is a study on the gender system of the Swedish dialect spoken in Jämtland, a province in northern Sweden. The Jämtlandic dialect preserves to a large extent the three-gender system that was present in Old Swedish, in which nouns can be either masculine, feminine or neuter. The three-gender system manifests in anaphoric pronouns and as agreement in the noun phrase. However, the gender system is changing under influence from the two-gender system of Standard Swedish. In Standard Swedish, the historical masculine and feminine genders have merged to form the common gender, and the masculine and feminine anaphoric pronouns have been replaced by the real pronoun *den* for inanimate nouns.

In this thesis, I look at the current situation of the three-gender system in the two Jämtlandic towns of Hammerdal and Oviken. The material for my study is a questionnaire consisting of 30 items, which was distributed to 67 informants. The questions ask informants to match nouns from different classes with anaphoric pronouns, definite articles, first-person possessive pronouns and indefinite articles. An informant's choice of pronoun or agreement reveals the gender they consider the noun to possess. In my analysis, I look at the variability among these four types of gender agreement as well as differences between classes of nouns. In addition to discussing overarching patterns, I consider the effect of participants' age, gender, education and location on their responses. The results are compared to three previous studies of other Swedish dialects with three-gender systems.

My overall results show that while the three-gender system is still present in the dialect, there are signs that the two-gender system is gaining ground. Questions on anaphoric pronouns received significantly more non-traditional responses than the other question types, indicating that the change to two genders is being led by anaphoric pronouns. In addition, nouns with traditionally feminine suffixes have a high rate of non-traditional responses. My study shows that neither age, gender, education or location have a significant effect on participants' responses.

# Chapter 1

## Introduction

Over the past 150 years, Sweden's rural dialects have gradually been disappearing. Modernization, urbanization and other forces present in today's world have caused widespread dialect levelling in Sweden and throughout Europe. The many dialects which once differed from village to village are now melting into a smaller number of "regional standards" which are anchored in the large cities of each region.

Dialect levelling in Sweden goes hand-in-hand with the loss of diversity in the grammatical gender system. Historically, Swedish had three genders - masculine, feminine and neuter. In Contemporary Swedish, however, the distinction between masculine and feminine gender for nouns has collapsed and has been replaced by the *uter* or "common" gender. The handful of rural dialects that have preserved the three-gender system are either disappearing or losing their three-way gender contrast. Recent research into grammatical gender shows that this pattern of loss is widespread among dialects of Swedish that historically have maintained three genders (see 2.2, also Ahlbäck (1946) and Westerberger (2004)).

In this Master's thesis, I investigate the current situation of the three-gender system in two particular areas in Jämtland. While several studies on grammatical gender in various Swedish dialects exist, to the best of my knowledge no formal study has been done on the dialects of Jämtland. I have taken an experimental approach to the study of the Jämtlandic dialect, using a questionnaire to ascertain the gender participants would assign to various different nouns. I also consider how participants' use of grammatical gender is affected by age, gender, education and location. This allows me to look at the gender system in Jämtland from a sociolinguistic as well as a grammatical perspective.

The population I investigated is composed of middle-aged and elderly speakers of Jämtlandic in the communities of Hammerdal in Strömsund municipality and Oviken in Berg municipality. Although it was my original intent to include younger speakers in the study, my contacts from three different communities in Jämtland stressed that it would not be possible to find more than a few speakers of Jämtlandic who are under the age of 35. Most young people in Jämtland speak only Standard Swedish.

### 1.1 Central question and hypothesis

The central question for this thesis is: Is the three-gender system still present in two Jämtlandic speech communities, or has it given way to the two-gender system of Standard



Swedish?

My hypothesis is that I will find some characteristics of both a two-gender system and a three-gender system in the Jämtlandic dialect. Specifically, I expect that some of the nouns that were formerly feminine will now be assigned the pronoun *den* instead of the traditional *hon*, and will follow the agreement patterns of the Standard Swedish *uter* gender. In addition, some of the traditionally masculine nouns will be assigned the pronoun *den* and display *uter* agreement. I also expect to see some signs of “Stockholm gender,” in which feminine nouns begin to take the anaphoric pronoun *han*. These predictions were made based on previous studies of other Swedish dialects that maintain a three-gender system, especially Thelander (1976), Rabb (2004) and Sandström (2010) (see 2.2).

Based on the results found in previous studies, I expect that the age and education level of the participant will be significant influences on traditionalness of responses, and that gender and location will not be significant. Age should be significant because older speakers tend to preserve older forms of speech. Likewise, participants with a lower education level should preserve dialectal forms because they have not had as much exposure to written Standard Swedish, and are less likely to have studied or worked outside of the community. Because Oviken and Hammerdal are similar in terms of size and distance from large cities, I do not expect to find significant variation between the two.

## 1.2 Notation system

All of the examples I present appear first in Swedish (Standard Swedish, Old Swedish or Jämtlandic) and are followed first by an English gloss, and then by a translation into English. Since I am not concerned with the phonetics or phonology of Jämtlandic, I have chosen not to use phonetic transcription. I use Standard Swedish orthography for the Swedish examples. For the Jämtlandic examples, the orthography is an approximation of pronunciation using the Standard Swedish writing system. For the Old Swedish examples, orthography is taken from Pettersson (1996).

## 1.3 Organization

I begin in Chapter 2 with an overview of the historical three-gender system in Swedish and the change to two genders in Standard Swedish. I also present summaries of the most thorough studies that have been done on the three-gender systems of other rural dialects of Swedish. Chapter 3 gives a brief background on Jämtland and the communities of Hammerdal and Oviken, and Chapter 4 presents the methodology I used for my study. The main analysis appears in Chapter 5, followed by a comparison to previous studies on the three-gender system in Chapter 6. I present my conclusion in Chapter 7.

# Chapter 2

## Background

### 2.1 History and development of grammatical gender in Swedish

The below presentation of the history and development of grammatical gender in Swedish is based primarily on Gertrud Petterson's 1996 book on the development from Old Swedish to Contemporary Swedish. I have also drawn from Esaias Tegnér's study on changes in the Swedish gender system and Elias Wessén's history of the Swedish language.

#### 2.1.1 The historical three-gender system

Old Swedish had a complex noun morphology. Nouns were inflected for gender, case and number, leading to an inflectional system that was more rich and complex than that of Contemporary Swedish. Central to the noun morphology of Old Swedish was the three-way distinction in gender between masculine, feminine and neuter. Nouns within the masculine and feminine noun classes could be either weak or strong. Feminine nouns ending in *-a* in the nominative form were weak, while other feminine nouns were strong. Weak masculine nouns ended in *-i* in the nominative, and strong masculine nouns were those that did not end in *-i*.<sup>1</sup>

In addition to its three genders, Old Swedish also had four cases - nominative, genitive, dative and accusative. This differs significantly from the Contemporary Swedish case system, which lacks all case inflection, except in the pronominal system. Weak and strong nouns were inflected differently. While strong nouns took all four case endings, weak nouns had a single ending for all non-nominative cases (*-a* for masculine nouns and *-u* for feminine nouns) (Petterson, 1996:88).

Gender, number and case were also marked on adjectives and the numbers one through four. Inflection was more or less the same for all of these adjectival words. However, some adjectives could take a simplified form of inflection called *weak inflection* in certain syntactic contexts. As in today's Swedish, pronouns had different forms according to case. Below are given some examples of a few different ways in which agreement surfaced in the noun phrase (all with strong inflection).<sup>2</sup>

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<sup>1</sup>The *-i* ending for weak masculine nouns corresponds with the ending *-e* in Contemporary Swedish. Very few weak neuter nouns existed in Old Swedish. Since this paper focuses on masculine and feminine nouns, neuter nouns will not be discussed in detail.

<sup>2</sup>All examples are from Petterson (1996), 102-103.

- (2.1) *Sva var ok han goper dræng-er*  
 so was also 3MS.NOM good-NOM man-NOM  
 ‘So he also became a good man’
- (2.2) *Vi skulum æng-in sak-an göra sum saklös ær*  
 1PL.NOM shall.PL no.one-ACC case-ACC make who innocent is  
 ‘We shall make no one guilty, who is innocent’
- (2.3) *vin=in gældi honum ater full-um gæld-um*  
 friend.NOM=the pay.SUBJ 3MS.DAT back full-DAT money-DAT  
 ‘His friend paid him back in full’
- (2.4) *iak vil iþer þæss biþia*  
 1S.NOM wish 2PL.DAT 3NS.GEN ask.INF  
 ‘I wish to ask you about it’

2.1 shows a masculine noun and adjective with nominative inflection. The disappearance of the *-er* masculine nominative marker contributed to the merging of the feminine and masculine cases, since strong feminine nouns do not have an ending in the nominative form. 2.2 shows a feminine noun and adjective with accusative agreement. 2.3 shows dative agreement, and 2.4 shows a pronoun in genitive form.

## 2.1.2 The change to two genders

The change from the complex noun morphology of Old Swedish to the considerably simpler morphology of Contemporary Swedish happened gradually from the fourteenth century to the twentieth century. Levelling occurred in both the case system and the gender system. The simplification of case eliminated the visible distinction between masculine and feminine, leading to the collapse of the two genders (Pettersson, 1996:154).

The change in case system began with the loss of the less frequently used case endings, such as the dative singular in masculine and feminine strong nouns (*-i* and *-u*, respectively) (Wessén, 1992:136). By the fifteenth century, so many case endings had been lost that the original four cases had collapsed, leaving the caseless system present in Contemporary Swedish. Within the same period, adjectival inflection simplified dramatically, going from 24 different endings to only four. The resulting paradigm was nearly the same as today’s Swedish, apart from the neuter plural, which maintained its original null ending (e.g. *stor hus* instead of *stora hus* ‘big houses’). In addition, the pronominal system was simplified; many accusative forms disappeared, replaced by the dative form in object position (e.g. *hana* ‘her’ became *hänne*) (Pettersson, 1996:150-151).

The change from three genders to two happened on two levels: first was the merging of masculine and feminine agreement markers in the noun phrase, followed by the replacement of *han* and *hon* with the pronoun *den* (for inanimate nouns). Table 2.1.2 from Pettersson (1996) shows how the decline of case endings contributed to the change in formal gender distinction in Swedish. The example sentences *en langer fisker* ‘a long fish’ and *en lang färd* ‘a long journey’ are presented with all possible case markings in Old Swedish and Modern Swedish.

**Table 2.1: Simplification of agreement in the Swedish noun phrase**

<b>Masculine (OSw)</b>	<b>Feminine (OSw)</b>
N <i>en lang-er fisk-er</i>	N <i>en lang färd</i>
G <i>en-s lang-s fisk-s</i>	G <i>enn-ar lang-rar färd-ar</i>
D <i>en-um lang-um fisk-i</i>	D <i>enn-i lang-ri färd</i>
A <i>en lang-an fisk</i>	A <i>ena lang-a färd</i>
<b>Masculine (New forms)</b>	<b>Feminine (New forms)</b>
C <i>en lång fisk</i>	C <i>en lång färd</i>
G <i>en lång fisk-s</i>	G <i>en lång färd-s</i>

As is clear from Table 2.1.2, the distinction in the noun phrase between masculine and feminine eroded with the loss of case endings (around the fifteenth century). After this point, the pronouns *han* and *hon* continued to be used to refer to traditionally masculine and feminine nouns. However, after case was lost, it became less important to keep the masculine and feminine genders separate in pronominal usage. Thus, the loss of case was a prerequisite for the shift from three genders to two (Davidson, 1990:154). The demonstrative *den* began to be used anaphorically in place of *han* and *hon*. *Den* appeared as a pronoun as early as the fifteenth century, gradually gaining ground. The use of *han* and *hon* for inanimate nouns persisted to some degree until the beginning of the twentieth century, when it disappeared completely from Standard Swedish (Tegnér, 1962).<sup>3</sup>

## 2.2 Previous studies on grammatical gender in Swedish dialects

In previous studies of the loss of the three-gender system in various rural Swedish dialects, a general pattern can be seen. Feminine nouns may start to take the masculine pronoun *han*, while both feminine and masculine nouns begin to switch over to the pronoun *den*. This results in a severe restriction of the feminine gender. As fewer and fewer words take the feminine pronoun *hon*, the distinction between masculine and feminine begins to weaken, causing feminine articles and other types of agreement to disappear.

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<sup>3</sup>It is also possible for the merging of two genders to begin with the collapse of the gender distinction in pronouns. In Norwegian, *han* and *hon* for inanimate nouns has disappeared from Oslo speech, while a distinction can still (optionally) be made with masculine and feminine agreement in the noun phrase. In current Oslo Norwegian, *en* can be used for both masculine and feminine nouns. However, some speakers use the older *ei* as the feminine article and *en* as the masculine article (Marit Julien, personal communication).

### 2.2.1 Margareta Thelander's study on the Burträsk dialect

Margareta Thelander's 1976 paper on the Burträsk dialect in Västerbotten is an early account of the change in formal gender in a rural dialect of Swedish. Thelander's study looked at 14 recorded conversations lasting about two hours each from 56 informants in Burträsk, focusing on usage of the anaphoric pronouns *han*, *hon* and *den*. She analyzed informants in four different age groups: 14-19, 20-34, 35-49 and over 50. Thelander found that *han* and *hon* still dominated over *den* for inanimate nouns; nevertheless, *den* had gained significant ground. In addition to *den* gaining ground over *han* and *hon*, *han* also was used for some traditionally feminine words, indicating uncertainty over traditional gender in the dialect.

#### Distribution of *han*, *hon* and *den*

In total, 25% of occurrences of traditionally masculine and feminine nouns in Thelander's material were given the Standard Swedish *den* instead of the dialectal form. Although this would seem to indicate that the hold of dialectal gender agreement was rather strong, a closer look shows that the feminine gender was being taken over by both *han* and *den*. While only 13% of the masculine nouns received *den* as a pronoun, 31% of feminine nouns received *den*. In addition, 18% of feminine nouns received *han* as a pronoun. Thelander notes that the collapse of the feminine gender is a common symptom of a changing gender system (Thelander, 1976:21).

#### Correlation between age, education, and use of *han* and *hon*

As expected, Thelander found that older speakers tended to use the traditional *han* and *hon* rather than *den* for inanimate nouns, with only 19% of pronouns surfacing as *den*. The speakers who were most likely to use Standard Swedish forms were those in the 20-34 age range, using 50% Standard Swedish forms (Thelander, 1976:14). Somewhat unexpectedly, the speakers in the 14-19 age group also tended to favor *han* and *hon* over *den*. Only 13% of pronouns produced by speakers in the 14-19 age range were Standard Swedish *den*. Nevertheless, the youngest group of speakers showed a different pattern of non-traditional usage - namely, overuse of the masculine pronoun *han* at the expense of the feminine pronoun *hon*. 43% of the traditionally feminine correlates were given the pronoun *han* by the 14-19 group. Thelander draws a parallel between this pattern in Burträsk and the historical "Stockholm gender" described by Tegnér (1962). In the seventeenth century, *han* began increasingly to be used in Stockholm to refer to traditionally feminine nouns. Eventually it pushed out *hon* completely. With the masculine/feminine distinction gone, *den* began gradually to replace *han* beginning with abstract words, and eventually *den* was the new dominant form.

Since there was a strong correlation between age and education level in Thelander's group of informants (older speakers tended to be less educated), the trends of pronoun usage according to education mirror closely the trends of pronoun usage according to age. No strong correlation existed between respondents' gender and pronoun usage.

## Thelander's analysis

Thelander's data shows an interesting and varied pattern of loss of the traditional three-gender system. While the informants as a whole had some resistance to incorporating Standard Swedish *den* into their dialectal speech, the two youngest groups showed marked differences from traditional dialectal pronoun usage. Trends shown by the 20-34 age group indicate that the usage of *den* is increasing, while a look at the 14-19 age group indicates instead that *han* is becoming the default pronoun for all inanimate nouns. Both of these trends indicate a move towards a two-gender system, with the pronouns *den* and *det* for one age group, and the pronouns *han* and *det* for the other age group. Thelander makes the prediction that the *han* in the latter gender system will eventually be replaced with *den*, leaving a two-gender system like that of Standard Swedish (Thelander, 1976:21).

### 2.2.2 Viveca Rabb's study on the Kvevlax dialect

Viveca Rabb's 2004 dissertation describes the state of the three-gender system in the Finland-Swedish community of Kvevlax in Österbotten. In contrast to Thelander, Rabb looked at gender agreement on definite articles, possessive pronouns, and certain adjectives instead of anaphoric pronouns. Rabb used an interview format to collect data, asking informants which of two forms they would use in their dialect (e.g. "Skulle du säga *honde båtjen* eller *hande båtjen*?" 'Would you say *that(fem) book* or *that(masc) book*?') (Rabb, 2004:91). Words were taken from a predetermined list that included various types of traditionally masculine and feminine nouns. This approach differs significantly from that of Thelander in several important ways. Firstly, by asking direct questions rather than recording spontaneous speech, Rabb's results can be said to mirror informants' own understanding of their dialect, not necessarily their actual usage of gender agreement. Second, by giving informants a choice between only two forms, Rabb does not allow for new forms (perhaps borrowed from Standard Swedish) to surface in the material. This combined with the fact that she did not look at anaphoric pronouns means that she can only measure uncertainty in gender assignment between masculine and feminine gender.

## Results

Similarly to Thelander, Rabb found that informants tended to overuse masculine forms at the expense of feminine forms. She also found that older informants tended to use traditional forms more often than younger informants. Rabb organized informants into three groups according to approximate birth year (1920, 1950 and 1980). There was a steady decline in the appearance of feminine agreement from 1920 to 1950 and from 1950 to 1980, but the only statistically significant difference was between 1920 and 1980. This suggests that the trend in the breakdown of the three-gender system is clear but gradual. The tendency to use masculine agreement with traditionally feminine words is even stronger here than in Thelander's study, as the youngest informants used masculine agreement even more than feminine agreement for traditionally feminine nouns. In addition, informants with a higher education level tended to use less traditional forms than those with a lower level of education. Education, however, is closely correlated with age, so Rabb avoids drawing conclusions from this.

Unlike Thelander, Rabb found a correlation between the respondent's gender and their use of traditional agreement. Specifically, she found that women in the oldest age group were more likely to choose traditional gender agreement than men in their age group. In contrast, women in the youngest age group were less likely to use traditional gender agreement than men of the same age. Nevertheless, gender differences among informants do not influence responses as much as age and education do.

### 2.2.3 Caroline Sandström's study on the Eastern Nyland dialect

In her dissertation on the changes in formal gender in the Eastern Nyland dialect of Finland-Swedish, Caroline Sandström investigates how the three-gender system, when it has lost its grammatical function, can allow speakers to indicate their affiliation with a certain social group. In this way, she takes dialect research a step further than the two previously discussed studies.

#### Methods

Sandström drew the data for her study from two main sources. The first was a collection of recorded material from Eastern Nyland from 1960-1970, and the second consisted of recordings from 2005-2008. The older material consisted solely of older informants, whom Sandström divides into three age groups. The age groups are organized around approximate birth years (1880's, 1890's and 1900's). In the new material, Sandström chose informants from two age groups: those born between 1927 and 1938, and those born between 1976 and 1988. She looked at changes in the gender system both in the usage of anaphoric pronouns and the definite article.

#### Results and disappearance of the three-gender system

Sandström found that even in the older group of informants, *hon* was being taken over by both *den* and *han*. *Den* gained more ground over *hon* than did *han*: while 21% of instances of traditionally feminine nouns received *den* as a pronoun, only 2% of feminine tokens received *han*. For pronouns for masculine nouns, Sandström notes that *han* is dominant over *den*, with only 20% of masculine tokens receiving *den*. There is only one instance in the material of a masculine noun receiving *hon*. Overall, the traditional definite articles have a stronger standing in the older recorded material than the pronouns. 13% of instances of traditionally feminine nouns received the masculine article *-n*, while the rest received the feminine article *-en*. The standing of masculine definite articles was even stronger, with only 3% deviating from the traditional definite article (Sandström, 2010:171-182, 187-209).

In the newer recorded material, Sandström notes that only one informant uses *hon* for inanimates, while *han* for inanimates appears sporadically for only a few informants (Sandström, 2010:184). Thus, *den* has completely pushed out the traditional three-gender pronominal system. For definite articles, there is a clear tendency (especially among the younger informants) to use *-en* for both masculine and feminine nouns. Although *-en* is the traditional feminine article in Eastern Nyland, the preponderance of *-en* is more accurately seen as the result of influence from the Standard Swedish article *-en*.

## Creation of a dialect marker

Although the distinction between masculine and feminine genders has all but disappeared in Eastern Nyland, certain traditionally gendered pronouns and articles continue to be used by speakers who have a strong affiliation with Eastern Nyland. Not all traditional pronouns and articles show up as dialect markers, and those that do occur are phonologically reduced. The traditional gender markers that appear as dialect markers are: 1. the syncopated masculine enclitic, e.g. *hattn* ‘the hat’, 2. the definite articles *-i* or *-in* for masculine or neuter nouns that end in *k* or *g*, e.g. *taki* ‘the roof’ and *skogin* ‘the forest’, 3. the neuter pronoun *he(t)*, and 4. the masculine pronoun *han*. Because feminine agreement disappeared from the dialect, the feminine pronoun *hon* and the feminine definite enclitic *-en* do not appear as dialect markers (Sandström, 2010:377-378).

Sandström argues that these remnants are dialect markers because they show stylistic variation. That is, they are used in some contexts more than others and are used to fulfill a social, rather than a grammatical function. The phenomenon is especially prominent when a speaker is talking with someone they know well from their home community. Additionally, dialect markers tend to be elicited when discussing work or everyday happenings (Sandström, 2010:372).

### 2.2.4 General patterns and predictions

By comparing past studies on the loss of the three-gender system in rural dialects with the loss of the three-gender system in older Standard Swedish, several patterns emerge. The overarching pattern is a gradual weakening of the traditional three-gender system, eventually leading to a two-gender system. This process can happen in various ways. The change in usage of anaphoric pronouns for inanimate nouns is closely tied to the loss of the masculine/feminine distinction in noun phrase agreement. Often one change begins first and subsequently influences the other. In some cases the change in pronouns occurs first (as in Oslo Norwegian and Eastern Nyland Swedish); in others, the change in noun phrase agreement occurs first (as in Standard Swedish).

There is also variation in how the change in pronoun usage occurs. In many instances, *han* and *hon* are simultaneously replaced by *den*. However, this is often accompanied by some use of *han* for feminine nouns. Occasionally, as in the so-called “Stockholm gender”, *han* replaces *hon* completely before finally being replaced by *den*. This appears to be what is occurring in Burträsk, according to Margareta Thelander’s study.

Based on these studies, I expect to see changes and simplification in both the pronominal system and within the noun phrase in Jämtlandic. I expect that one of the changes, either the pronouns or the noun phrase, will be significantly more prominent than the other.

## 2.3 The traditional gender system in Jämtland

The below description of the traditional three-gender system in Jämtlandic is based on grammatical descriptions from Ohlson (1973) and Oscarsson (2007). These are non-academic books geared towards people with a background or an interest in Jämtland. Because no academic descriptions of the Jämtlandic three-gender system exist, I have



used these sources instead. Although several different Jämtlandic dialects exist, Ohlson (1973) and Oscarsson (2007) base their descriptions off of Central Jämtlandic.

The current nominal system in Jämtland is similar to that of Old Swedish, with a few key differences. In Jämtlandic, as in Old Swedish, distinctions are made between three noun classes: masculine, feminine and neuter. In practice, the three-gender distinction surfaces as agreement on articles, personal pronouns, the number one, and certain pronominal adjectives such as *töcken/töcka* ‘such (m/f)’. The pronouns *han* and *hon* are used to refer to masculine and feminine nouns, respectively, in place of Standard Swedish’s *den*. Unlike Old Swedish and Contemporary Swedish, Jämtlandic dialects do not mark gender on adjectives (Oscarsson, 2007:512).

Jämtlandic maintains much of the Old Swedish case system, with nominal, dative, and accusative forms. In contrast to Contemporary Swedish, Jämtlandic does not have the genitive ending *-s* for nouns. The genitive is replaced in Jämtlandic by either the possessive pronoun or the preposition *ata*. For example, Swedish *Pers rock* ‘Per’s coat’ in Jämtlandic becomes either *rocken hans Per* or *rocken ata Per* (Ohlson, 1973:61). The accusative case has completely merged with the nominative case, while dative case is still marked differently. The table below shows how case surfaces in Jämtlandic for the masculine word *pojke* ‘boy’ and the feminine word *stårs* ‘girl’ (Ohlson, 1973:61).

**Table 2.2: Inflection of Jämtlandic nouns - Definite forms**

	<b>Masc. singular</b>	<b>Masc. plural</b>	<b>Fem. singular</b>	<b>Fem. plural</b>
Nominative	pojken	pojkan	stårsa	stårsan
Dative	pojka	pojkom	stårs’n	stårsom
Accusative	pojken	pojkan	stårsa	stårsan

**Table 2.3: Inflection of Jämtlandic nouns - Indefinite forms**

	<b>Masc. singular</b>	<b>Masc. plural</b>	<b>Fem. singular</b>	<b>Fem. plural</b>
Nominative	n pojk	pojke	e stårs	stårse
Dative	n pojk	pojke	n stårs	stårse
Accusative	n pojk	pojke	e stårs	stårse

As can be seen in Table 2.3, weak masculine and weak feminine nouns in Jämtlandic tend to lose their final vowel in the singular indefinite forms.<sup>4</sup> This means that there is no significant distinction between strong and weak nouns in most Jämtlandic dialects, since final vowels are the markers for weak masculine and feminine nouns. In addition, Jämtlandic does not maintain the other morphological distinctions between strong and weak nouns that existed in Old Swedish. All nouns are inflected the same way regardless of whether they are historically weak or strong.

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<sup>4</sup>However, the final vowel is preserved in Southwestern Jämtlandic dialects.

# Chapter 3

## Jämtland and focus areas

### 3.1 Location and brief history of Jämtland

Jämtland is located in the southwestern part of Norrland, the northernmost region of Sweden. It is bordered to the west by the Norwegian province of Trøndelag, to the north by Lappland, to the east by Ångermanland, and to the south by Härjedalen and Medelpad. As the third largest province in Sweden, it covers 49,343 square kilometers (Bengtsson, 2011). Figure 3.1 shows Jämtland's location in Sweden.

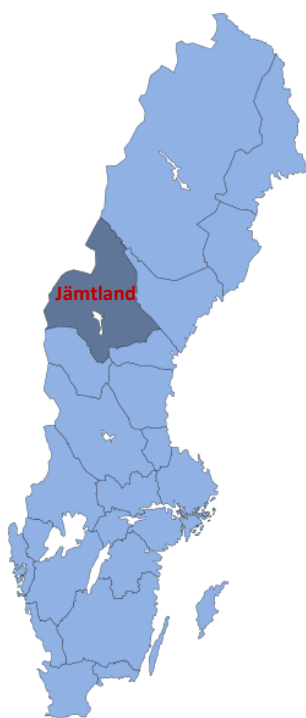


Figure 3.1: Location of Jämtland in Sweden

The area which today is known as Jämtland was first inhabited by hunter-gatherers around 7,000-6,000 B.C.E. It first became a part of Norway in 1178 after the Norwegian king Sverre Sigurdsson secured victory over the Jämtes. Thereafter, it went back and forth from Norway and Denmark to Sweden several times before finally becoming part

of Sweden in 1645 (Ekerval, 2004:163). Jämtland often experienced influence from both countries at once. For instance, it was ruled politically by Norway, but was under the Swedish church from 1164 until 1570 (Imsen, 2011:136). The constant shift back and forth between three ruling countries meant that Jämtland was not well integrated into any Scandinavian country until the seventeenth century. This combined with Jämtland's location away from the center of Swedish society allowed the Jämtlandic dialect to develop in relative isolation, with ancient grammatical features that were lost in other dialects of Swedish (Reinhammar, 2005:81).

After the incorporation of Jämtland into Sweden in 1645, Sweden began an aggressive Swedification policy. As knowledge of Standard Swedish became increasingly important in daily life over the next few centuries, the status of the rural Jämtlandic dialects weakened. In a long, slow process that is still ongoing today, the traditional dialects fell out of use, replaced by the regional variety of Standard Swedish. In 2000, it was estimated that 30,000 of Jämtland's inhabitants spoke the traditional dialect (Lewis, 2009). This was a mere 23% of Jämtland's total population at the time, which was around 130,000 (Bengtsson, 2011). The number of people who speak Jämtlandic today is probably slightly lower than these figures.

## 3.2 Focus areas for study

For my study, I gathered data from two principal areas. 32 respondents came from Hammerdal or nearby areas in Strömsund municipality, and 35 came from in or around Oviken in Berg municipality. Thus, my study can be said to reflect two out of the six Jämtlandic-speaking municipalities (Östersund, Bräcke, Åre and Krokom were not included).<sup>1</sup> Focusing on two different locations that are more than 100 kilometers away from each other allowed me to compare the three-gender system in different areas of Jämtland. Figure 3.2 shows the locations of Hammerdal and Oviken in Jämtland.

### 3.2.1 Hammerdal

Hammerdal is a village located in the southern part of Strömsund municipality in eastern Jämtland. As of December 31, 2010, it covered 2.29 square kilometers and had 974 inhabitants. The greater Hammerdal Parish has 2,279 inhabitants and covers 1,228 square kilometers (Statistiska centralbyrån, 2012).<sup>2</sup>

Hammerdal was founded as a church center of Northern Jämtland in the Middle Ages. The area's early inhabitants supported themselves with foresting, livestock farming, and agriculture. Currently, the most important industries are foresting and cement pouring (Gidlund, 2012), also (Reinhammar, 2005:76).

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<sup>1</sup>In the municipality Frostviken in northern Jämtland, a dialect of *trøndersk* is spoken, which is more closely related to the dialects of the Trøndelag region of Norway than to the other Jämtlandic dialects. The dialect of Ragunda, while sometimes classified as a Jämtlandic dialect, is significantly different from the other dialects of Jämtland and more closely resembles the dialects spoken in the nearby provinces of Medelpad and Ångermanland (Flemström, 1992).

<sup>2</sup>Most of the informants in my survey are from the population center of Hammerdal, though a few are from Hammerdal Parish.

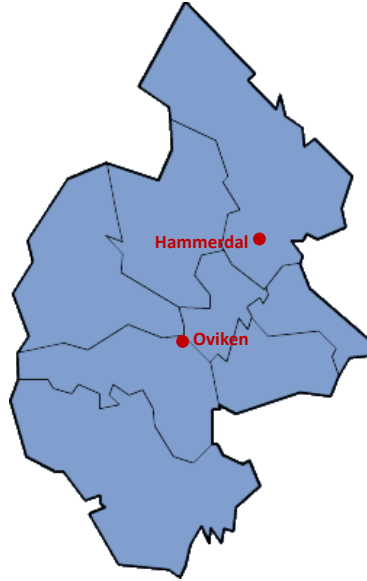


Figure 3.2: Location of Hammerdal and Oviken in Jämtland

The dialect of Hammerdal, or *hammerdalsmålet*, has a few features that separate it from most other Jämtlandic dialects. For instance, it maintains the Old Norse diphthongs *au*, *ei* and *öy*, which have been lost in several Jämtlandic dialects. It also maintains many older present tense forms of verbs such as *dräg* 'draw' (compare Standard Swedish *drar*), and *skäk* 'shake' (compare Standard Swedish *skakar*). These verb forms are only present in the northern and western regions of Jämtland (Reinhammar, 2005:68-69).

### 3.2.2 Oviken

Oviken is located in the northeastern corner of Berg municipality near the center of Jämtland. It covers 0.31 square kilometers and had 132 inhabitants as of 2005 (Statistiska centralbyrån, 2007). Oviken Parish as of 2000 had 1,419 inhabitants and an area of 1,073 square kilometers (Harlén, 2003:345).<sup>3</sup>

Like Hammerdal, Oviken has its roots in medieval times. The town's oldest church, which was built in the Middle Ages, is still standing today. Oviken is composed of a farming district and a forest district. Starting from the eighteenth century, it was common for cattle farmers in the area to make use of shielings (summer pastures, or *fäbodas* in Swedish) in the nearby Oviken Mountains (Sjögren, 1935:494). Today, Oviken is known for its rich cultural scene, with several cultural events throughout the year that draw visitors from inside and outside of Jämtland (Åström, 2012).

The dialect of Oviken, or *oviksmålet*, belongs to the southwestern Jämtlandic dialect group. As in the Hammerdal dialect, the Oviken dialect preserves the Old Norse diphthongs *au*, *ei* and *öy*. In addition, it has one other diphthong, which is similar to Icelandic

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<sup>3</sup>Most of the informants in my survey are from the village of Oviken, though a few are from the greater Oviken Parish.

*á* and is not present in other Jämtlandic dialects.<sup>4</sup> In addition, southwestern Jämtlandic preserves *-a* and *-e* in disyllabic words, which are lost in other Jämtlandic dialects (e.g. *bodde* ‘lived’ is pronounced *bood* in other Jämtlandic dialects.) (Österberg, 1914:4).

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<sup>4</sup>This diphthong corresponds to long *á* in other dialects of Jämtlandic and in Standard Swedish.

# Chapter 4

## Informants and methodology

### 4.1 Profile of informants

In my study, I had 67 participants. Of these informants, 48% were women and 52% were men. All participants were native speakers of a Jämtlandic dialect, and were bidialectal in Jämtlandic and the regional variant of Standard Swedish. 45% of the informants had a primary school (*grundskola*) education, 35% had a secondary school (*gymnasieskola*) education, and 20% had a university (*högskola*) education.

Informants were chosen from the villages of Hammerdal in Strömsund municipality and Oviken in Berg municipality. Altogether, 52% of the informants came from Oviken and 48% came from Hammerdal. The informants in my study have an average age of 65 and an age range of 37 to 87. This gives a range of 50 years, which is sufficiently large for my statistical analysis.

#### 4.1.1 “Second-language” speakers

Two of the speakers I interviewed did not speak Jämtlandic from birth. I did not include them in the study since including non-native speakers could have skewed the data. Nevertheless, it is interesting to look at how their responses compare to those of the other respondents to the survey. One of these speakers came from outside of Jämtland, but married into a Jämtlandic-speaking family over 30 years ago. She learned Jämtlandic in order to be able to communicate effectively with her husband’s family. Today, she still speaks Jämtlandic daily with her husband. According to my survey, there is little difference between her gender assignment and the gender assignment of the average native speaker of Jämtlandic. In fact, this second-language speaker uses only 17% non-traditional forms, in comparison with the 19% average for native speakers. This low figure may also have something to do with the fact that she has a university education (those with a university education tend to use more traditional forms, perhaps due to a greater awareness of language attained from university-level language courses).

The other second-language speaker I interviewed was a 17-year-old secondary school student who is learning the Jämtlandic dialect in school. Although her parents both speak the dialect, they do not speak it at home, and consequently she did not acquire it. Her answers differed more from the answers of the average respondent, with 47% non-traditional forms. She also gave non-traditional answers for several words to which

native speakers consistently assigned the traditional gender. For instance, she assigned a non-traditional gender to *lada*, *mjök* and *tröja*, which were assigned the traditional gender 95% of the time by native speakers.

### 4.1.2 Speakers from outside Hammerdal and Oviken

In addition to the 67 speakers from the two main areas of my study, I received data from 11 informants who were from other areas of Jämtland. Of these, seven were from Åre municipality, three were from Östersund municipality, and one was from Krokoms municipality. In order to ensure the homogeneity of my data, I have not included these questionnaires in my primary analysis. Nevertheless, to get some idea of how these regions differ from my main study areas, I include them in a supplemental discussion in 5.5.1 to see if they differ significantly from the participants in Oviken and Hammerdal.

## 4.2 The questionnaire

For my experiment, a paper questionnaire was distributed to 67 informants. The questionnaire contained thirty questions which asked informants to give the forms of pronouns or agreement they would use in their dialect.

### 4.2.1 Choice of words

Most of the words that are present in my questionnaire are drawn from previous studies of grammatical gender in Swedish, namely Thelander (1976), Rabb (2004), and Sandström (2010). Using words that appear in other studies allows me to compare my overall results and the results for individual words with these previous studies.

My word list consisted mostly of words to which participants in the above studies consistently assigned the traditional gender. I looked up each word I intended to use in *Dalins ordbok* and *Svenska Akademiens ordbok* to ensure that the gender assigned by participants corresponded with the word's historical gender. I am aware that by choosing words that have demonstrably retained masculine or feminine gender in other dialects of Swedish, I risk overestimating the extent to which the three-gender system is still present in Jämtlandic. Therefore, it is important that I do not over-generalize my results. This study may not give a complete picture of the status of the three-gender system in all of Jämtland, and the results only apply to traditional, high-frequency words.

My final list included thirty words. The distribution is as follows: Two tree names, which are traditionally feminine, two words each with the historically feminine derivational suffixes *-else* and *-het*, seven each of weak and strong feminine nouns, and five each of weak and strong masculine nouns. Below I have listed all of the nouns that appear on the questionnaire.

**Tree names, originally feminine.**

1. *björk* 'birch'
2. *ek* 'oak'

3. *pojke* 'boy'

4. *pinne* 'stick'
5. *måne* 'moon'

**Historically feminine derivational suffixes**

1. *rörelse* 'movement'
2. *utmärkelse* 'distinction'
3. *fastighet* 'property'
4. *dumhet* 'stupidity'

**Strong masculine nouns**

1. *mangel* 'mangle'
2. *stol* 'chair'
3. *båt* 'boat'
4. *fot* 'foot'
5. *tallrik* 'plate'

**Weak feminine nouns**

1. *klocka* 'clock'
2. *lada* 'barn'
3. *stuga* 'cottage'
4. *tröja* 'sweater'
5. *stekpanna* 'frying pan'
6. *yxa* 'axe'
7. *kaka* 'cookie'

**Strong feminine nouns**

1. *mjölk* 'milk'
2. *grind* 'gate'
3. *åder* 'vein'
4. *kvarn* 'mill'
5. *sked* 'spoon'
6. *å* 'stream'
7. *sol* 'sun'

**Weak masculine nouns**

1. *påse* 'bag'
2. *backe* 'hill'



I chose a larger proportion of feminine nouns because these are the nouns that are generally affected first in the shift from a three-gender system to a two-gender system (Rabb, 2004:78). I chose not to look at neuter nouns for my study, since these nouns are generally not affected in the shift from three genders to two (Rabb, 2004:87).

## 4.2.2 Design of questions

The above words were placed in different contexts, and informants were asked to choose the form of agreement or anaphoric pronoun that they would use in their dialect (see Appendix A). The choice of form reveals which gender speakers assign to the noun. For my study, I looked at four of the most common areas in which grammatical gender agreement surfaces: choice of pronoun (9 questions), suffixed definite articles (5 questions), first-person possessive pronouns (8 questions) and indefinite articles/the numeral one (8 questions).<sup>1</sup>

Since there is no written standard for Jämtlandic, I wrote the survey mostly in Standard Swedish. I explained to all participants that I was interested in the forms they would use in their dialect, even though the questions were written in Standard Swedish. I chose to present all of the words in short sentences or phrases in order to establish some sort of context in which the speaker could place the word. Nevertheless, I wanted to avoid having too many Standard Swedish words in the survey. To minimize the risk of priming informants for giving Standard Swedish responses, I tried to make the questions as short and simple as possible.

### Choice of pronoun

Questions regarding choice of pronoun were of the following form:

(4.1) *Stekpanna*: Han/Hon/Den är på bordet (*Frying pan*: He/She/It is on the table).

For these questions, I instructed the participant to circle the form of the pronoun they would use with the italicized word in their dialect. I provided three forms - the masculine, feminine and reale forms. I varied the order in which the choices were presented to avoid any interference that could occur from speakers preferring the choice that appears in a certain position.

### Definite articles

Questions regarding choice of definite article were of the following form:

(4.2) *Stuga*: De bodde i \_\_\_\_ (*Cottage*: They lived in \_\_\_\_).

For definite article questions, I presented an italicized word and instructed informants to provide the definite form of the italicized word. Before these questions, I gave an example to clarify what is meant by “definite form”. I instructed informants to write the word the way it sounds in their dialect, rather than the way it is spelled in Standard

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<sup>1</sup>In Jämtlandic, indefinite articles and the numeral one have the same form: *en* for masculine and *ei* for feminine. In my discussion of these types of questions, I will refer to them as indefinite articles.

Swedish. This resulted in many spelling variations, but this did not affect the results, since I was only interested in the type of ending the participants gave (*-a* or *-u* for feminine and *-n* or *-en* for masculine).

### First-person possessive pronouns and indefinite articles

These questions were presented in a table, as shown below with the words *mjölk* “milk” and *utmärkelse* “observation”:

Table 4.1: First-person possessive pronoun and indefinite article questions

men mjölk ‘my(masc) milk’	mi mjölk ‘my(fem) milk’
ei utmärkelse ‘a(fem) distinction’	ein utmärkelse ‘a(masc) distinction’

For these two types of questions, two possible forms were given and speakers were asked to circle the one they would use. I chose this form for these two questions because for these two types of agreement, the masculine forms (*men*, *ein*) closely resemble the Standard Swedish forms (*min*, *en*), and this would have made it difficult to interpret responses if the questions were fill-in-the-blank. Thus, these two questions types only measured variation between masculine and feminine, as in the definite article questions above.

## 4.3 Survey reading by selected informants

A written survey, while ideal for creating usable data, is not an ideal way to elicit natural forms of speech. To make my study more reflective of natural speech, I could have recorded spontaneous conversations in Jämtlandic, and then listened for how gender was used in the conversations. However, with this method, I would have had no guarantee that certain types of words or agreement would be present in the conversations. In addition, I would not have been able to accurately compare participants to each other or obtain averages for each word, since each participant would use completely different nouns. With my limited time frame, this method was too risky. Although I also considered having informants talk about carefully chosen pictures in an attempt to elicit specific words, this method still does not ensure that nouns would occur in the contexts I was interested in for my study. Also, it would make the observed speech far less natural than a spontaneous conversation. Instead of resorting to one of the above methods, I decided to attempt to compare my questionnaire to spoken Jämtlandic. To get a sense of how my questionnaire corresponded to the spoken language, I interviewed 20 informants in Hamnerdal in person. After they had completed the survey, I asked them to read through the entire survey in Jämtlandic.

While the answers that informants read for the most part matched the answers they had written down on the survey, occasionally an informant changed an answer while reading the survey aloud. Out of the 600 answers from these 20 informants, 13 were changed during the reading of the questionnaire. This means that 2.1% of informants’

answers were changed.<sup>2</sup> Three out of 600 (0.5%) of the answers were changed from a traditional form to a non-traditional form, and ten out of 600 (1.7%) were changed from a non-traditional form to a traditional form. The majority (8 out of 13) of these changes came in the anaphoric pronoun section and were changes from *den* to *han* or *hon*. This indicated that the survey format caused a slight increase in Standard Swedish forms in the pronoun section (a 4.4% increase, with eight out of 180 answers changed). However, the effect on the other sections of the survey was negligible (with two changes to traditional forms and two changes to non-traditional forms). Therefore, I can conclude that the absence of recordings for the remaining informants did not have a significant effect on the data.

## 4.4 Statistical methods

For my study, I used quantitative statistical testing to determine the extent to which various factors influence the traditionality of informants' answers. The dependent variable in my study is "traditionalness" - that is, whether a given response aligns with the traditional, historical gender of the word. I investigate how "traditionalness" is influenced by several predictor variables. These include the age, gender, location and education level of participants, as well as noun class and type of question (pronoun, possessive pronoun, definite article or indefinite article).

To gain an overall understanding of the patterns of my data, I calculated the percentage of responses that did not align with the traditional gender of the word ("non-traditional" responses) for each participant.<sup>3</sup> I then placed each participant into groups according to gender, education level and location, and calculated the average percentage of non-traditional responses for each group. I repeated this process on a word-by-word basis, calculating the percentage of non-traditional responses for each word. I then placed each word into groups according to question type and noun type, and calculated the average percentages for these groups.

For the final statistical analysis, I used the program R. I employed a mixed-model analysis, which is best able to handle the varied nature of my data. It incorporates both the fixed effects (location, gender, age, education, noun type and question type) and the

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<sup>2</sup>For these few cases, I accepted the changed answers rather than the answers the informant gave on the survey, assuming that these answers were what the participant actually considered the gender of the noun to be.

<sup>3</sup>The existence of the dative case in Jämtlandic complicates the study of gender in the dialect, especially in the definite singular forms. The feminine nominative is identical in form to the masculine dative (both are *-a*), and the masculine nominative ending *-en/-n* is very similar to the feminine dative *-n* (see 2.3). For the purposes of my study, I have interpreted responses ending in *-a* as feminine, and responses ending in *-n* and *-en* as masculine. There are a few sentences in the questionnaire in which the dative form could be used, but since very few informants use the dative form, there is no reason to believe that informants intended these answers to be in the dative case. For example, for the sentence *Vi åkte med båten* "we travelled in the boat", nearly all of the responses were of the form *båten* or *båt'n*. The most traditional form for this sentence would be *båta*, using the masculine dative. It seems unlikely that informants who answered *båten* or *båt'n* meant to give a feminine dative ending for a traditionally masculine noun. It instead seems more plausible that they meant to give the masculine form. Likewise, it is more likely that these same informants, when responding with *-n* endings for traditionally feminine nouns (for example *stugan* in *De bodde i stugan*) were giving the non-traditional, Standard Swedish form rather than the dative feminine form.

random effects (participants and individual words) of my study. This analysis generates a p-value, which can be used to determine whether or not the differences between variable levels are significant. For my analysis, I set the significance level at  $p=0.05$ .<sup>4</sup>

## 4.5 Ethical considerations

I have taken into account the standards of ethical conduct for researchers using human participants. All informants in my study signed a consent form that assured participants of their anonymity. The consent form also stated that participation in the study was completely voluntary and that the material would only be used for research purposes. Individual participants in my study cannot be linked to my research material or any statement in this thesis. Because my questionnaire did not record any personally sensitive information such as a person's name, address or person number, I did not deem it necessary to have an ethical hearing.

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<sup>4</sup> $p=0.05$  is the generally accepted level of significance in statistical literature. A p-value of 0.05 means that only 5% of the population from which the sample was taken would be expected to produce values more extreme than those witnessed in the study (Baayen, 2008).

# Chapter 5

## Analysis

### 5.1 Results for individual words

Below I have presented the numbers of traditional and non-traditional responses received for each word on the survey. The words are presented individually, along with a summary of the combined results for that type of agreement.<sup>1</sup>

#### 5.1.1 Results for anaphoric pronouns

Among the four different types of questions on the questionnaire, anaphoric pronouns differed most markedly from the other types of questions. 26% of responses given for anaphoric pronouns were non-traditional (with 144 non-traditional responses and 409 traditional responses). Individual results are presented below.

Table 5.1: Results for anaphoric pronouns

Word	Non-traditional	Traditional	Percentage non-traditional
stekpanna	3	59	4.8%
björk	10	51	16.4%
kaka	12	49	19.7%
grind	15	47	24.2%
fot	15	47	24.2%
påse	17	45	27.4%
stol	18	42	30%
dumhet	34	28	54.8%

Amongst the anaphoric pronoun questions, *stekpanna* ‘frying pan’ differs most markedly from the others in the group, with a much lower percentage of non-traditional responses. *Dumhet* ‘stupidity’ shows an unusually high percentage of non-traditional responses, which is in line with the other nouns that carry a historically feminine suffix (see 5.4). The overall higher rate of non-traditional responses given for this question type suggests that the change in gender is being led by anaphoric pronouns.

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<sup>1</sup>See 5.4 for a further discussion of each question type.

### 5.1.2 Results for suffixed definite articles

Definite articles had the smallest rate of non-traditional responses, with 23 non-traditional responses and 273 traditional responses (8% non-traditional responses). Below are presented results for individual words in the definite article section.

Table 5.2: Results for definite articles

Word	Non-traditional	Traditional	Percentage non-traditional
sked	1	60	1.6%
klocka	3	56	5.1%
båt	3	54	5.3%
åder	6	51	10.5%
stuga	10	52	16.1%

All of the words in the definite article section had a low or fairly low percentage of non-traditional responses. The reasons that *stuga* ‘cottage’ and *åder* ‘vein’ had a slightly higher rate of non-traditional responses than others in the section is unclear.

### 5.1.3 Results for first-person possessive pronouns

First-person possessive pronouns, with 64 non-traditional responses and 439 traditional responses, had a 13% rate of non-traditional responses. Results for individual words are presented below.

Table 5.3: Results for first-person possessive pronouns

Word	Non-traditional	Traditional	Percentage non-traditional
backe	0	63	0%
pojke	1	62	1.6%
yx	1	62	1.6%
mjölk	1	62	1.6%
tallrik	2	61	3.2%
å	3	60	4.8%
rörelse	11	51	17.7%
ek	45	18	71.4%

With the exception of *ek* ‘oak’ and *rörelse* ‘movement,’ no word in this section had more than 5% non-traditional responses. This indicates that participants’ sense of gender was strong in regards to possessive pronouns. *Rörelse* belongs to the group of words with traditionally feminine suffixes that tend to have more non-traditional responses. *Ek* is an interesting case. Like all other names for trees, it was historically feminine. However, this word’s 71.4% rate of non-traditional responses is very high in comparison to the other tree name in the study (*björk* ‘birch,’ from the anaphoric pronouns section). This may be attributed to the fact that oak trees do not grow in Jämtland.

### 5.1.4 Results for indefinite articles

Questions on indefinite articles had a 17% rate of non-traditional responses, with 84 non-traditional responses and 417 traditional responses. Individual results for these questions are presented below.

Table 5.4: Results for indefinite articles

Word	Non-traditional	Traditional	Percentage non-traditional
tröja	1	62	1.6%
sol	1	62	1.6%
lada	2	61	3.2%
måne	2	60	3.2%
mangel	3	60	4.8%
kvarn	5	58	7.9%
utmärkelse	32	29	52.5%
fastighet	38	25	60.3%

Similarly to the results for possessive pronouns, words in this section tended to have a low percentage of non-traditional responses. Aside from the words with traditionally feminine suffixes (*utmärkelse* ‘distinction’ and *fastighet* ‘property’), all of the words in this section had less than 8% non-traditional responses. This indicates that speakers have a strong sense of traditional gender when it comes to indefinite articles.

## 5.2 Overall tendencies

My final data set consisted of a total of 1,961 responses from 67 participants. Of these, 1,589 responses were aligned with the traditional gender of the word in the dialect, and 372 were not aligned with the traditional gender of the word. This means that 19% of the responses were non-traditional. This indicates that while non-traditional forms have begun to creep into the dialect, speakers still have a good sense of masculine and feminine gender for most words. Figure 5.1 shows a boxplot of the distribution of individual averages of non-traditional responses.

In this plot, the thick line in the middle of the box represents the median percentage of non-traditional responses. The box shows where the middle 50% of the data falls. The outer lines denote the approximate range of the data. Points outside these lines are potentially outlying values.<sup>2</sup> Although three participants did have extreme values in the data set, I saw no clear reason to remove them from the sample. The participants with extreme values did not differ from the other participants in the study in a meaningful way - they were native speakers of Jämtlandic from Oviken or Hammerdal just like everyone else in the study. Removing these participants from the study would thus mean throwing away data unnecessarily.

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<sup>2</sup>Here, the two dots on the plot actually represent three potentially outlying values. Since two of the outliers have the same value, 50%, they show up as the same point on the boxplot.

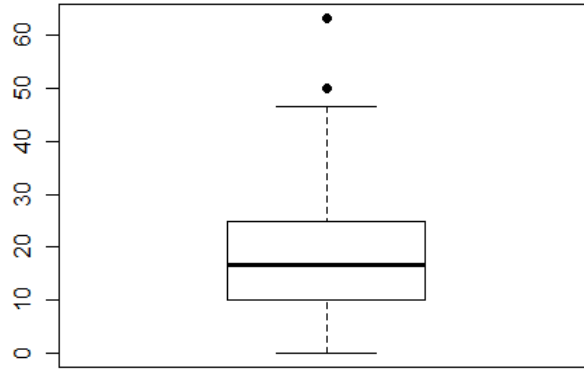


Figure 5.1: Individual percentages of non-traditional responses

### 5.3 Effects of age, gender, education and location

In this section, I look at the distribution of non-traditional responses in relation to participants' age, gender, education and location. I determine whether or not each variable has a significant effect on the number of non-traditional responses.

#### Age

Although I originally believed that older speakers would tend to use more traditional forms, this proved not to be the case in my data. As Figure 5.2 shows, there is great variation in the distribution of traditional responses according to age. In this chart, the dark color represents traditional responses and the light color represents non-traditional responses.

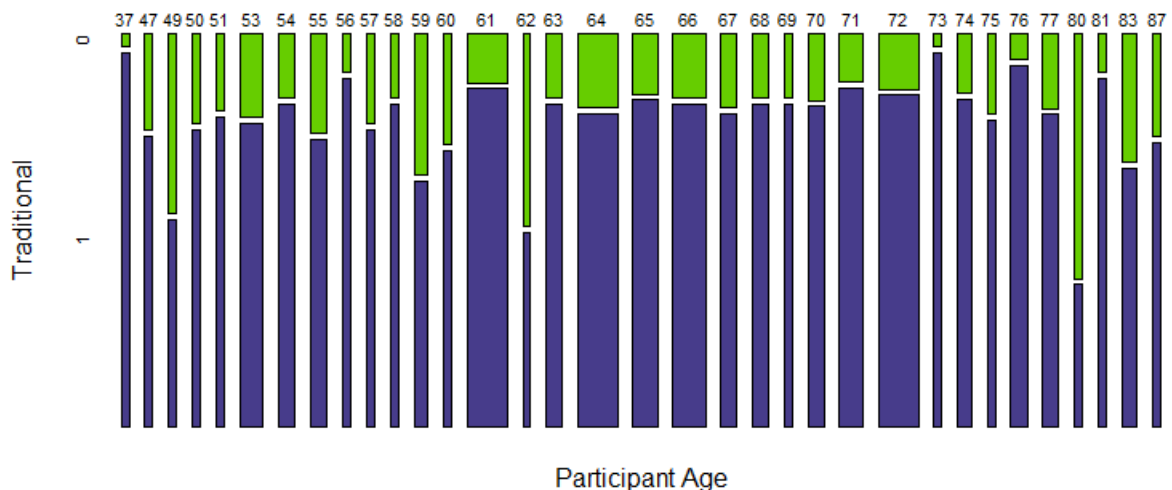


Figure 5.2: Number of traditional and non-traditional responses by age

In the statistical analysis, the age variable received a p-value of 0.913. This means



that age is not a significant factor in determining how traditional a speaker's sense of grammatical gender is. As is suggested by the table above, there is no clear correlation between age and traditionality of responses.

## Gender

Women tended to give slightly more traditional responses than men. While women had 136 non-traditional responses and 747 traditional responses (15% non-traditional responses), men had 179 non-traditional responses and 791 traditional responses (18% non-traditional responses). Figure 5.3 shows the distribution of traditional responses based on gender.

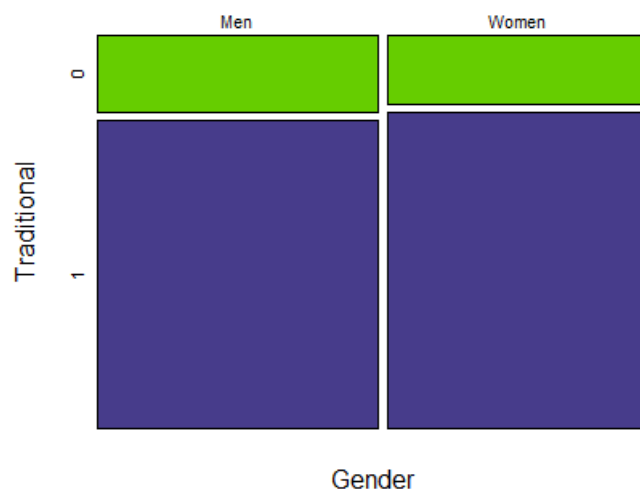


Figure 5.3: Number of traditional and non-traditional responses by gender

As expected, the effect of gender on traditionality of responses was not significant. The p-value for gender was 0.261, far from the 0.05 threshold. This means that men and women generally have the same sense of which gender words have in the dialect.

## Education

Contrary to my expectations, the highest number of non-traditional answers were given by the group with a secondary school education (21% of responses; 130 non-traditional and 493 traditional). The most traditional responses were given by participants with a university education, with 47 non-traditional responses and 336 traditional responses (only 12% non-traditional responses). In between was the group of participants with a primary school education, which had 138 non-traditional and 709 traditional responses (16% non-traditional responses). Figure 5.4 shows the distribution of responses by education level.

Although there were some differences in the overall percentages for different education groups, these differences turned out not to be significant. Using primary school as the

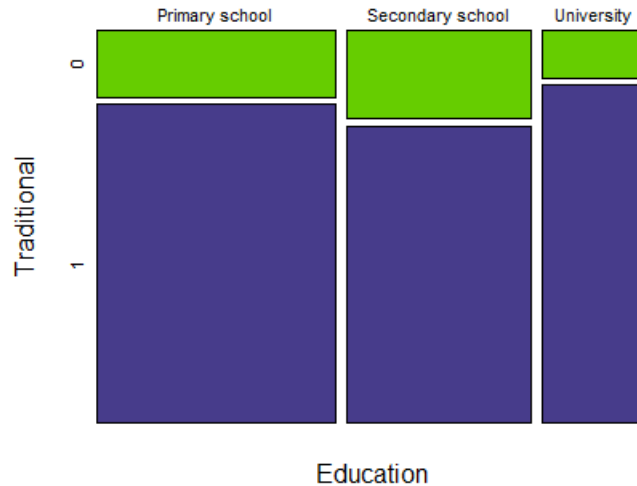


Figure 5.4: Number of traditional and non-traditional responses by education

reference level,<sup>3</sup> the p-value for secondary school was 0.230, and the p-value for university was 0.128. Thus education is not a good predictor for how traditional a participant's responses will be.

### Location

Participants from Oviken gave slightly more traditional responses than participants in Hamnerdal. Oviken participants had 161 non-traditional responses and 864 traditional responses (16% non-traditional responses), compared with Hamnerdal's 154 non-traditional responses and 674 traditional responses (19% non-traditional responses). Figure 5.5 provides a visual representation of the distribution of answers by location.

With a p-value of 0.448, there was no significant difference between participants in Oviken and participants in Hamnerdal. This confirms my hypothesis. While this does not mean that gender assignment in these two areas is identical, it indicates that Oviken and Hamnerdal have preserved the three-gender system to about the same degree.

## 5.4 Analysis by word class

### Noun type

Words with traditionally feminine endings (*-else* and *-het*) show much more variability in gender assignment than the other classes of words. For the suffix *-else*, 43 responses were non-traditional and 80 were traditional, giving a 35% rate of non-traditional responses. For the suffix *-het*, 72 non-traditional responses and 53 traditional responses were given,

<sup>3</sup>The *reference level* is the form of the variable to which all other forms are compared in a statistical analysis. Here, this means that strong feminine nouns are compared to all other levels of the variable in turn.

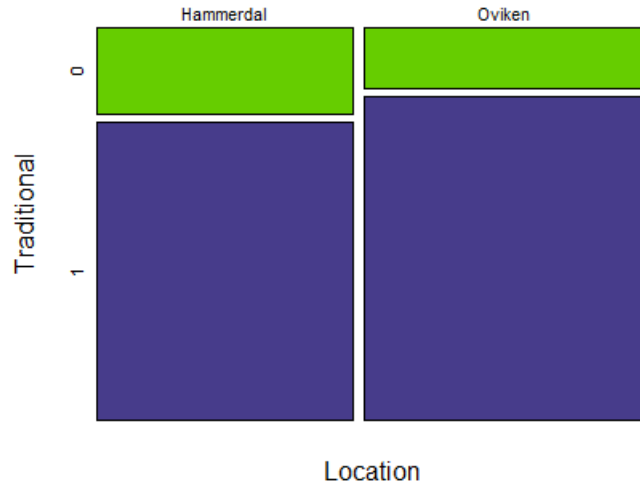


Figure 5.5: Number of traditional and non-traditional responses by location

giving a 58% rate of non-traditional responses. The percentage of non-traditional forms for masculine and feminine nouns without a suffix was much lower, with 16% for strong feminines, 13% for strong masculines, 7% for weak feminines and 13% for weak masculines. Figure 5.6 below shows the distribution of traditional and non-traditional responses according to noun type.

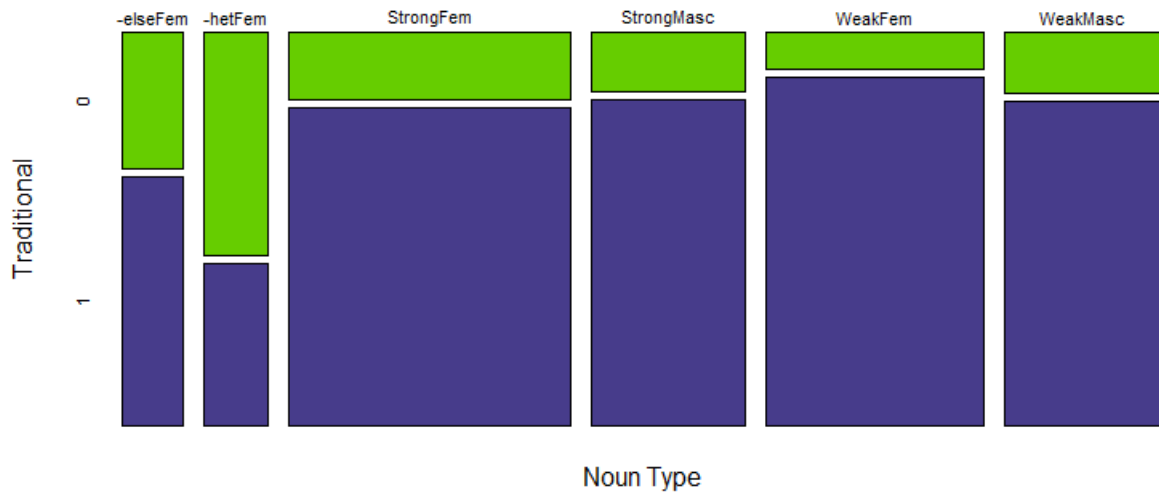


Figure 5.6: Number of traditional and non-traditional responses by noun type

The suffixes *-else* and *-het* differed significantly from the words that did not contain a suffix. Using strong feminine nouns as the reference level, neither weak feminine nouns nor strong or weak masculine nouns had a p-value even under 0.1. However, the p-value for *-else* indicated significance at 0.014, and the p-value for *-het* was very significant at 0.005. This indicates that speakers are increasingly beginning to assign the masculine gender to words with traditionally feminine suffixes.

There may also be a semantic reason for the high percentage of non-traditional responses among feminine nouns with a suffix. These words were the only abstract nouns on the survey. Abstract nouns have been shown to change grammatical gender more easily than concrete nouns, probably due to the fact that speakers are more easily able to connect a concrete word with its gender (Davidson, 1990:125-126).

### Anaphoric pronouns, definite articles, possessive pronouns and indefinite articles

Figure 5.7 shows the distribution of traditional and non-traditional responses according to question type. As stated in 5.1, anaphoric pronouns show the most marked difference from the other question types.

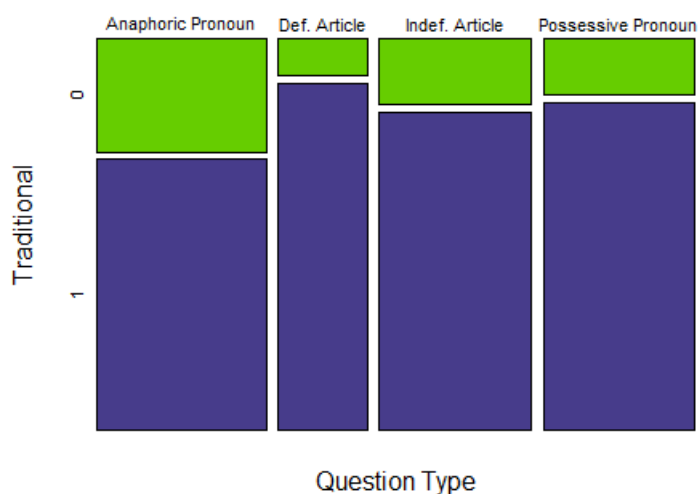


Figure 5.7: Number of traditional and non-traditional responses by question type

Using definite articles as the reference level, the only question type that differed significantly from the others were the anaphoric pronoun questions, with a p-value of 0.028. There was no significant difference between definite articles and possessive pronouns ( $p=0.654$ ) or between definite articles and indefinite articles ( $p=0.613$ ). This could indicate that anaphoric pronouns are leading the change from three genders to two in Jämtlandic (see 5.1 for further discussion on variation according to question type).

## 5.5 Participants from areas outside of Hammerdal and Oviken

Looking at the data that was excluded from the primary analysis reveals some interesting patterns. For this secondary exploration of the data, I included thirteen participants that had been taken out of my main data analysis. Out of these thirteen, two were non-native speakers of the dialect (see 4.1.1), and eleven were from areas outside of Hammerdal and Oviken (see 4.1.2). I performed a mixed-model analysis again with this extended list of data.

## 5.5.1 Differences between main data group and outside populations

### Speakers from other areas

Participants from Åre municipality gave significantly more non-traditional responses than participants from the main part of the study ( $p=0.012$ ). However, participants from Östersund and Krokoms, with  $p$ -values of 0.586 and 0.539, did not differ significantly from participants in the main study.

The dialect spoken in Åre municipality belongs to the southwestern Jämtlandic dialect group. This same dialect is spoken in Oviken. Therefore, it is unlikely that the differences in responses is due to a difference in sub-dialect. Instead, it is more likely that the difference is due to variability in how the traditional dialect is preserved in different areas of Jämtland. The data suggests that the dialects of Hammerdal and Oviken are more conservative than the dialect spoken in Åre.

### “Second-language” speakers

The responses given by the two “second-language” speakers of Jämtlandic did not differ significantly from those of the native speakers in the study. The  $p$ -value for the 53-year-old woman was 0.718, and the  $p$ -value for the 17-year-old girl was 0.757. I attribute this lack of significance to the fact that I only had two second-language speakers in the study. I would expect that a study comparing a large group of second-language speakers of the dialect to first-language speakers would find a significant difference, but this was not the focus of my study (see 4.1.1 for further discussion).

## 5.5.2 Effect of inclusion on overall patterns in the data

Including these thirteen additional participants alters the picture in several interesting ways. Most broadly, it increases the percentage of non-traditional forms from 19% to 26%. With the thirteen additional participants, education becomes significant. Participants with a university education are significantly more likely to give more traditional responses than participants with a primary or secondary school education ( $p=0.028$  for primary school and  $p=0.008$  for secondary school). This indicates that outside of Hammerdal and Oviken, one’s education level is a stronger predictor for traditionalness of responses. Note however that the addition of these participants simply exaggerates the trend that was already visible in the original set of 67 participants - the tendency for university-educated participants to have more traditional answers (see 5.3). A possible explanation for this tendency is that participants who have a university education are more likely to have taken language courses, and consequently to have acquired a greater awareness of gender in their dialect.

Age also becomes significant, with a  $p$ -value of 0.021. This is a more surprising change from the original data set, in which age had a very high  $p$ -value ( $p=0.913$ ). In areas outside of Hammerdal and Oviken, there is a very strong correlation between age and traditionality of responses - the older informants are, the more traditional their responses are. This may fit in with the data that suggests that the traditional dialect is not as well-preserved in Åre (see 5.5.1). While elderly speakers still have a strong sense of traditional

grammatical gender, the sense for traditional gender has begun to weaken significantly among middle-aged speakers.

The p-values for the other variables remain generally unchanged. Thus, participants outside of Oviken and Hammerdal do not differ significantly from those within the main study area in terms of gender, question type, or noun type.

## 5.6 Summary

Overall, the data suggests that the three-gender system is still favored over the two-gender system by native speakers of the Jämtlandic dialect. Only 19% of the forms provided by speakers in the main study and 26% of the forms from the overall group were non-traditional. Nevertheless, there is a large range of variability among individual participants, with the lowest percentage of non-traditional forms at 0% and the highest at 63%. The data from Hammerdal and Oviken showed no significant trends for age, gender, education level or location of the participants. However, there was a significant difference between nouns with suffixes *-het* and *-else* and nouns without a suffix. Nouns with a suffix were much more likely to be assigned a non-traditional gender. In addition, the questions regarding anaphoric pronouns were significantly more likely to elicit a non-traditional response. This indicates that the pronominal system is leading the change from three genders to two.

Bringing in eleven participants who were from outside of the main focus area and two “second language” speakers of Jämtlandic altered the previous patterns slightly. It enhanced the trend for participants with a university education to give more traditional responses. It also made age a significant predictor of traditionalness of responses. There was no significant difference between “second-language” speakers and native speakers. However, there was a significant difference between speakers in Åre and speakers from other areas.

# Chapter 6

## Comparison to past studies

In this section, I compare my results to the results of three previous studies: Thelander (1976), Rabb (2004) and Sandström (2010). I focus on the overall patterns in the data, and then go on to look at a few specific words that occur in my study and in some of the past studies. For further discussion of these past studies, see Section 2.2.

### 6.1 Overall tendencies

Overall, the results of my study show the same general pattern as the past studies: a three-gender system that is in a state of flux, but is still very much present in the dialect. However, the details of how this fluctuation manifests vary widely among my study and the three others. In this section, I discuss how the overarching patterns of agreement and pronoun usage in my study compare to the past studies.

Margareta Thelander's 1976 study of grammatical gender in Burträsk focused on anaphoric pronoun usage. A comparison of data from the anaphoric pronoun section of my survey reveals some interesting patterns. Thelander's data shows a 25.5% occurrence rate for the Standard Swedish pronoun *den*. For the pronoun questions in my data, I found a 26.1% rate of occurrence for *den*. That my value is so similar to Thelander's is surprising, given that Thelander's study was carried out over 35 years prior to mine. This suggests that the three-gender system has a stronger hold in the Jämtlandic dialect than it does in Burträsk. In addition, my data does not suggest that the masculine anaphoric pronoun has a stronger hold than the feminine pronoun, as was the case in Thelander's study. Thelander found that 13% of masculine nouns received *den* as an anaphoric pronoun, compared to 31% of feminine nouns. Amongst the anaphoric pronoun questions on my survey, 29% of masculine nouns received *den*, and only 22% of feminine nouns received *den*. This would suggest that feminine nouns are actually less likely than masculine nouns to receive a non-traditional gender.

Besides a 25.5% occurrence rate of *den*, Thelander also found that feminine nouns took the masculine pronoun *han* 18.3% of the time (51 out of 279). In comparison, masculine nouns took the feminine pronoun *hon* only 1.6% of the time (7 out of 440). The tendency to use masculine pronouns for traditionally feminine words was particularly strong among younger speakers, with 43% of feminine tokens taking *han*. This suggests that the Burträsk dialect was moving towards an intermediate period in which *han* becomes the default pronoun choice. However, in my data, only 14 out of 328 instances

of feminine nouns received the masculine pronoun (4.3%), and 6 out of 260 instances of masculine nouns received the feminine pronoun (2.3%). The lack of a significant number of feminine nouns taking a masculine pronoun suggests that Jämtlandic is not experiencing the intermediate stage of “Stockholm gender” that was present in Burträsk. That is, a roughly equal proportion of traditionally masculine and feminine nouns are taking *den*, rather than *han* prevailing over *hon*.

Caroline Sandström’s results for pronoun usage more closely resemble mine. In the recorded material from the 1960’s, only 2% of feminine nouns received *han* as a pronoun, while 21% of feminine nouns received *den*. This preponderance of *den* is confirmed in the newer recorded material, in which *den* has almost completely replaced *han* and *hon* as pronouns for inanimate referents. Again, it seems that Jämtlandic is more conservative than the Eastern Nyland dialect, as speakers still use *han* and *hon* to refer to nouns denoting inanimate referents.

Rabb focused on agreement in definite articles, possessive pronouns, and certain adjectives. She also found that participants tended to use masculine agreement for many feminine nouns. In the possessive pronoun and indefinite article section of my data,<sup>1</sup> I found that a large number of feminine nouns had been assigned masculine agreement. While the combined surveys contained 331 feminine words in these sections, only 270 were assigned the feminine gender. This means that approximately 61 feminine words received masculine agreement. This is interesting because it does not mirror the pattern seen in the anaphoric pronoun section. Thus, in the Jämtlandic noun phrase, masculine agreement is pushing out feminine agreement, but in the pronominal system, real pronouns are overtaking both masculine and feminine pronouns.

## 6.2 Significance of age, gender and education

Rabb (2004) and Thelander (1976) both looked at the effects of age, gender and education on informants’ responses. My study differed from the previous studies in that age and education did not have a significant effect on my informants’ responses.<sup>2</sup>

### Age

Both Rabb (2004) and Thelander (1976) separated their participants into groups according to age. I decided not to do this, since choosing arbitrary points at which to divide participants into age groups could hide patterns in the data. In her study, Thelander found a large difference between the youngest participants (aged 14-19) and the next youngest group (aged 20-34). She also found a large difference between the oldest group

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<sup>1</sup>I did not look at definite articles in my comparison to Rabb because the write-in format of the question means that the exact gender assignment is ambiguous. For instance, the noun *stuga* ‘cottage’ becomes *stuga* in the definite dialectal form. An attempt to put masculine agreement onto *stuga* would yield *stugan*, which is identical to the Standard Swedish form. Therefore, a response of *stuga* can safely be interpreted only as “non-traditional,” rather than as masculine or Standard Swedish. Possessive pronoun and indefinite article questions were set up so that informants could choose between the masculine and the feminine form, which mirrors how Rabb set up her survey.

<sup>2</sup>Thelander (1976) did not use statistical testing on her data, so it can be difficult to say what in her data can be characterized as “significant.” For the purposes of this discussion, I will count as significant the effects that were separated by a sufficiently large percentage difference (around 15%).



(ages 50 and over) and the 20-34 group. She believes that this difference is due to an increased likelihood for young adult speakers to use Standard Swedish prestige forms. Rabb found a different pattern, in which the oldest group of speakers (born around 1920) used significantly more traditional forms than the youngest group (born around 1980).

A probable reason as to why the other studies showed significance for the age variable and my study did not is that the other studies included younger participants. My data reflects the predominating trend in Jämtland for the younger generation to grow up without being able to speak the traditional dialect at all. Had I done the study twenty years earlier, I would have been able to find of speakers with a wider age range and may have obtained different results.

## **Gender**

In my data, participants' gender did not have a significant effect on the traditionalness of their responses. This matched the results found by Thelander (1976) and Rabb (2004) - gender is not a good predictor of what a participant's three-gender system will look like.

## **Education**

Although education turned out not to be significant in my results, there was a trend for the university-educated participants to give the most traditional responses. This trend became significant once I added in the additional 13 participants for the supplementary analysis. While Thelander (1976) and Rabb (2004) both found significant trends for the education variable, they were exactly the opposite of my results. Rabb found a significant difference between all three of her education groups, in which the more educated an informant was, the less likely they were to use traditional dialect forms. Thelander found similar results: while the higher two education groups did not differ significantly from each other, the lowest education group showed significantly more traditional pronoun usage than the other two groups. It should be noted that the studies differ from mine with respect to the education level of the participants. Thelander does not include any university-educated participants, and Rabb includes only two, which she combines with those who have completed a secondary school education. Thus their three groups correspond with my first two groups (primary and secondary school).

I would like to argue that the trends found by Rabb and Thelander are actually reflections of the effect of age, rather than of education itself. Both Rabb and Thelander point out that education level is highly correlated with age (Rabb, 2004:101; Thelander, 1976:15). Therefore, the tendency for speakers with a lower education level to give more traditional responses may come from the fact that most of the older speakers fall into the lowest education group. In my data, education is not strongly correlated with age, due to the more restricted age range of my participants and the presence of some elderly informants in the highest education level. This lack of correlation allowed the weak trend towards greater linguistic awareness of university-educated participants to come through. If such a trend existed in the populations Thelander and Rabb studied, they could only have uncovered it if they had included participants with a university education.

### 6.3 Significance of word type

In my data, weak feminine nouns were just as likely to take non-traditional agreement and pronouns as strong feminine nouns. This appears to be contrary to the prevailing tendency in Swedish dialects, in which strong feminine nouns begin to take masculine agreement first, while weak feminine nouns tend to be more stable (Ahlbäck, 1946). Thelander (1976) found that weak feminine nouns were more likely to take the traditional pronoun *hon*, with only 7% of tokens taking the masculine *hon* (compare to 30% for strong feminine nouns). However, Sandström (2010) showed a pattern similar to mine. Sandström's data showed that weak feminine nouns were just as likely as strong feminine nouns to take masculine agreement (Sandström, 2010:375). Rabb (2004) did not look at the difference between strong and weak nouns; however, she notes that weak masculine nouns have a tendency to switch over to feminine agreement (thus being reinterpreted as weak feminine nouns) (Rabb, 2004:191). This pattern is however not present in my data - weak masculine nouns and strong masculine nouns have around the same percentage of nontraditional forms (15.8% and 15.5%).

### 6.4 Results for individual words

Taking most of my survey words from these three past studies allows me to compare individual words across different studies. In this section, I discuss one word out of each of the six word type categories that I used on my survey. I then compare the results I found to the results from at least one out of the three previous studies.

#### *Båt*

The strong masculine noun *båt* 'boat' appeared only once in Thelander's study, and it received a masculine pronoun. In Sandström's study, it most often received the masculine pronoun. However, it did in some cases receive the Standard Swedish pronoun *den*, especially from speakers prone to using non-traditional forms (Sandström, 2010:190, 199, 231). In my material, *båt* consistently appears with masculine agreement. Out of 60 instances, it only receives non-traditional agreement three times. Thus, my data for *båt* closely matches that of the other studies.

#### *Backe*

In Sandström's material, *backe* 'hill' most often receives masculine agreement. However, it also occurs with the neuter anaphoric pronoun (Sandström, 2010:190, 291). Since my survey did not offer neuter pronouns as an option for anaphoric pronoun questions, I cannot say whether or not *backe* could take the neuter pronoun in Jämtlandic. In my data, *backe* received the feminine possessive pronoun *mi* only two out of 66 times. This is an illustration of the fact that weak masculines in my data do not tend to take feminine agreement, as is sometimes the case in other dialects with three-gender systems (see Section 6.3).

### ***Björk***

The traditionally strong feminine noun *björk* ‘birch’ turned up five times in Thelander’s data. In all of these five cases, it was assigned the traditional feminine pronoun. However, in Sandström (2010), the standing of *björk* is much less certain. *Björk* appears with the masculine pronoun *han* already in the older material from 1960-1970, and in the newer material from 2000 it appears with *den* and *han* as well as *hon*. My data also showed a considerable number of non-traditional responses for *björk*. Out of 65 instances, it received non-traditional agreement 12 times. Interestingly, it received the pronoun *den* in all of these 12 instances. There were no instances of *björk* taking the masculine pronoun *han*. This can be seen as an illustration of the fact that *han* does not show any particular dominance over *hon* in the Jämtlandic three-gender system.

### ***Klocka***

The weak feminine noun *klocka* ‘clock’ appears fairly consistently with feminine *hon* in Thelander (1976). It appears twelve times with *hon* and three times with *den*. In Sandström (2010), *klocka* appears with *hon*, *han* and *den*, though most often with *hon*. In my material, *klocka* was given much more traditional agreement in general than in these past studies. Appearing in the definite article section, it was given the traditional feminine form *klocka* 58 out of 62 times, and the Standard Swedish form *klockan* only four out of 62 times.

### ***Rörelse* and other nouns with *-else***

The traditionally feminine noun *rörelse* ‘movement’ appears only once in Thelander’s material, and it is assigned the feminine pronoun *hon*. In my data, *rörelse* is mainly assigned the feminine gender, receiving 52 traditional forms and 13 non-traditional forms. However, *utmärkelse*, the only other noun with the *-else* suffix on the survey, received an even number of feminine and masculine forms (32 and 33, respectively). Rabb (2004) found yet another pattern. In Rabb’s study, nouns with the suffix *-else* (including *rörelse*) were actually far more likely to take the masculine demonstrative pronoun *hande* than the feminine demonstrative *honde*. Altogether, Rabb found that nouns ending in *-else* took masculine agreement 74% of the time. While it seems likely that the suffix *-else* is somewhat of an indicator for feminine gender in Jämtlandic rather than of masculine gender as in the Kvevlax dialect, it appears that speakers’ sense of feminine gender for *-else* is weakening. As mentioned in 5.4, the tendency for nouns with the suffix *-else* to change grammatical gender may be due to the fact that these nouns tend to be abstract.

### ***Fastighet* and other nouns with *-het***

The traditionally feminine noun *fastighet* ‘property’ appears three times in Thelander’s data, taking masculine agreement in each case. Out of the nine instances of words ending in the suffix *-het*, only one takes the feminine pronoun, four take the masculine pronoun, and four take *den*. Rabb (2004) finds similar results, with 75% of words with the suffix *-het* taking the masculine demonstrative pronoun. *Fastighet* appeared in the indefinite article section of my study and took mostly masculine agreement (39 instances of masculine

agreement and 26 instances of feminine agreement). The other word with suffix *-het* in my survey was *dumhet* ‘stupidity’, which appeared in the anaphoric pronoun section. Results from this word appear to contrast with Thelander’s data for anaphoric pronouns, as my data is evenly divided between the feminine pronoun and *den*, with only a few instances of the masculine pronoun (30 feminine, 28 male and 7 masculine). Thus, the results seem to be similar to those of *-else*. Although the suffix *-het* has come to indicate masculine gender in Kvevlax and Burträsk, it still weakly indicates the feminine gender in Jämtlandic. Like words with *-else*, words with *het* are abstract, which contributes to the weakening of their traditional gender.

## 6.5 Summary

The results of my study provide an interesting contrast to the previous studies of Thelander (1976), Rabb (2004) and Sandström (2010). Overall, my data seems to more closely follow the pattern found by Sandström, in which the change is led by an intrusion of *den* into the pronominal system, rather than by a slow takeover of the feminine *hon* by the masculine *han*. The latter pattern is the one that is present in Thelander (1976). Within the noun phrase, my data seems to match the findings of Rabb (2004), in that some feminine nouns have begun to take masculine agreement. While my data is similar to Thelander (1976) and Rabb (2004) in that it lacks a significant difference between male and female participants, it differs from the previous studies in terms of the effects of age and education. While I did not find a significant trend for age, Thelander and Rabb found that older speakers tended to use more traditional forms. This may explain why they also found a significant correlation between lower levels of education and more traditional forms - these two variables are interrelated. My data showed a weak trend in the opposite direction, in that speakers with a university education were more likely to use more traditional forms than those with a primary or secondary school education.

While Rabb (2004) and other past studies have shown that strong feminine nouns tend to take masculine agreement more readily than weak feminine nouns, my data did not show any significant difference between these two groups of words. A comparison of a few of the individual words from my survey with the same words from the other studies shows that participants in my study tended to adhere more closely to the traditional gender of the word than participants in the other studies. Thus, it could be said that the Jämtlandic dialect in Hamnerdal and Oviken is more conservative in terms of grammatical gender than the dialects of Burträsk, Kvevlax and Eastern Nyland.

# Chapter 7

## Conclusion

The purpose of this study was to investigate the status of the three-gender system in two Jämtlandic speech communities. I wanted to find out whether the three-gender system is still present, or if it is being overtaken by the two-gender system of Standard Swedish. To achieve this, I collected data from 67 participants and analyzed the results according to several different variables. I then compared my results to the results of three past studies.

My hypothesis that I would find some characteristics of a three-gender system and some characteristics of a two-gender system in the Jämtlandic dialect was correct. Although most speakers still use the three-gender system widely, my data shows that there is considerable crossover from the traditional dialectal gender to Standard Swedish forms. However, contrary to my expectations, this crossover is not overwhelmingly being led by the loss of feminine agreement and feminine anaphoric pronouns. Instead, the rate of loss is fairly even between masculine and feminine forms. This means that Jämtlandic is not going through a transition stage in which “Stockholm gender” is used.

### 7.1 Results according to age, gender, location and education

I categorized participants by age, gender, location and education to see if any interesting patterns emerged. The data confirmed my hypothesis that participants’ gender and location would not have a significant effect on their responses. However, I expected to see a significant effect for age and education, and neither of these was significant. I expected to see a clear increase in traditional forms as participant age increased, but this was not the case. A look at Figure 5.2 confirms that there is hardly any pattern at all. This means that the youngest speakers have essentially the same gender system as the oldest speakers. At first glance, this seems odd, given the gradually increasing pressure that the dialect is experiencing from Standard Swedish. But based on my experience in Hammerdal, it is not surprising. In Hammerdal, and in other areas of Jämtland, it is rare to find someone under the age of 35 who speaks the traditional dialect. Thus the dialect seems to have frozen at a certain point, rather than gradually becoming more like Standard Swedish as younger speakers begin to acquire the language and accommodate it to their needs.

Contrary to my expectations, there was a tendency for participants with a university education to give more traditional responses than participants with a primary or secondary school education. I presented the possible explanation that participants with a university education were more likely to be aware of their own language usage. It is also possible that the methods I used had an effect on these results. If university-educated participants tend to reflect more on their dialect, perhaps they are more likely than other participants to provide a form on a questionnaire that they know is traditional, rather than the form they would actually say in conversation. To determine whether or not this is actually the case, it would be necessary to complete a follow-up study using recorded conversations.

## 7.2 Anaphoric pronouns

While the results for possessive pronouns, definite articles and indefinite articles were all similar to each other, anaphoric pronouns showed significantly more non-traditional forms. This indicates that the change in gender in Jämtlandic is being led by anaphoric pronouns, rather than by agreement in the noun phrase. If this trend continues, it is conceivable that Jämtlandic could go through a phase in which *den* is used as the default anaphoric pronoun, but the three-gender system is still present as agreement in the noun phrase. This is similar to the situation in Eastern Nyland Swedish and in Oslo Norwegian (see 2.2.4).

Nearly all of the non-traditional anaphoric pronoun usage in my data was characterized by *den* replacing *han* or *hon*. This contrasts with Thelander (1976), in which the feminine pronoun *hon* was being taken over by the masculine pronoun *han* as well as *den*. It would be interesting to further investigate anaphoric pronouns in the Jämtlandic dialect, especially in spontaneous speech. This would help to reveal the extent to which *den* has pushed out the traditional *han* and *hon*.

## 7.3 The role of semantics

A look at the individual words on my survey reveals that certain words tend to show much more variability in gender assignment than others. These tendencies indicate that semantic cues may play a role in gender assignment. For instance, words with the traditionally feminine suffixes *-else* and *-het* have significantly more non-traditional responses than the other words on the survey. This is probably due in great part to the fact that these words have a high degree of abstractness. In a dialect with variability in its gender system, concrete nouns are often able to maintain their traditional gender better than abstract nouns. Davidson (1990) argues that objects that can be seen and touched are easier for speakers to connect with a specific gender, while abstract concepts are more fleeting (Davidson, 1990:124-126).

Another interesting result was the high number of non-traditional responses for *ek* ‘oak.’ Although oak trees do not grow in Jämtland and would therefore not be expected to have a strong presence in the Jämtlandic dialect, I expected that speakers would assign the feminine gender to *ek* based on the fact that all tree names are traditionally feminine. However, with only 18 traditional responses (compared to 45 non-traditional responses),

*ek* was most often assigned masculine gender. This means that the semantic category “tree” may no longer be a strong indicator of the feminine gender. In contrast, the only other tree name in the study (*björk* ‘birch’) received only ten non-traditional responses, and 51 traditional responses. Thus for tree names, frequency of usage is more important for consistent gender assignment than semantic cues are.

## 7.4 Possibilities for future research

This thesis is, to the best of my knowledge, the first academic study on grammatical gender in the Jämtlandic dialect. Further research into the three-gender system in Jämtlandic would help to complete the picture I have sketched here. Perhaps the most obvious follow-up study would be to work with recorded conversations. This would provide data from a more “natural” setting. While it would not be possible to reliably elicit the same words present in my study, it would be interesting to see how the overall trends compare. In addition, this method would allow for easier comparison to Thelander (1976) and Sandström (2010), who also used recorded material.

Another area that I did not look at is how speakers assign gender to new words that come into the dialect (e.g. *bil* ‘automobile’ and *teve* ‘television’). This could shed more light on the respective strength of the masculine and feminine genders (for instance, do all new words receive the masculine gender?) as well as the role of semantics in gender assignment. It would also be interesting to further investigate the trend shown in my study for abstract words to receive a non-traditional gender. One could look at abstract nouns without a suffix to see if these too are likely to take non-traditional gender marking.

It would be fascinating to do a study on the grammatical gender systems of the few remaining young speakers of Jämtlandic. Although there are not enough young speakers in Hammerdal and Oviken, a broad survey of all areas of Jämtland could be done. It would be interesting to see if their responses are significantly different from the responses of the older speakers.

## 7.5 Final remarks

The results of this study reveal that speakers of Jämtlandic in Hammerdal and Oviken still use the three-gender system that has been present in their dialect for hundreds of years. Nevertheless, the two-gender system from Standard Swedish has begun to exert influence on the dialect. This manifests mainly in words with traditionally feminine suffixes, and in speakers’ choice of anaphoric pronoun. Variability can also be seen, to a lesser degree, in noun phrase agreement with words without a suffix.

While the three-gender system is still relatively stable in Jämtlandic, the dialect itself is on the verge of disappearing. Since the younger generation does not speak the dialect, it seems all but inevitable that Jämtlandic will disappear within this century. It is essential to document this piece of Scandinavian linguistic heritage while it still exists.

# Appendix A

## Questionnaire

### Undersökning om jämtskan

Ringa in det pronomen som du använder med substantiven nedan i din jämtländska dialekt.

1. *Stekpanna*: Han/Hon/Den är på bordet.
2. *Stol*: Den/Hon/Han är i huset.
3. *Påse*: Hon/Han/Den är inte här.
4. *Björk*: Den/Han/Hon står utanför huset.
5. *Grind*: Hon/Den/Han är stängd.
6. *Dumhet*: Han/Den/Hon finns överallt.
7. *Kaka*: Hon/Den/Han är på tallriken.
8. *Fot*: Han/Den/Hon gör ont.

Fyll i den form som du skulle använda i din jämtländska dialekt. Stava precis som det låter. Tänk inte på om stavningen ser konstig ut.

OBS! Ordet ska stå i bestämd form!

Exempel – *Cykel*: *Cykeln* var alldeles ny.

1. *Stuga*: De bodde i \_\_\_\_\_.
2. *Båt*: Vi åkte med \_\_\_\_\_.
3. *Sked*: \_\_\_\_\_ var av silver.
4. *Åder*: Det kom blod ur \_\_\_\_\_.



5. *Klocka*: Vad är \_\_\_\_\_?

Ringa in det uttryck som stämmer bäst med din jämtländska dialekt. *Men* och *mi* är vad som på rikssvenska stavas *min*, t.ex. i *min cykel*.

men backe	mi backe
mi ek	men ek
men pojke	mi pojke
mi yxa	men yxa
men å	mi å
mi rörelse	men rörelse
men mjölk	mi mjölk
mi tallrik	men tallrik

Ringa in den form av 'en/ett' som du använder i din jämtländska dialekt.

ein utmärkelse	ei utmärkelse
ei tröja	ein tröja
ein mangel	ei mangel
ei kvarn	ein kvarn
ein lada	ei lada
ei måne	ein måne
ein fastighet	ei fastighet
ei sol	ein sol

Ålder: \_\_\_\_\_

Kön: \_\_\_\_\_

Utbildning: Grundskola \_\_\_\_\_

Gymnasium \_\_\_\_\_

Högskola \_\_\_\_\_

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