Stability and Change in Grammatical Gender: Pronouns in Heritage Scandinavian

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Abstract

Previous studies on gender in Scandinavian heritage languages in America have looked at noun-phrase internal agreement. It has been shown that some heritage speakers have non-target gender agreement, but this has been interpreted in different ways by different researchers. This paper presents a study of pronominal gender in Heritage Norwegian and Swedish, using existing recordings and a small experiment that elicits pronouns. It is shown that the use of pronominal forms is largely target-like, and that the heritage speakers make gender distinctions. There is, however, some evidence of two competing systems in the data, and there is a shift towards a two-gender system, arguably due to koinéization.

Keywords

Scandinavian heritage language – gender – noun phrase – agreement – pronouns

1 Introduction

1.1 *Background and the Present Research Questions*

In recent years, heritage language, i.e. language learnt in a naturalistic setting in a society where another language is dominant, has started to receive some interest. Heritage speakers have been shown to be similar to second language

learners in some respects, but in other respects, they behave like native speakers, and they therefore make it possible to address the question of how the distinction between first and second language (L1 and L2) acquisition should be understood from a new perspective (see e.g. Montrul, 2008, 2016; Polinsky, 2015).

Gender is known to be difficult in L2 acquisition. According to Grüter *et al.* (2012), who discuss L2 acquisition of Spanish, it is particularly lexical gender assignment to the noun that causes difficulty, rather than morphosyntactic agreement between determiners, adjectives and nouns. Studies of heritage speakers show partly different patterns. Polinsky (2008) argues that Russian heritage speakers have reanalysed the Russian gender system, but that gender as a category remains a robust part of the linguistic system. Montrul *et al.* (2008; 2012) show that Spanish heritage speakers have advantages over L2 learners in morphosyntax, particularly in oral tasks that require less metalinguistic awareness. Johannessen and Larsson (2015) argue that Scandinavian heritage speakers in America have a stable gender system, with gender assignment fully following the baseline (the language spoken by the Scandinavian emigrants), and that the observed deviations in agreement can be due to on-line processing difficulty in complex noun phrases (defined as those that have several elements that require agreement, such as both determiners and adjectives). Lohndal and Westergaard (2016), on the other hand, note that there are overgeneralizations towards the most common gender (masculine) in Heritage Norwegian, and conclude that gender is vulnerable.

In this paper, we build on previous work on gender in American Scandinavian, but consider another area where the gender system is visible, namely the pronominal domain. Since agreement between the pronoun and the antecedent noun is phrase external, it will shed light on how we can interpret the previous results reported by Johannessen and Larsson (2015) and by Lohndal and Westergaard (2016: 1) What is the status of the category gender in Heritage Scandinavian grammar? 2) What is the relationship between internal and external gender agreement? 3) What is the relationship between gender and declension? Studying the Scandinavian languages together provides important perspectives since they are closely genetically connected, and are structurally very similar, but with relevant differences. The social factors are also comparable, but not identical.

Studies of gender assignment and agreement in bilingual settings, like the present one, can shed light on the difference between second languages, heritage languages and native languages and address the important question of which factors play a part in language development and how these factors interact. The results may also have a bearing on the understanding of historical

change: Simplification and change in the gender system have often been assumed to be a consequence of language contact. For instance, Trudgill (2013) suggests that the change from three to two genders in varieties of Scandinavian (Standard Swedish and the Norwegian dialect spoken in the city of Bergen) was due to language contact, specifically incomplete acquisition in adults.

In previous work (Johannessen and Larsson, 2015; Larsson and Johannessen, 2015a, b), we have identified different factors that have affected the development of Heritage Scandinavian in America, and when we consider the gender system, all four might be relevant. Firstly, there is the possibility of koinéization, i.e. changes – particularly dialect leveling – due to mixing of mutually comprehensible dialects (cf. Kerswill, 2002). In the case of the Scandinavian gender system, this would be expected to lead to a spread of the two-gender system in Swedish heritage speakers. Secondly, there might be a possibility of direct transfer from English. Johannessen and Larsson (2015) observe that some heritage speakers have a gender-neutral definite determiner, which corresponds closely to English *the*, and which is likely to be a result of transfer from English. It is, however, possible that this type of transfer is a consequence of the acquisitional context of the heritage language, and that it is in fact due to what we have identified as the third factor, incomplete acquisition (discussed in detail by e.g. Montrul, 2008, 2011; Larsson and Johannessen, 2015a for Heritage Scandinavian). Finally, we distinguish attrition, i.e. language loss in the individual, which we argued in Johannessen and Larsson (2016) affects the production of agreement morphology in online processing.

The results of the study will support the conclusion in Johannessen and Larsson (2015), that the gender system is largely stable in both Heritage Norwegian and Heritage Swedish. As we will, see, we find little evidence of incomplete acquisition or attrition with respect to pronouns. In fact, pronominal gender appears to be more stable than noun phrase internal agreement. When there is change, it is rather due to koinéization.

The paper is structured as follows. Section 2 presents the systems of gender and pronouns in European Scandinavian. In Section 3 we give a brief summary of our previous work on DP-internal agreement in Heritage Scandinavian. Section 4 investigates the pronoun systems of Heritage Scandinavian. Section 5 gives a discussion of the findings in light of previous studies. The paper is concluded in Section 6.

1.2 *Data and Methods*

In the present investigation, we mainly study spontaneous speech in the two Heritage Scandinavian languages, on which we have both old and modern data. The modern data are recordings of informal transcribed (and untranscribed)

interviews and conversations from fieldwork conducted in 2010 onwards. The Norwegian data is available in the Corpus of American Norwegian Speech (CANS) (Johannessen, 2015), which contains recordings and their transcriptions and is searchable. The Heritage Swedish data (Andréasson *et al.*, 2013; Larsson *et al.*, 2015) are transcribed only in part, and these transcriptions have been used in the study together with recordings that have yet to be transcribed.

At the time of this investigation, the CANS corpus contains interviews and conversations with 34 Heritage Norwegian speakers. The investigation includes speakers whose ancestors' family background is from rural areas in Hedmark and Oppland (both in central Norway, and an area with a large emigration), altogether 20 out of the 34 informants presently in the corpus. By focusing on speakers from a couple of areas, we limit the sources of variation somewhat, and make comparison easier. The pronoun systems in Hedmark and Oppland are also suitable for the present study (see further below), and there are many speakers with this dialect background in the corpus. For the study of American Swedish, we have investigated recordings of two immigrant speakers (i.e. speakers that emigrated from Sweden, Martin and Annie) and eight American-born heritage speakers. Both the Norwegian and Swedish heritage speakers were 70–80 years old at the time of the recording, and they had often not used their heritage language regularly for many years. For all of them, English was the dominant language. Some of them were monolingual until school-start, others can be considered simultaneous bilinguals.

To establish what the language was like in previous generations, we have used, for Heritage Norwegian, recordings by Einar Haugen from the 1940s (available the Text Laboratory, University of Oslo) and, for Swedish, Folke Hedblom's 1960s recording of Mrs Friesendahl (b. 1878 in Ångermanland, Am117A_m). Larsson *et al.* (2015) used the language of Mrs Friesendahl as an example of the rather rapid dialect leveling in Heritage Swedish. In addition, the Nordic Dialect Corpus (Johannessen *et al.*, 2009) was used to get data from the relevant dialects in Scandinavia, both Norwegian and Swedish, for the purpose of comparison.

As we will see, the available data is limited due to the low frequency of relevant pronouns in the recordings. The data from older and modern Swedish is even more limited, since most of the recordings are not yet transcribed. Taken together, the data can still give a picture of what the pronominal systems of Heritage Scandinavian are like, and what variation can be found. At the same time, there is clearly a need for further studies, using different methods. In addition to the investigations of the recordings above, we have also tested pronoun elicitation (for Norwegian only). This gives valuable extra

information. A thorough study on gender including pronouns in Heritage Norwegian using elicitation techniques is Linn Iren Sjøanes Rødvand's MA thesis (Rødvand 2017).¹

1.3 *Briefly on the Scandinavian Immigration*

The Norwegian and Swedish emigration to America took place mainly in the 19th and beginning of 20th century. Both groups (altogether 800 000 Norwegians and 1.3 Million Swedes) settled mostly in the rural American Midwest, and their language was used in these agrarian communities. Both groups built infrastructure, such as churches, schools and newspapers, in which their Scandinavian language was the main language. The language quickly started to change, however, in a direction of a koiné with additional effects of transfer from English (see Haugen, 1953; Johannessen and Salmons, 2015).

2 *Scandinavian Gender and Pronouns*

In this section, we give an overview of the Scandinavian gender system, considering both DP-internal agreement and pronouns. In this way we establish the baseline language for the Scandinavian heritage speakers, i.e. the system with which our heritage speakers can be compared. Given what we know from documentation from different time periods on the European and the Heritage Scandinavian dialects, we can assume that such a comparison is justified. As we will see, there is some dialect variation, which was presumably also present in the language of the emigrants. Notice that when we say “target” and “target-like”, this is in reference to the patterns shown in (older or contemporary) European Scandinavian dialects. We treat something as non-target only when it is highly unlikely as a modern or older European Scandinavian dialect form.

We ignore plural pronouns throughout this paper, since they do not show gender distinctions in any of the systems. We also do not discuss the details of the purely morpho-phonological variation that is irrelevant for our present purposes. All dialect examples in the following come from the Nordic Dialect Corpus.

2.1 *Gender in Norwegian and Swedish*

Gender is usually defined as a category of the noun that determines the form of other words, as formulated by Charles Hockett (1958): “Genders are classes of

1 Rødvand's thesis was submitted the week before the last revision of the present paper, which means that it, though highly relevant, cannot be taken into account here.

nouns reflected in the behavior of associated words” (cf. Corbett, 1991:1). This entails the converse, too: Any inflection in a noun that is not reflected in one or more associated words, is not gender, but something we can conveniently call declension class (cf. e.g. Enger, 2004a). We follow standard practice and take gender to be an agreement category, distinct from declension class. We also make a distinction between gender agreement and gender assignment to the noun. In the latter, gender is generally assumed to be an inherent (lexical) property of nouns (e.g. Julien, 2005, but cf. e.g. Nygård and Åfarli, 2013, who argue that gender is assigned to the noun in the syntax). Gender assignment is generally semantically opaque in Norwegian and Swedish, and it often has to be learned for individual lexical items (but for discussion, see e.g. Trosterud, 2001; Enger 2014). Animates are however typically non-neuter (e.g. No. fem. *jente* ‘girl’, *ku* ‘cow’, masc. *mann* ‘man’, *hval* ‘whale’), with a few exceptions (e.g. neuter *barn* ‘child’). There are also some morpho-phonological patterns in gender assignment; for instance nouns ending in *-a* in Swedish and *-e* in Norwegian are often (but not always) old weak feminines, and thus non-neuter in present-day standard Swedish, and still feminine in Norwegian.

In Scandinavian, gender is generally visible through agreement on determiners and adjectives. In Swedish and Norwegian, attributive adjectives show gender inflection (so-called strong inflection) only in singular, indefinite noun phrases, whereas predicative adjectives always show gender agreement in the singular. We illustrate the three-gender system found in many dialects in (1).

(1) a. Feminine:	<i>ei</i>	<i>lita</i>	<i>jente</i>	(Norwegian)
	a.F	small.F.SG.INDEF	girl	
b. Masculine:	<i>en</i>	<i>liten</i>	<i>gutt</i>	
	a.M	small.M.SG.INDEF	boy	
c. Neuter:	<i>et</i>	<i>lite</i>	<i>barn</i>	
	a.N	small.N.SG.INDEF	child	

There is considerable dialect variation in gender agreement, even when we only consider dialects with a three-gender system (and disregard variation that is solely a question of morpho-phonological form). First of all, adjectives like *liten* ‘small,’ which mark a distinction between the masculine and the feminine, are unusual in many varieties; for most adjectives, and in many dialects, the distinction between the masculine and the feminine has been lost in the adjectival inflection. Determiners more often make the distinction between masculine and feminine gender, but again, this does not hold for all determiners or all varieties. For the indefinite article, the distinction between

feminine and masculine illustrated in (1) is upheld in many, but not all, varieties. In addition, the gender of the noun can sometimes be reflected in the choice of pronouns. In fact, in some dialects, the choice of pronoun with inanimate nouns is the only place where the gender of the noun is unambiguously reflected in “associated words”.

The examples in (1) illustrate the three-gender system found in many dialects (as in old Germanic). In Standard Swedish and some Norwegian varieties, particularly in Bergen and Oslo, and in contact areas (with Sámi and Kven) in Northern Norway, the masculine and the feminine have collapsed into a common gender (for discussion see Fretheim, 1976/85; Lødrup, 2011; Trudgill, 2013; as well as Conzett *et al.*, 2011; Sollid *et al.*, 2014). Standard Swedish examples corresponding to (1) are given in (2). Here, the distinction between the common gender and the neuter is visible both on determiners and adjectives (and often on pronouns, see below).

(2) a. Common gender:	<i>en</i>	<i>liten</i>	<i>flicka</i>	(Swedish)
	a.C	small.C.SG.INDEF	girl	
	<i>en</i>	<i>liten</i>	<i>pojke</i>	
	a.C	small.C.SG.INDEF	boy	
b. Neuter:	<i>ett</i>	<i>litet</i>	<i>barn</i>	
	a.N	small.N.SG.INDEF	child	

In addition to being marked on determiners and adjectives, it is traditionally assumed that in Scandinavian, the definiteness suffix marks gender in the singular. This is historically quite clear, since this suffix has developed from a post-nominal determiner, which showed agreement with the noun (see e.g. Stroh-Wollin, 2014 on this development). For the distinction between neuter and non-neuter, the traditional view is also unproblematic: In the singular, the definiteness suffix is invariably *-e(t)* in Mainland Scandinavian, and this form never shows up on non-neuter nouns, which typically have the forms *-en* or *-a*. It is, however, often assumed that the definiteness suffix can distinguish the masculine (*-en*) from the feminine (*-a*). While this is true for many varieties that maintain a stable three-gender system, it is not always the case. In some Swedish and Norwegian varieties, the feminine and masculine forms of the definiteness suffix have collapsed into a single, non-neuter category, and the suffix therefore only marks the distinction between neuter and non-neuter, even if a three-gender system is upheld e.g. in agreement forms. In two-gendered Norwegian and Swedish (i.e. in systems where there is no difference between masculine and feminine in terms of agreement), there are two possibilities:

In some varieties, *-e(t)* is neuter, and *-en* and *-a* are common gender, whereas other varieties (such as Standard Swedish) have *-e(t)* for neuter and *-en* for common gender. In the former case, the difference between *-en* and *-a* does not mark gender, but has been reduced to declension class (see Lødrup, 2011; Johannessen and Larsson, 2015 for additional discussion). The distinction between *-en/-a* and *-e(t)* is still an unambiguous marker of gender.

2.2 Pronouns in Norwegian and Swedish

Following previous work on Scandinavian, we can distinguish between semantic gender and grammatical gender on third person singular pronouns (e.g. Teleman, 1969; Andersson, 1994; Dahl, 2000; Faarlund *et al.*, 1997; Josefsson, 2010 to appear). English can serve as a point of departure, since it has a purely semantic pronoun system, as illustrated in (3). The English pronouns distinguish between [+/- human] and among the [+human] between female and male. The speaker has a choice of referring anaphorically to e.g. a *teacher* as *he* or *she* – there is nothing inherent in the noun *teacher* that requires one or the other, i.e. there is no grammatical gender that restricts the choice of pronouns.

(3) English: a semantic system

Animate	Inanimate
(+human)	(-human)
Female: <i>she</i>	
Male: <i>he</i>	
	<i>it</i>

The Mainland Scandinavian languages differ from English, though. There are two main systems that are in use, and both are more complex (have more distinctions) than the English system. We call these the *mixed system* and the *grammatical system*.

The mixed system combines both semantic and grammatical gender. It is similar to the English one when it comes to [+human] pronouns. As long as a pronoun refers to animate, especially [+human], nouns, semantic choice of personal pronoun is preferred, irrespective of the grammatical gender of the noun.

In the case of [-human] pronouns, however, grammatical gender is important. In the two-gender system of Standard Swedish and some Norwegian varieties (for example in the cities of Oslo and Bergen), *den* refers back to common gender (i.e. old masculine/feminine, called masculine in Norwegian) nouns, while *det* refers to neuter nouns. The mixed system is presented in (4), with linguistic examples in (5)–(6).

- (4) Norwegian Oslo, Bergen and Swedish standard: a mixed system
(Where Swedish and Norwegian differ, the word on the right of the slash is Swedish.)

Animate (+human)	Inanimate (-human)
Semantic gender, female: <i>hun/hon</i>	Grammatical gender, common gender: <i>den</i>
Semantic gender, male: <i>han</i>	Grammatical gender, neuter: <i>det</i>

Using data from the Nordic Dialect Corpus, we illustrate the mixed system in (5) and (6) with examples from the Swedish dialect of Fårö and the Norwegian dialects of Oslo and Lommedalen (near Oslo). (5a) shows a [+human, +female] pronoun referring back to a neuter noun, and (5b) has a [+human, +male] pronoun referring to the common gender noun – in these cases the pronouns do not mark grammatical gender. In (5c) and (5d), however, the pronouns refer to non-human entities, and here we see the difference between the two grammatical genders in the inanimate pronouns, common gender in (5c) and neuter in (5d).

- (5) a. [Referring to: *barn* 'child'.N.SG]
hon *föddes* *nu* *den* *tjugotredje* *maj*
 she.F.ANIM born.PASS now the 23 May
 'She was born the 23. May.' (faro_ym1)
- b. [Referring to: *farfar* 'grandfather'.C.SG]
han *dog* *ju*
 he.M.ANIM died PRT
 'He died, as you know.' (faro_ym1)
- c. [Referring to: *Fårödialekten* 'the Fårö dialect'.C.SG.DEF]
ja, *det* *gör* *den*
 yes, that does it.C.INANIM
 'He died, as you know.' (faro_ym1)
- d. [Referring to: *hus* 'house'.N.SG]
det *är* *byggt* *artonhundratrettio två*
 it.N.INANIM, is built 1832
 'It was built in 1832.' (faro_om1)

The Norwegian example in (6a) illustrates a [+human, +male] pronoun referring back to a neuter noun. (6b) illustrates a [+human, +female] pronoun referring back to a feminine noun. In (6c,d) we find non-human entities in feminine and neuter gender, referred to by a masculine/feminine and neuter inanimate pronoun, respectively.

- (6) a. [Referring to: *menneske* 'person'.N.SG]
han har ingen som bryr seg om seg
 he.M.ANIM has noone who cares REFL PRT REFL
 'He has nobody who cares about him.' (Oslo 058)
- b. [Referring to: *dama* 'the woman'.F.SG.DEF]
hun var litt fan fra før
 she.F.ANIM was little fan from before
 'She was already a bit of a fan.' (lommedalen_02um)
- c. [Referring to: *lommedalsdialekta* 'the Lommedalen dialect'.
 F.SG.DEF]
men det er vel ikke lenge før
 but it is PRT not long before
den er helt borte
 it.M. is all gone
 INANIM
 'But it probably won't take long before it's all gone.'
 (lommedalen_02um)
- d. [Referring to: *bildet* 'the photograph'.N.SG.DEF]
jeg ville ikke hatt det
 I would not had it.N.INANIM
på telefonen min
 on phone.the my
 'I wouldn't have had it on my phone.' (lommedalen_02uk)

However, many (rural) Mainland Scandinavian dialects have a three-gender system in which the pronouns *hun/hon* 'she', *han* 'he' and *det* 'it' carry grammatical gender, and are used to refer back to all nouns of feminine, masculine and neuter gender, respectively. We refer to this as the grammatical system. This system can be summarized as in (7), with simple, grammatical reference in examples in (8)–(9) and pragmatic reference in (10), which will be described at the end of this section.

(7) Scandinavian rural dialects: a grammatical system

All nouns (+/- human)	Pragmatic reference for inanimates
Grammatical gender, feminine:	<i>den</i>
<i>hun/hon</i>	
Grammatical gender, masculine:	<i>den</i>
<i>han</i>	
Grammatical gender, neuter: <i>det</i>	<i>det</i>

The main system (the left part of the table in (7)) can be illustrated for inanimate nouns as in (8) below. Here we illustrate with the Norwegian dialect of Gausdal, Gudbrandsdalen, a dialect that has had some influence on American Norwegian (see Johannessen and Laake, 2015). The Heritage Norwegian speakers studied in this paper (see Section 1.2) all have ancestors whose dialects have the grammatical pronoun system. In (8a), the pronoun *ho* (i.e. what is standardized as *hun*) refers to an inanimate, feminine noun ‘dialect’. In (8b), the same pronoun refers to an animate noun, ‘girl’. In (8c,d) the masculine pronoun *han* is used, first with an inanimate noun, ‘school’, and then with an animate noun (a person mentioned by his name). Finally, in (8e) the neuter personal pronoun *re* (i.e. *det* in the standard) is used referring to a neuter inanimate noun. There was no example of a neuter animate noun from this dialect area in the Nordic Dialect Corpus.

- (8) a. [Referring to: *gæussdøsjdialekta* ‘the.Gausdal.dialect’.F.SG.DEF]
ho *æ* *ve* *gannske* *spessiell*
 she.F is well quite special
 ‘I suppose it is quite unusual.’ (gausdal_01um)
- b. [Referring to: *jente* ‘girl’.F.SG]
ho *hadde* *itt* *no* *problem* *me*
 she.F had not any problems with
å *sjønne* *gæusdøl*
 to understand G.dialect
 ‘She didn’t have any problems understanding the Gausdøl dialect.’
 (gausdal_05um)
- c. [Referring to: *grendeskolen* ‘the.local.school’.M.SG.DEF]
han *ha* *nåkk* *ve* *nelakkt*
 he.M has probably been closed.down
 ‘It’s probably been closed down.’ (gausdal_04gk)
- d. [Referring to: a man mentioned by his first name]
han *klare* *likksåmm* *itte* *å* *sitte* *hemme* *ålæne*
 he.M can somehow not to sit home alone
 ‘He somehow cannot manage to sit at home alone.’ (gausdal_08gk)
- e. Referring to: *vatn* ‘water’.N.SG
vi *ha* *itte* *læv* *te å* *vasske* *mjølkeanlegge*
 we have not permission to wash milk.plant
mæ *re*
 with it.N
 ‘We are not allowed to wash the milk plant with it.’ (gausdal_05um)

There are also Swedish speakers in the dialect corpus that show evidence of a grammatical system; an example is given in (9). Note that in this particular case, there is no noun-phrase internal agreement that marks the noun as feminine – this is only evident from the pronoun.

(9) Feminine gender:

<i>jag</i>	<i>hade</i>	<i>en</i>	<i>blyertspenna</i>	<i>men</i>	<i>hon</i>	<i>försvann</i>
I	had	a.C	pencil.F.SG	but	she.F	disappeared

'I had a pencil, but it disappeared.' (anundsjo_om2)

The grammatical system is used in the Norwegian written Nynorsk variety, while the mixed system is used in the written Bokmål variety and written Swedish. The spoken language does not follow the written norms directly, so there may be some intra-individual and inter-individual variation. (See also Faarlund *et al.*, 1997:327.)

There are a couple of complications to this description of the pronominal systems. Firstly, the grammatical system has optional use of semantic pronouns (*han* for male, *hun/hon* for female) when referring to humans, independently of grammatical gender. As far as we know, this is a possibility in all present-day Norwegian and Swedish dialects. This means that there is in fact no pure grammatical system in present-day Norway and Sweden. Since the focus of our study is grammatical gender, we will therefore not discuss [+human] pronouns further.

Another complication holds for inanimate pronouns. Even systems that maintain three grammatical genders in weak pronouns, have a two-gender distinction in demonstratives with the stressed forms *den* and *det* for inanimate reference, i.e. the same forms used for pronouns in the mixed system. (Historically, the demonstrative *den* is the origin of the weak pronominal *den* of the modern mixed system; see Davidson, 1990.) We have already seen that the Norwegian Gausdal dialect has a grammatical system that does not distinguish between animates and inanimates in pronominal reference. However, when a demonstrative (contrastive) pronoun is used for inanimates, the forms *den* and *det* (the inanimate pronouns of the mixed system) are used. An example is given in (10).

(10) [Referring to: *strøm* 'electricity'.M.SG.INDEF]

<i>å</i>	<i>den</i>	<i>bi</i>	<i>bære dyrere</i>	<i>å</i>	<i>dyrere</i>
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and that.M.SG.INANIM becomes just expensive.COMP and expensive.COMP
'and it's becoming more and more expensive.' (gausdal_05um)

The demonstratives always carry stress and can therefore be distinguished from pronouns in spoken language.

2.3 Summary

The European mainland Scandinavian languages have two pronominal systems, as we have seen. One is a mixed system, with both semantic and grammatical reference, and which has two genders. The other is a grammatical system with three genders, which has grammatical reference as its key reference, but which in addition has a pragmatic system for inanimates, in which only two genders are used: a common gender (masculine and feminine collapsed) and neuter.

The grammatical system is most common in rural areas, while the mixed system is used in the bigger cities in Norway as well as in Sweden. Since the ancestors of most of our heritage speakers came from rural areas (see Section 1.2), we would expect the grammatical system with three genders to be used by the Heritage Norwegian and Heritage Swedish speakers. (See e.g. Larsson *et al.*, 2015 for a discussion of dialect features in the language of the Swedish emigrants.) The grammatical system therefore could be considered the baseline. If the heritage speakers have changed their pronominal system, due to e.g. koinéization, we should expect a change in American Scandinavian from the grammatical system to the mixed system. If, on the other hand, transfer from English is involved, or if language contact and bilingualism have led to further change, we might possibly find signs of a semantic system of the English type, and a complete loss of grammatical gender in the pronominal system.

The purpose of the present paper is to investigate the pronominal system of our heritage speakers. If we find a grammatical system, this suggests that the speakers still have feminine gender (known to be vulnerable in European Mainland Scandinavian). With a mixed system, the speakers distinguish between common and neuter gender. A semantic system is a sign of a general loss of gender.

3 Gender Agreement in Heritage Scandinavian

As shown by Johannessen and Larsson (2015), there are present-day heritage speakers of Norwegian and Swedish who have little difficulty with gender assignment and agreement. Counting noun-phrase-internal agreement, we found that only 12 % of the relevant constructions in the CANS corpus of Heritage Norwegian were non-target. Nearly 60 % of the speakers produced only

target-like noun phrases. In this study, we noted that it seems to be gender agreement, rather than gender assignment that causes difficulty. Importantly, the definiteness suffix is target-like, without exception. Recall from section 2.1 that the definiteness suffix reflects the gender of the noun in the baseline (see Johannessen and Larsson, 2015 and references there for additional discussion).

We present some examples of non-target agreement in (11), and the target-like definiteness suffix in (12).

- (11) a. (Heritage Norwegian)
en fin-t maskin (target: *fin* 'nice'. M.SG.INDEF)
 a.M nice-N.SG.INDEF machine.M.SG.INDEF
 'a nice machine' (Rushford_MN_01gm)
- b. (Immigrant Swedish)
en anna-t stålverk (target: *ett* 'a'.N)
 a.C other-N.SG.INDEF steelworks.N.SG.INDEF
 'a different steelworks' (Martin)
 (from Johannessen and Larsson 2015)
- (12) (Heritage Norwegian)
- a. *politiskol-en*
 police.school-M.SG.DEF
 'the police school' (chicago_IL_01gk)
- b. *nableg-et*
 neighbourhood-N.SG.DEF
 'the neighbourhood' (chicago_IL_01gk)
- c. *hytt-a*
 hut-F.SG.DEF
 'the hut' (harmony_MN_02gk)
 (Heritage Swedish)
- d. *brev-et*
 letter-N.SG.DEF
 'the letter' (Amos)
- e. *golv-et*
 floor-N.SG.DEF
 'the floor' (Arhtur)
- f. *konditori-et*
 cafe-N.SG.DEF
 'the café' (Norman)
 (From Johannessen and Larsson 2015)

Given Hockett's formulation of what gender is, we need to ask whether the target-like assignment of noun suffixes, as in (12), is an expression of gender or if the suffixes that used to reflect masculine, feminine and neuter gender are now simply reduced to declension classes. Johannessen and Larsson (2015) provide some evidence that it is gender. The main argument is that gender still seems to survive in simple noun phrases, i.e., those that consist of a determiner plus a noun. For instance, in the two Heritage Norwegian speakers that overall show the most deviations, postnominal possessives always show target-like agreement. Since gender survives in the simple noun phrases, there is no reason to assume that the target-like noun suffixes do not also reflect gender, as it does in the baseline. Johannessen and Larsson conclude that the deviations in agreement morphology are due to processing difficulty in online production, and that they do *not* reflect an underlying general change in the gender system.

In the following, we consider gender in the pronominal system, and we find additional support that the gender system is in fact stable in Heritage Scandinavian, unlike in several other heritage languages.

4 An Investigation of the Heritage Scandinavian Pronominal Systems

This section is concerned with pronouns and gender in American Scandinavian. In section 4.1, we discuss pronominal gender in the older American Scandinavian recordings. Section 4.2 investigates pronominal gender in present-day Heritage Scandinavian.

4.1 *Pronouns and Gender in Older American Scandinavian*

As noted, the old Scandinavian three-gender system has been retained to a greater or lesser extent in the present-day Scandinavian varieties. In Standard Swedish and in Bergen and Oslo Norwegian, the feminine and the masculine have collapsed to a common gender, and the written standard Bokmål can have a two-gender system. Even in varieties of Norwegian and Swedish that retain the feminine, there is sometimes a tendency towards a two-gender system, in which neuter remains as before, while masculine forms take over at the expense of feminine forms. Historically, the change typically affects adjectives first, and in present-day Norwegian and Swedish dialects only a few adjectives have specific feminine forms. Determiners often maintain feminine forms longer, as noted above. Personal pronouns are typically the most resilient to change, both in Scandinavian and cross-linguistically (see Corbett, 1991: 143;

Audring, 2009). According to Davidson (1990), the Swedish shift from masc./fem. *han/hon* to common gender *den* started in the 16th century, but the modern standard language was not established until in 19th century.

Thus, we expect that Swedes and Norwegians born in rural areas in the 19th century acquired a system with some evidence for a three-gender system, at least in the personal pronouns, even in Swedish. This would then be the system that the emigrants brought with them to America. For Swedish, we can also assume that the emigrants had some (passive) knowledge of the standard language (see Larsson *et al.* 2015), with an almost fully established two-gender system, and a mixed pronoun system. While the dialects seem to have formed the bulk of the input for the next generation speakers (Larsson *et al.*, 2015), we cannot completely rule out a mixed baseline for the present-day heritage speakers that are descendants of these immigrants. For Norwegian, we do not expect that the written standard had any particular influence (see Johannessen and Laake, 2015 for discussion), and the baseline language can be assumed to have a three-gender system and a grammatical system for pronominal gender. As we will see below, this is supported by data from old and recent recordings.

We expect change in Heritage Scandinavian to involve some dialect mixture, leveling and koinéization (as has been argued by e.g. Hjelde, 2012; Johannessen and Laake, 2012; Larsson *et al.*, 2012). For American Swedish, the direction should then be towards the written language with two genders and a mixed pronominal system. For Norwegian, we might expect some changes towards the mixed system, but not a general reduction to a two-gender system. For both Heritage Swedish and Heritage Norwegian, the prediction is that change in Heritage Scandinavian goes from a grammatical system to a mixed system, possibly (due to language contact) further to a semantic system without pronominal gender. The investigation in the next section will show us how far Heritage Scandinavian has come in this development. First, we consider the older recordings.

As expected, there is evidence for a three-gender system with grammatical pronouns in the old recordings of American Norwegian and Swedish. Many Norwegian speakers have the grammatical system, as shown in (13).

(13) (Heritage Norwegian)

[Referring to: *trøskemaskin* 'threshing machine'.M.SG.INDEF]

han *var* *utu* *moten*

he.M was out.of fashion

'It was out of fashion' (Almar Halvorsen, E-6, from Einar Haugen's material)

On the other hand, there is not much evidence of a mixed system with two genders in the older American Norwegian recordings. However, the clergy generally had a more standard Oslo dialect. We see this in the example given in (14). The fact that this person has a masculine determiner with the traditionally feminine noun *uke* ‘week’, shows that this is a two-gender system.

(14) (Heritage Norwegian)

en ukes ti (traditionally: *ei* ‘a’.F.SG)

a.M week’s time fashion

‘a week’s time’ (Rev. H. Haagensoen, C-20, from Einar Haugen’s material)

The excerpt in (15) describes some of the many dialect differences, and also hints at a certain koinéization.

(15) (Heritage Norwegian)

Ho er hall, far hennes ær soløring, å mor hennes ær telemarking å hardanger. ... hu snakker itte slik solung som vi talar veit du. Hu talar mer, je må seia, finere ho, mer krestjana-språk såm n far seier.

‘She is half, her father is from Solør, and her mother is from Telemark and Hardanger. She doesn’t speak the kind of Solør dialect that we speak, you know. She speaks more, I have to say, nicer, more Kristiania language, as my father says.’²

(Selmer Halvorsen, B-26, from Einar Haugen’s material)

Also in American Swedish, we find both the grammatical system and the mixed system, but here there is as expected more widespread evidence for the mixed system with two genders. Interestingly, however, the three-gender system appears to survive koinéization in American Swedish, at least to some degree. This is clear from the 1960s recording of Mrs Friesendahl (b. 1878, rural Sweden). Larsson *et al.* (2015) used the language of Mrs Friesendahl to show the rather rapid dialect leveling in Heritage Swedish. Mrs Friesendahl lacks the nominal and verbal inflection that would be expected for somebody from her area of Sweden. She has no evidence of a three-gender system in determiners and adjectives, and the nominal inflection is clearly influenced by the written language (or the language spoken in church). For instance, most of her pronominal forms are non-dialectal: She uses the forms *hon* ‘she’ and *han* ‘he’, not

2 The first three places and areas mentioned in this citation are places and areas in very different parts of rural Norway, each with their own dialect, while the last one is the capital city (Kristiania, now called Oslo).

the weak dialectal forms *a* 'she' and *n* 'he'. (But she uses the possessive form *hanses* 'his' for standard *hans*.) She has the common gender forms *älv-en* 'the river' and *bok-en* 'the book' for the dialectal (feminine) forms *älv-a*, *bok-a*. The latter forms are also attested in Hedblom's recordings.

However, in the pronominal system, she retains three genders; see the examples in (16). In (16a), the masculine pronoun *han* refers to the masculine *landsvägen* 'the country road'. In (16b), *han* refers to masculine *laxen* 'the salmon'. In (16c), the feminine pronoun *hon* refers to the feminine noun *tavla* 'painting'.

- (16) a. [Referring to: *landsvägen* 'country.road'.M.SG.DEF]
Han gikk rätt igenom byn
 he.M went right through the.village
 'It went right through the village.' (Mrs Friesendahl)
- b. [Referring to: *lax* 'salmon'.M.SG.INDEF]
Han är så dyr
 he.M is so expensive
 'It is so expensive.' (Mrs Friesendahl)
- c. [Referring to: *tavla* 'painting'.F.SG.INDEF]
Hon var nästan som en hel vägg
 she.F was almost like a whole wall
 'It was almost like a whole wall.' (Mrs Friesendahl)

However, Mrs Friesendahl also uses the common gender form *den* as a weak pronoun (and not only as a demonstrative), as in the examples in (17). In (17a), *den* refers to the (old) masculine *forsen*, in (17b), *den* refers to *gravlaxen* 'the cured salmon', and in (17c) *den* refers to *tavla* 'painting', curiously followed by the feminine pronoun in the next sentence. For both feminine and masculine nouns, *den* is used in around half of the cases.

- (17) a. [Referring to: *forsen* 'stream'.M.SG.DEF]
den var så förskräckligt hög
 it.C was so terribly high
 'It was so terribly high.' (Mrs Friesendahl)
- b. [Referring to: *gravlaxen* 'salmon'.M.SG.DEF]
dom bara salta den
 they just salted it.C
 'They just salted it.' (Mrs Friesendahl)
- c. [Referring to: *tavla* 'painting'.F.SG.INDEF]
...tre kronor för den. Hon var värd...
 three crowns for it.C she.F was worth
 'three kronor for it. It was worth...' (Mrs Friesendahl)

In other words, Mrs Friesendahl seems to be fluctuating between a grammatical system – the system of the dialect – and a mixed system – the system of the standard language. Notice, though, that her choice of pronoun is never inconsistent with the gender of the noun; she never uses *han*, *hon* or *den* to refer to neuter nouns, and she does not use *det* to refer to masculine, feminine or common gender nouns. She does not show any deviations with respect to noun phrase internal agreement, either.

Our cursory investigation of the older American Norwegian and American Swedish recordings thus gives us a fuller picture of the baseline for the present-day heritage speakers; these speakers belong to the generation after the speakers in the old recordings. As expected, however, the language in the old recordings shows variation, both within and across speakers, and we find evidence both of the system with three grammatical genders for pronominal reference to inanimates and a mixed system with two genders. Notably, though, the three-gender system appears to resist koinéization to a higher degree than many other morphological features, and is maintained to a considerable degree even in speakers like Mrs Friesendahl. It is also noteworthy that whichever system speakers like Mrs Friesendahl use, the production is target-like.

4.2 *Pronouns and Gender in Modern Heritage Scandinavian*

Now we turn to the present-day heritage languages. Since we might expect partly different systems for Swedish and Norwegian, the two languages are treated separately. Swedish is discussed in Section 4.2.1, and Norwegian in Section 4.2.2.

One difficulty in the investigation of pronominal gender in Heritage Scandinavian recordings of spontaneous speech, is that pronouns with inanimate reference are rare, overall. As far as we can see, there are two reasons for this. First, the heritage speakers typically talk about family members and events, rather than inanimates. While inanimate nouns are mentioned, they often do not form the continuing topic of the conversation, and they are therefore not referred to by pronouns. Secondly, and more specifically to the heritage linguistic context, it seems that pronouns are often avoided, and that the noun is instead repeated. Previous literature has suggested that less proficient heritage speakers employ such avoidance strategies (see for example Smits and van Marle, 2015). Examples of this from American Swedish are given in (18).

- (18) (Immigrant Swedish)
- a. *vi hade en hyrbil å jag körde den hyrbilen*
 we had a rental.car and I drove that rental.car
 ‘We had a rental car and I drove it.’ (Martin)
 (Heritage Swedish)

- b. *min pappa gjorde sleepers därför har jag visst om sleepers*
 my dad made sleepers therefore have I known about sleepers
 'My dad made sleepers, therefore I have known about them.' (Gerald)
 (A sleeper is a railroad tie.)

Since the paucity of inanimate pronouns in the recordings puts limits on our investigation, we briefly discuss an elicitation task that we have started to develop for Heritage Norwegian. This is done in Section 4.2.2.

4.2.1 Heritage Swedish

As expected, but unlike the immigrant speakers in the older recordings, the two immigrant speakers, Martin and Annie, have no evidence for a three-gender system or a grammatical pronominal system. Like present-day Standard Swedish, they both have a mixed system with two genders. With respect to the choice between common gender *den* and neuter *det*, the use of *den* is always target-like. An example is given in (19). We can note that gender as reflected in the choice of pronouns appears to cause less difficulty for Martin than noun phrase internal gender agreement: According to Johannessen and Larsson (2015), Martin deviates in 9% of the noun phrases. (Annie shows no clear deviations in agreement.) However, the overall number of pronouns is small, and there are no pronouns referring back to neuter nouns in this data set.³

- (19) [Referring to: *kaffestuga* 'coffee house'.C.SG.INDEF]

<i>den</i>	<i>är</i>	<i>på</i>	<i>en</i>	<i>ö</i>
it.C	is	on	an	island

'It is on an island.' (Annie)

Considering now the heritage speakers, we might expect some evidence for a three-gender system with grammatical pronouns. We found some evidence for this in the older recordings, which can represent the language that was input for the present-day speakers. Moreover, as argued by Larsson *et al.* (2015), the present-day speakers often retain some dialect features.

However, little suggests that any of the Heritage Swedish speakers have a grammatical system of pronouns, or a three-gender system. In Johannessen and Larsson (2015), there was no evidence for the feminine gender in Heritage Swedish nominal agreement, and none is found among the pronouns

3 There are, however, many examples of *det* referring back to propositions or verb phrases, or to non-individuated entities. This use of *det* is perfectly target-like.

either. Instead, *den* is used to refer to common gender nouns, and *det* refers to neuter nouns. Examples are given in (20). (Again, there are few examples of *det*.)

(20) (Heritage Swedish)

- a. [Referring to: *kors* 'cross'.N.SG.INDEF]

det *var* *borta* [...] *nå* *pojkar* [...] *tog* *det*
it.C was gone some boys took it.N.SG

'It was gone. Some boys took it.' (Konrad)

- b. [Referring to: *anka* 'duck'.C.SG.INDEF]

han [...] *såg* *inte* *den*
he saw not it.C

'He didn't see it.' (Lilian)

Compared to the older recordings, there is thus considerably less evidence for the grammatical system, but also overall fewer examples of pronouns. In only one case do we see something that could have been a remnant of the older system, when a masculine pronoun *han* is repeatedly used to refer to a [–human], old masculine noun. The example is given in (21). However, the noun is [+animate], *hjort* 'deer', and many systems allow semantic reference to take precedence over strict grammatical reference. Given that the noun is [+animate], we cannot claim that this is a remnant of the earlier grammatical system. However, in Standard Swedish, common gender *den* would be the expected choice. In fact, the heritage speaker alternates between *han* and *den*; see (22).

(21) (Heritage Swedish)

- [Referring to: *hjort* 'deer'.M.SG.INDEF]

nu *ha* *ja* *mista* *han* *så* *jag* *sköt* *igen* [...]
now have I missed him.M. so I shot again

han *spring* *bort*
he.M. runs away

'Now I have missed it so I shot again... He ran away.' (Gerald)

(22) [Referring to: *hjort* 'deer'.M.SG.INDEF]

nu *går* *den*
now goes it.C

'Now it goes away.' (Gerald)

We can conclude that although the old pronominal system seems to have been resilient to koinéization among the early American Swedish immigrants

(cf. Section 4.1 above), the system has largely been lost in the next generation. It seems then that this grammatical change – which can be explained in terms of dialect leveling – largely took place between generations. As noted, both systems were, however, most likely present in the input for the new generation speakers.⁴

In other words, we can observe the loss of one gender system for another in more recent Heritage Swedish. We can, however, not see any evidence for a more general loss of gender. Only in one of the most attrited speakers do we find some examples of non-target pronouns. The early bilingual Amos, who had not spoken Swedish for almost 30 years at the time of the interview, produces examples like (23). In this example, neuter /*de*/ refers back to common gender *båt* ‘boat’.

(23) (Heritage Swedish)

<i>de</i>	<i>båtn,</i>	<i>de</i>	<i>gick</i>	<i>till</i>	<i>Storbrit'n</i>
that.N	boat.C.SG.DEF	it.N	went	to	Great Britain

‘That boat, it went to Great Britain.’ (Amos)

[Target: *den båten* ‘that’.C.SG.‘boat’.C.SG.DEF; *den* ‘it’.C.SG.]

Amos is one of the speakers who have the most difficulty with noun-phrase internal agreement (34 % non-target agreement in the study by Johannessen and Larsson, 2015). Johannessen and Larsson (2015) show that this speaker has a gender-neutral determiner /*de*/, which they argue is a result of transfer from the phonologically and syntactically similar English determiner *the*. This determiner is in fact also present in (23), in *de båt'n* ‘the.N boat’ (for *den.C båten*), and it is formally identical to the pronoun. It seems that this particular speaker has both a determiner and an (identical) pronoun that lack gender features, unlike determiners and pronouns in Standard Swedish and older American Swedish, but like English. The fact that *de/det* is generalized is perhaps not completely surprising, since *det* is an extremely common pronoun used for a range of purposes, like as formal subject in presentations, impersonal passives, and clefting. *Det* is also used with reference to events, propositions and mass nouns, regardless of grammatical gender (see e.g. Josefsson, to appear). This generalization, however, appears to be an individual strategy, and it is not

4 In fact, we can note that some of the dialect forms that were absent in the language of Mrs Friesendahl show up in the modern recordings. Some of our speakers use the old definite form for feminines like *bok-a* ‘the book’ for standard *bok-en*, but this use is never completely consistent. Some speakers have dialectal weak pronominal forms like *a* ‘she’ and *n* ‘he’ for standard *hon* and *han*, but there are no examples where these forms refer to inanimates.

shared among the other Swedish Heritage speakers, who seem to have a fully target-like system for gender, as evidenced from the pronouns.

With the exception of one individual speaker, the pronominal data from Heritage Swedish support the conclusion in Johannessen and Larsson (2015), who considered noun phrase internal agreement and the form of the definiteness suffix: The two-gender system appears to be stable in Heritage Swedish, but the older three-gender, grammatical system has been lost, presumably due to koinéization. As we will see in the next section, the conclusion is further strengthened by the results from Heritage Norwegian, where we have more quantitative data from the CANS corpus. (But there, too, pronouns referring to inanimates are rare, as we shall see.)

4.2.2 Heritage Norwegian

Speakers with a family background from Hedmark and Oppland were chosen for this investigation, both because there are many of them in CANS and because these areas have the grammatical system of pronouns (see Sections 1.2 and 2.2). Since the recordings in this corpus are transcribed phonetically and orthographically and are searchable, and the audio and video accompany the search results, it is very convenient for our purposes. We chose simply to search for the four relevant pronouns using standard orthography:

- (24) *han* 'he'.M
hun 'she'.F
den 'it'.M/F
det 'it'.N

The results for *han* 'he'.M gave 899 hits. However, the absolute majority of these refer to humans. Further, the clitic form /n/ is ambiguous between *han* 'he'.M and *den* 'it'.M/F, and cannot be counted in an investigation that has as one of its goals to test whether there is a distinction between the grammatical and the mixed pronominal system. There were 13 unambiguous examples with inanimate reference. They are exemplified in (25).

- (25) a. [Referring to: *tobakken* 'tobacco'.M.SG.DEF]
hann *bi* *mjuk* *da* *væit* *du*
 he.M becomes soft then know you
 'It becomes soft then, you know.' (coon_valley_wi_o2gm)
- b. [Referring to: *skolen* 'school'.M.SG.DEF]
førr *ann* *va* *itte* *brukkt*
 because he.M soft then know
 'Because it wasn't used.' (coon_valley_wi_o6gm)

All the 13 cases where *han* has been used with inanimate reference are target-like, in the sense that they agree with their antecedent in gender (and number).

Turning now to *hun* 'she'.F, we get 490 hits for the same part of the corpus. As with *han* 'he'.M, it is important to count only those that refer to non-humans or inanimates. There are only two such cases, both are presented in (26).

- (26) a. [Referring to: *chainsaga* 'chain saw'.F.SG.DEF]
 u *e* *tje* *lekkRik*
 she.F is not electric
 'She isn't electric.' (blair_wi_o7gm)
- b. [Referring to: *brua* 'bridge'.F.SG.DEF]
 kenn *se* *å* *høu* *ho* *e*
 can see how high she.F is
 'Can you see how high it is?' (coon_valley_wi_o6gm)

Both cases where *hun* 'she'.F has been used for inanimate reference, have target-like agreement.

The form *den* 'it'.M/F can be a demonstrative or a prenominal determiner, even in the grammatical pronoun system, as explained in Section 2.2. There are 254 hits for *den* 'it'.M/F in this part of the corpus.⁵ There are no clear examples of *den* used as a pronoun. All the cases of *den* pronounced in its full form /den/ are demonstratives or determiners, and they are target-like. We exemplify with a demonstrative use, where the pronoun is the correlate of a relative clause:

- (27) [Referring to: *mor* 'mother'.F.SG.INDEF]
 hu *var* *denn* *somm* *snakke* *nåsjk*
 she was that.M/F who spoke Norwegian
 'She was the one who spoke Norwegian.' (blair_wi_o2gm)

There are 24 cases of *den* 'it'.M/F pronounced as /n/, and six of them are prenominal.⁶ All the cases where /n/ is used, are target-like. It either refers as a

5 The hits for this pronoun was recounted 19. May 2016, when the corpus was somewhat bigger than when the other pronouns were counted. Since we only look at the numbers per pronoun, this has no practical consequences.

6 The rest refer to masculine nouns as ordinary antecedents. They were classified as *den* rather than *han* in a semi-automatic transliteration process from phonetic to orthographic variant in the corpus development process. However, these 18 /n/ pronouns should have been transliterated to *han*, not *den*, and we can therefore ignore them. One such example is illustrated in (i).

pronoun to a masculine antecedent or is used as a demonstrative or determiner. We find no reference to feminine or neuter ordinary antecedents.

Finally, we will consider *det* 'it'.⁷ There are 2997 hits in this subcorpus. Nearly all are examples of a formal subject in cleft constructions, presentation constructions, impersonal passives, with weather verbs etc. or refer to propositions, mass nouns and plurals that have a non-specific reference. Because of the vast number of hits, most of them irrelevant, we conducted a new search with only postverbal uses of *det*, and excluded the verbs *være* 'be', *tru*, *tro* 'believe', *ha* 'have', *gjøre* 'do', *bli* 'become' as these are used in many of the constructions with formal subject *det*. This resulted in 240 hits.

For these hits we looked for a gender mismatch, in which *det* is used with non-neuter nouns. However, nearly all of the hits refer to non-concrete entities, where *det* might be a possibility regardless of the gender of the noun. Only 12 are relevant, for instance the example in (28).

- (28) [Referring to: *maskineriet* 'machinery'.N.SG.DEF]

<i>da</i>	<i>kan</i>	<i>domm</i>	<i>sellja</i>	<i>de</i>
then	can	they	sell	it.N

 'Then they can sell it.' (blair_W1_01gm)

The results for *det* are somewhat different from those of the other three singular pronouns. Only seven are target-like, which means that as many as five are non-target. Some of the latter ones are uttered by speakers who otherwise have the grammatical system of reference. In (29) are illustrated some examples of non-target pronouns. (29b) is included in addition to (29a) to show the variation for this speaker.

- (29) a. [Referring to: *jakken* 'coat'.M.SG.DEF]

<i>e</i>	<i>fekk</i>	<i>de</i>	<i>tå</i>	<i>jennntun</i>	<i>mine</i>	<i>te</i>	<i>jul</i>
I	got	it.N	of	girl.PL.DEF	my	to	Christmas

 'I got it from my girls for Christmas.' (sunburg_MN_12gk)

(i) [*tobakken* 'tobacco'. M.SG.DEF]:

<i>så</i>	<i>må</i>	<i>ru</i>	<i>tjøre</i>	<i>n</i>	<i>inn</i>
then	must	you	drive	it.M/F.SG.	in

 'Then you must drive it in.' (coon_valley_W1_02gm)

7 We would like to thank Linn-Iren Sjøanes Rødvand for doing the corpus investigation of *det* for us.

- b. [Referring to: *jakken* ‘coat’.M.SG.DEF]
e ha brukkt n så mykkji
I have used he.M so much
‘I’ve used it a lot.’ (sunburg_MN_12gk)
- c. [Referring to: *farmen* ‘farm’.M.SG.DEF]
messte ta re dåmm tjøffte re i omtrennt nitt'nhunndre
most of it.N they bought it.N in around 1900
‘They bought most of it around 1900.’ (spring_grove_MN_05gm)

It seems that *det* may take on a generalized role. This of course is a role it already has in the complicated system of reference to generalized noun phrases of a certain kind, see Josefsson (2009, 2014a,b, to appear) and Enger (2004b, 2013) for a discussion of this. When speakers start to be uncertain about the agreement system, it is therefore to be expected that they resort to *det*. (In non-target noun-phrase internal agreement, on the other hand, common gender is typically generalized, not neuter.)

Table 1 summarizes the results.

Summing up the findings in the pronominal investigation of Heritage Norwegian, it is clear that the three-gender system exists in American Norwegian, and that the grammatical system is present in many speakers. We have not investigated to what extent individual users have a stable system with respect to grammatical reference or three genders, but we have established that whichever pronoun is used, is used in accordance with the target. In other words, pronouns are used in accordance with the gender of their antecedent, whether in the grammatical or in the mixed system. The results suggest that gender is retained in Heritage Norwegian nouns. There are a few exceptions, all involving a generalized use of the neuter pronoun *det*.

TABLE 1 Pronouns used with [-animate] reference.

	Total number of hits in the subcorpus	Unambiguous [-animate]	Target-like (of relevant usage)	Per cent target-like
<i>han</i> ‘he’.M’	899	13	13	100
<i>hun</i> ‘she’.F	490	2	2	100
<i>den</i> ‘it’.M/F	254	147	145	99
<i>det</i> ‘it’.N	2997 (240, see text above)	12	7	58

Since the free speech of the heritage speakers often showed few examples of pronouns referring to inanimate nouns, we have also tested elicitation. In this experiment, the speakers were presented with pictures and asked to describe what they saw in the pictures. This was supposed to give at least one pronoun per picture, but did not work very well. Even in this context, many informants avoided using pronouns. For instance, instead of saying (in their heritage language), as they were instructed to: “I see a house. It is blue”, they would say: “I see a house. There is some blue colour on the house”. Moreover, some speakers decided to use one and the same pronoun throughout the experiment, no matter the grammatical features of the noun it referred to. For example, they might use *det* ‘it’.N even if the noun referred to was *ku* ‘cow’.F. Despite these difficulties with the experiment, the results can still be used in addition to the recordings of their unelicited speech to see if individual speakers have a mixed pronoun system or a grammatical system. We give some examples below, which show what the individual variation can look like.

Informant Westby_WI_o1gm displays quite a bit of variation between a grammatical system and a mixed system. Examples from the experiment are given in (30).

(30) (Westby_WI_o1gm)			
	Animate nouns	Animate pron.	Inanimate pron.
a.	<i>ei ung jente</i> a.F young.F girl.F	<i>ho</i> she.F	
b.	<i>ei kjerke</i> a.F church.F		<i>den</i> it.M/F
c.	<i>ei chainsaw</i> a.F chainsaw.F		<i>ho / den</i> she.F / it.M/F.
d.	<i>ei kiste</i> a.F chest.F		<i>den</i> it.M/F
e.	<i>ei ku</i> a.F cow.F	<i>ho</i> she.F	
f.	<i>en guttunge</i> a.M boy.M	<i>han</i> he.M	
g.	<i>bakenden (ta en gamp)</i> bottom.M (of a horse)		<i>han</i> he.M
f.	<i>en fuggel</i> a.M bird.M		<i>den</i> it.M
g.	<i>en råd</i> a.M road.M		<i>den</i> it.M/F

h.	<i>eit tre</i>
a.N tree.N	<i>det</i>
it.N
i.	<i>et hus</i>
a.N house.N	<i>det</i>
it.N

Notice that in (30c), involving the word *chainsaw*.F.SG, this speaker first says *ho* 'she'.F, suggesting a grammatical system, but then corrects it to *den* 'it'.M/F, which belongs to a mixed system. (30g) refers to a body part of a horse, and also hints at a grammatical system. In the other cases it is only the mixed system that is used, with *han* and *ho* referring to animate nouns, including big animals like *ku* 'cow', but not small animals like *fuggel* 'bird'. Thus, (30a, e, f, g) refer to animates, while (30 b, c, d, g, h, i) refer to inanimates. In all cases, gender is target-like, both in the preposed articles and in the pronouns.

However, when we look at the same speaker's spontaneous speech, we find a grammatical system, without exceptions. (31a, b) show how the animate pronouns are used for inanimate nouns. (31c) shows both the target-like masculine pronoun (referring to the masculine inanimate nouns 'school') and the target-like pragmatic use of the inanimate pronoun *den* 'it'.M/F.

- (31) a. [Referring to: *trucken* 'truck'.M.SG.DEF]
da me fekk ann på julan att
 when we got him.M on wheel.PL.DEF again
 'When we got it on wheels again...' (Westby_WI_01gm)
- b. [Referring to: *fild* 'field'.F.SG.INDEF]
e veit itte hå romm mene på å jøra me o
 I know not what they mean on to do with her.F
 'I don't know what they mean to do with it.' (Westby_WI_01gm)
- c. [Referring to: *skulen* 'school'.M.SG.DEF]
han står dær ennda æu denn
 I stands there still too it.M/F
 'It stands there still, too, it does' (Westby_WI_01gm)

This speaker has had some contact with European Norwegians, and this might be why he has the mixed system, letting that surface in the more school-like formal setting of the elicitation test. In spontaneous language production, on the other hand, he only has the grammatical system of the dialect. In other words, the speaker seems to have access to two different systems (much like the speakers did in the older American Swedish recordings).

Informant Fargo_ND_gm01 has a family background (via his grandparents, who were those who emigrated to America) from several different places in

East Norway: Hallingdal, Valdres, and Inderøy. These places all have the grammatical system of pronouns. From his background, therefore, we might have expected him to have a grammatical system. However, he reveals a semantic system of referring pronouns, in the text as well as in his speech. There are no clear gender distinctions to be seen from the 40-word long test list.

(32)	(Fargo_ND_01gm)		
	Animate nouns	Animate pron.	Inanimate pron.
a.	<i>ein kvinne</i> a.M woman.F	<i>ho</i> she.F	
b.	<i>en ku</i> a.M cow.F	<i>ho</i> she.F	
c.	<i>ein katte</i> a.M cat. F	<i>ho</i> she.F	
d.	<i>ei kiste</i> a.F chest.F		<i>den</i> it. M/F
e.	<i>ei mus</i> a.F mouse.F		<i>den</i> it. M/F
f.	<i>en liten gutt</i> a.M little.M boy.M	<i>han</i> he.M	
g.	<i>en postmann</i> a.M postman.M	<i>han</i> he.M	
f.	<i>ein hund</i> a.M dog.M	<i>han</i> he.M	
g.	<i>ein raud bygning</i> a.M red.M building.M		<i>den</i> it.M/F
h.	<i>eit tre</i> a.N tree.N		<i>den</i> it.M/F
i.	<i>ein hus</i> a.M house.F		<i>den</i> it. M/F

What we see in this excerpt is that the speaker uses the masculine article *en* 'a'.M where we would have expected the feminine *ei* 'a'.N (32a, b, c) suggesting a two-gender system, but then this speaker also has some examples of the feminine article (32 d, e). He uses the masculine article for the neuter (32i), but he also uses the neuter article *eit* 'a'.N where we would expect it (32h). The masculine article is also used target-like with masculine nouns. This particular speaker has a dwindling gender system, with some gender mismatches between the noun phrase and the referring pronoun, exemplified here in (32i). His system is

furthermore clearly semantic, with one set of pronouns for animates (humans and big animals) and another for inanimates (and small animals).

Some examples from the free speech of this speaker, i.e., Fargo_ND_01gm, are given in (33). (33a) shows that this speaker indeed has the neuter pronoun in his repertoire (contrary to what the elicitation test suggested), and that this is used in a target-like manner to refer to a neuter noun.⁸ (33b) shows an example of the only way this speaker uses the pronouns *han* and *hun*: to denote animate reference.

- (33) a. [Referring to: *lortet* 'dirt'.N.SG.DEF]
 vi kunn ta en kniv å så skrape re tå
 we could take a knife and so scrape it.N off
 'We could take a knife and scrape it off.' (Fargo_ND_01gm)
- b. [Referring to: *tremenning* 'second cousin'.M.SG]
 han har aldri hørt
 he.M has never heard
 'He had never heard...' (Fargo_ND_01gm)

The two excerpts from the pronoun test illustrate a problem with elicitation techniques. The informants might get self-conscious, and although they do not know what the point of this task is, they sometimes seem to change their language, perhaps toward the more formal language that they have met in church, or heard from Norwegian visitors or on their travels in Norway. The fact that the mixed system is the one that is used in modern, urban Norway, and is also the one that belongs to the major Norwegian written standard Bokmål, means that it is not unlikely that some (unconscious) knowledge of this standard has influenced our speakers in the elicitation test. However, we need more data to draw any conclusions. Recall that Mrs Friesendahl in the old American Swedish recordings maintained the grammatical system as one of few dialect features in the interview with Folke Hedblom – for her, the pronominal system was resilient to koinéization and influence from the standard or the written language, at least in her spontaneous speech. What the comparison of elicited and spontaneous speech shows us is that type of task matters for these speakers (as has been pointed out in other studies of heritage speakers, see e.g. Montrul 2008). We also see some intra-individual variation. In the case of the Fargo speaker, he is a very active user of Norwegian, and also writes in Norwegian.

8 The noun *lort* 'dirt' is actually masculine in Norway, but we take this to be irrelevant in this context, since the speaker treats it as a neuter both with respect to the definiteness suffix and the referring pronoun.

The fact that he shows non-target pronouns might be due to a relearning (see Polinsky, 2013, who describes how this may influence speakers, partly due to linguistic differences between the heritage language and the newly learnt language). Again, more research is needed.

5 Discussion

In a previous study (Johannessen and Larsson, 2015), we observed that there was overall 12 % non-target DP-internal agreement in Heritage Norwegian and Swedish, but we argued that the gender system in Heritage Scandinavian is still overall stable. Importantly, agreement seems to be partly sensitive to the linear complexity of the DP – a longer distance between agreeing form and noun causes more processing difficulty for the heritage speakers. The deviations can therefore be attributed to the general difficulties with on-line production (also reported by Polinsky 2008) that are common among heritage speakers that have often not used their heritage language for many years. The fact that the definiteness suffix and postnominal possessives are always target-like suggests that the underlying gender system is stable. There is thus no general attrition of the gender system as such.

Our investigation of the pronominal system corroborates this conclusion. Although there is an alternation between two gender systems (the grammatical system and the mixed system) in some heritage speakers, the use of pronominal forms is overall target-like. What we can note is some tendency towards koinéization or standardisation (perhaps particularly clear in the elicitation task) rather than general attrition of the gender system. As in the study of agreement, there are some idiosyncratic exceptions, where individual pronouns (like determiners) seem to lack gender. However, these cases appear to be exceptional.

The overall stability of the gender system in Heritage Scandinavian data contrasts with reports from other heritage languages (see Montrul *et al.*, 2008; Polinsky, 2008), where it has been shown that gender assignment poses difficulty, and from studies of L2 acquisition. As mentioned, gender is known to be difficult in L2 acquisition, both in Scandinavian and other languages. For instance, Andersson (1994) observes that L2 speakers of Swedish often generalize common gender both with respect to gender assignment to the noun, and in agreement morphology; common gender can be assumed to be the default in Swedish (see Johannessen and Larsson, 2015, and references there). In L1 acquisition, on the other hand, gender appears to pose little difficulty for Swedish children – despite its phonological and semantic unpredictability. According

to several studies, children very rarely produce non-target examples, and gender appears to be fully acquired early on (e.g. Andersson, 1992:180–189; Plunkett and Strömquist, 1990:83–86; Bohnacker 1997, 2003:214). In this respect, Swedish L1 learners do not behave like L1 learners of languages like Spanish, where gender assignment can cause some difficulty. As pointed out by Andersson (2004:35; cf. Bohnacker 2003:215), it is likely that the fact that the definiteness suffix unambiguously signals gender in Swedish makes acquisition of gender easier – in this respect, acquisition of gender and declension can go hand in hand.⁹ The difference between Heritage Scandinavian and other heritage languages (e.g. Spanish and Russian) is possibly due to the differences in acquisition; given that gender is acquired early and with ease in Scandinavian (particularly in Swedish), there is no reason to assume that it is not fully acquired by the heritage speakers, at least not the speakers that are monolingual in Scandinavian during the first years of their lives. Thus, the acquisition of gender, and the (in-)stability of gender in a heritage language, appears to be language specific, and tied to the specific (morphological) evidence of the system in the input.

However, acquisition of the three-gender system by L1 speakers of Norwegian appears to be less error-free (Bohnacker 2003:214; Rodina and Westergaard 2013, 2015). For Norwegian monolingual children (as for bilinguals), the feminine gender appears to be most error-prone, and the masculine is most often generalized. It is unlikely that a three-gender system is by itself more difficult to acquire than a system with only two genders, given that the three-gender-system has survived in many European languages (including Scandinavian) for centuries. When the feminine gender is losing ground in some varieties, it most likely has to do with lack of overt gender marking. There are only a handful of adjectives that have a separate feminine form, so there is less empirical evidence for it (though one would have thought that the feminine form of the indefinite determiners would have been enough). However, it should also not be ruled out that Norwegian children are affected by variation in the linguistic community, and that they receive conflicting input. As noted, some varieties of Norwegian (including both a couple of urban varieties and variants of the

9 As argued by Johannessen and Larsson (2015), there are good reasons to assume that the definiteness suffix in Standard Swedish (as in many varieties of Norwegian) marks gender, and this is also the traditional view in Swedish grammars (see e.g. Lohndal and Westergaard 2016 for a partly different view). Importantly, this does obviously not mean to say that gender and declension class can be completely conflated. There is only reason to distinguish different genders, if they trigger agreement morphology on “related words” (cf. Hockett’s 1958 definition). As discussed in detail by Enger (2004a), the connection between gender and declension class is not always as simple as in the case of the Swedish definiteness suffix.

official written language) have a two-gender system, and it is likely that this is spreading both in European Norwegian and in Heritage Scandinavian. When there is weak and conflicting input for a three-gender system, it is perhaps not all that surprising that acquisition is not error-free.

However, as noted, what we find in Heritage Scandinavian is a largely stable gender system. In our study of pronouns, there is some evidence of an alternation between two different systems (one a grammatical system with three genders and a mixed system with two genders) in older American Swedish and present-day Heritage Norwegian. (In present-day Heritage Swedish, there is no clear evidence for the three-gender system left.) Importantly, there are very few examples of non-target pronouns. In fact, it seems that pronominal gender is even more stable than gender agreement within the DP; as noted, Johannessen and Larsson (2015) find 12 % non-target DP-internal agreement. As pointed out in section 4.1 above, DP-internal agreement is also typically affected before pronominal gender in historical change. In the older American Swedish recordings, the feminine gender is typically only ever visible in the pronominal system (if at all).

As noted, Johannessen and Larsson (2015) argue that the non-target DP-internal agreement is due to processing difficulty, partly because the linear distance between agreeing form and head noun seems to matter. Based on this, one might perhaps have expected gender on pronouns to pose even more difficulty than internal agreement. In e.g. processability theory, DP-external agreement is predicted to be more difficult (be in place later) in L2-acquisition than DP-internal agreement, and this is also what is found e.g. in L2-Swedish (see e.g. Pienemann and Håkansson, 1999). In a study of young Heritage Swedish speakers, Håkansson (1995:162) shows that the production of predicate agreement is less target-like than DP-internal agreement. For American Heritage Swedish and Norwegian, we have not looked at predicate agreement (partly because of dialect variation; see Johannessen and Larsson 2015). With respect to pronominal gender, on the other hand, we find a different pattern: If anything, pronominal gender is more target-like than DP-internal agreement, not less. Here, the linear distance between pronoun and noun seems to matter less. Now, there clearly is a syntactic difference between subject-predicate agreement and noun-pronoun agreement. Presumably, pronouns do not (like adjectives and determiners) get their gender value through a syntactic agreement process, but are lexically specified for gender (like nouns). As noted, the lexical gender of nouns is completely target-like in Heritage Scandinavian (as evidenced from the definiteness suffix). Recall that pronominal gender is also historically the most resilient to change (much unlike predicative agreement). Some processing difficulty might still be involved – but it does not seem to

result in non-target pronominal forms but what rather appears to be a general strategy to avoid pronouns.

6 Conclusion

The aim of this paper was to investigate pronominal gender in American Heritage Norwegian and Swedish. In a previous study (Johannessen and Larsson, 2015) we observed that American Scandinavian heritage speakers produce noun-phrase-internal gender agreement, but with on average 12 % non-target agreement. Interestingly, the definiteness suffix is always target-like. From these results, we concluded that the gender system is stable in Heritage Scandinavian, and that the suffix is an exponent of gender (and not only declension class). The deviations, we argued, were due to processing difficulty in on-line production. However, in a different study of Heritage Norwegian, Lohndal and Westergaard (2016) conclude that gender is in fact vulnerable in Heritage Norwegian. In their data, neuter nouns combine with a masculine indefinite determiner in 48.8 % of the cases, and with a feminine indefinite determiner in 10.4 % of the cases. Lohndal and Westergaard argue further that the definiteness suffix marks declension class only.

The different results from the two studies are partly due to differences in methodology. One difficulty is that there is considerable dialect variation, both with respect to the underlying gender system and with regard to the exponents. It is therefore not always clear what the target form would be in Heritage Scandinavian. For instance, some (American) Norwegian dialects have a neuter indefinite determiner which is indistinct from the feminine determiner. Johannessen and Larsson (2015) therefore treat some examples as ambiguous that are included in the study by Lohndal and Westergaard. Secondly, there is considerable intra-individual variation, not least in the determiners. Among other things, some speakers appear to have individual determiners that lack gender features. The study of Lohndal and Westergaard only considers gender agreement on indefinite determiners. Thus, it seems that additional data is still required. We provide some such data in the present study.

In our study of pronouns, we find additional evidence for a stable gender system in Heritage Scandinavian (although the overall frequency of pronouns with inanimate reference is small). With few exceptions, the pronominal forms are target-like with respect to gender. Thus, the present study corroborates the conclusion that Heritage Scandinavian speakers largely maintain a stable system (with some individual variation). If anything, the gender of pronominal forms is less vulnerable than DP-internal agreement. In other words, if there is

erosion of the system, it has not affected pronominal gender to any considerable extent.

Again, we conclude that the definiteness suffix carries gender information (as argued for homeland Norwegian by e.g. Enger, 2004a) – given that there is also gender agreement. We have suggested (with Johannessen and Larsson, 2015) that the definiteness suffix is important for the stability of the system, since it provides a clue to the gender of the noun for the language learner. In other words, while we maintain the general distinction between gender and declension class, we have suggested that whenever a declension is specific for a particular gender, it can serve as an aid for acquiring gender. In languages like Spanish and Russian, where the connection between declension and gender is less clear-cut, acquisition will presumably be more difficult. In other word, both acquisition of gender and its vulnerability in the heritage language depends on language-specific factors.

However, we have seen some evidence for change in the pronominal system of Heritage Scandinavian: We can observe a shift from a grammatical system of pronominal reference to a mixed system with two genders. In American Swedish, this change appears to have been on-going in the previous generation – we can note variation between the two systems in the older recordings. One possible explanation for this is koinéization, and influence e.g. from the standard language. In Heritage Norwegian, there is some evidence for the two systems in some present-day speakers. Whether this is due to contact between different varieties of Norwegian, or evidence for erosion of the system is perhaps not completely clear. We do not know which system(s) was part of the input of the heritage speakers, but given that there is evidence for koinéization in Heritage Norwegian (Hjelde, 2015) as in Heritage Swedish (Larsson *et al.*, 2015), the input was possibly mixed also with regard to gender. In any case, we can note that pronominal gender is generally target-like according to one of the two systems. As in Heritage Swedish, or in the homeland Mainland Scandinavian varieties, we might expect a future general shift from the grammatical system with three genders, to the mixed system with two genders (as in e.g. the dialect in Bergen, Bokmål, or Standard Swedish), and finally perhaps a more general loss of grammatical gender (as in some varieties of present-day Danish and English).

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