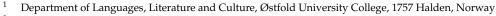


## Article Stability and Change in the C-Domain in American Swedish

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**Abstract:** This article introduces American Swedish (AmSw) into the discussion of the C-domain in heritage Scandinavian. The study is based on spontaneous speech data from the Swedish part of the Corpus of American Nordic Speech (CANS), compared to a baseline of homeland Swedish dialect speakers. We show that the C-domain in AmSw is primarily characterized by stability; this is evidenced by a relatively robust V2 syntax and left dislocation patterns that resemble the homeland baseline. However, we also show that AmSw diverges in some respects: there are some V2 violations and a stronger preference for SV clauses (subject-initial main clauses) at the expense of XVS clauses (non-subject-initial main clauses). These results are similar to previous findings from American Norwegian. We argue that the diverging patterns exhibited by AmSw speakers are not indicative of any fundamental change in their Swedish grammar. The occasional V2 violations are attributed to parallel activation of English and Swedish, and speakers sometimes failing to inhibit English, which is their dominant language. The increase of SV clauses is analyzed as a preference for the canonical word order of the dominant language, but within the limits of what the heritage grammar permits. The patterns in AmSw can be described as cases of attrition and cross-linguistic influence; however, we argue for a nuanced use of these terms.

Keywords: C-domain; heritage languages; Swedish; V2; cross-linguistic influence; attrition



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### 1. Introduction

A group of heritage languages that has received considerable attention in recent years, both from a theoretical and an empirical perspective, are the Scandinavian heritage languages spoken in North America (see, e.g., Johannessen and Salmons 2015; Johannessen 2018). These languages are spoken by the descendants of emigrants that left Scandinavia mainly in the second half of the 19th century or the beginning of the 20th century. One of the areas that has spurred particular interest is the C-domain, including the V2 property; there are detailed studies of American Norwegian (AmNo) (Eide and Hjelde 2015; Westergaard and Lohndal 2019; Larsson and Kinn 2021; Westergaard et al. 2021; see also Bousquette et al. 2021), American Danish (Kühl and Petersen 2018) and American Icelandic (AmIce) (Arnbjörnsdóttir et al. 2018).<sup>1</sup> In this article we introduce American Swedish (AmSw) into the discussion of the C-domain in heritage Scandinavian. The C-domain of AmSw is not completely unexplored (see Larsson et al. 2012; Larsson and Johannessen 2015); however, since the appearance of these studies, a tagged corpus that facilitates more systematic comparisons has become available (Corpus of American Nordic Speech, henceforth CANS, Johannessen 2015).

By presenting new findings from AmSw, we aim to contribute to the more general discussion of microvariation in the C-domain. As our starting point, we take the view that derivations of V2 are not necessarily uniform across varieties (e.g., Greco and Haegeman 2020). In our study, we take different types of left dislocation into account (Eide 2011; Holmberg 2020), as these constructions can be particularly revealing with respect to the underlying structure of the C-domain. We also consider the extent to which XVS clauses



# (i.e., non-subject-initial V2 clauses) occur (e.g., Westergaard and Lohndal 2019; Westergaard et al. 2021 on AmNo).

We will show that the V2 property in AmSw is retained to a large extent, and we will argue that the structure of the C-domain, with a split CP (Holmberg 2020), is intact. We do, however, observe some V2 violations, of which some may perhaps be analyzed as involving base generated adjuncts (like hanging topics), while others lack V-to-C movement, and can be analyzed as having English syntax. We also show that there is an increase in the frequency of SV clauses (i.e., subject-initial V2 clauses) at the expense of XVS (non-subject-initial V2 clauses), compared to a baseline of homeland Swedish dialect data.

The article is structured as follows: Section 2 provides a brief background on AmSw as a heritage language. In Section 3, we outline some general patterns of the C-domain in homeland Swedish, which will be the starting point for our discussion of the C-domain in AmSw. In Section 4, we present our material and methods. In Section 5, we present our results. In Section 6, the findings are discussed in further detail; this includes brief comparisons between AmSw and other Scandinavian heritage languages, and AmSw and urban vernacular Swedish, i.e., Swedish in a different multilingual context. Section 7 concludes the article.

#### 2. Background: American Swedish as a Heritage Language

Around 1.3 million Swedes emigrated to America from the late 19th century until the beginning of the 20th century. Many quickly integrated in the English-speaking American society, but there were also Swedish settlements where Swedish was maintained for several generations (see Larsson et al. 2015 for an overview and references). Some members of the last generation of speakers (generally over 70 years old at the time) were recorded in 2010–2014; these recordings are now available in CANS (see Section 4 below).

Previous research on AmSw has often focused on dialect variation and levelling (see Hedblom 1963, 1974, 1978, 1982, 1992; Larsson et al. 2015). The largest study of AmSw thus far is by Hasselmo (1974), who gives a background to the emigration and the sociolinguistic context of AmSw, as well as an overview of lexical and grammatical features of AmSw at the time. More recent studies on the grammar of AmSw are still scarce, but there are studies of gender and agreement (Johannessen and Larsson 2015, 2018) and verb placement (Larsson and Johannessen 2015). A finding of particular relevance for the present study concerns verb movement in the lower domains of the clause, i.e., V-to-T movement.

Homeland Swedish has V-to-C movement in declarative main clauses, but lacks independent V-to-T movement (see, e.g., Holmberg and Platzack 1995). In clauses without V-to-C-movement (e.g., relative clauses, conditional clauses, and embedded questions), the verb therefore remains in the VP, following negation and other sentence adverbs; see (1).

(1)	a.	Lisa	har	inte	läst	boken.		(V-to-C; V-neg)
		Lisa	has	not	read	book.DEF		
		'Lisa h	asn't reac	the boo	k.′			
	b.	Lisa	som	inte	har	läst	boken	(V-in-situ; neg-V)
		Lisa	who	not	has	read	book.DEF	
		'Lisa w	vho hasn'	t read the	e book′			

However, AmSw differs from homeland Swedish with respect to V-to-T. As observed by Larsson and Johannessen (2015), AmSw appears to have variable V-to-T (i.e., optional movement of the verb past sentence adverbs) in relative clauses, conditional clauses and embedded questions; examples with V-to-T and V-in-situ are given in (2).

(2)	a.	något	som	jag	hade	inte	hört	(V-to-T)
		something	that	Ι	had	not	heard	
		'something that	I hadn't	heard' (	mn11_m	ı018)		
	b.	om	jag	inte	gör	det	nu	(V-in-situ)
		if	Ι	not	do	it	now	
		'if I don't do it now' (mn11_m013)						

Larsson and Johannessen argue that V-to-T has been introduced into AmSw due to the acquisitional context. V-in-situ in embedded clauses is known to be acquired late even in homeland Swedish (see, e.g., Waldmann 2008), and the heritage language learners receive less input than the homeland speakers (see Johannessen 2015 for further discussion). Notably, however, V-to-T is far from obligatory in AmSw. Embedded clauses with the verb in situ can also be attested (see (2b) above). Larsson and Johannessen did not have access to a corpus of AmSw, only a corpus of AmNo and untranscribed AmSw recordings; they therefore do not provide any quantitative data for Swedish. They note that around half of the relevant embedded clauses (excluding cases with possible V-to-C) have V-to-T movement in AmNo, and around half have the verb in situ. AmSw seems to be very similar. A quick search for relative clauses and conditional clauses with negation in the now available Swedish part of CANS yields only 12 relevant hits; 6 of these have V-to-T.<sup>2</sup> We return to this in Section 5.3.1 below.

The innovation of V-to-T movement in AmSw can be analyzed as a consequence of divergent attainment (Polinsky 2018, p. 24ff), also referred to as incomplete acquisition (as in Larsson and Johannessen 2015), due to reduced input of the heritage language.<sup>3</sup> It is thus an example of how the context of acquisition can drive change in heritage languages. Another main source of divergence between the homeland baseline and heritage varieties is attrition (see, e.g., Polinsky 2018, p. 22ff for further discussion). Attrition is commonly defined as loss of linguistic skills throughout the lifespan of a speaker, due to lack of use. In attrition, speakers lose linguistic skills that were once acquired, or (as we will argue below) have difficulty accessing linguistic structures of their heritage language.

Apart from the innovation of V-to-T movement, research on the syntax of AmSw thus far does not suggest substantial changes. This is in line with observations from heritage languages more generally; core syntax appears to be less susceptible to change than other domains in heritage language contexts (see, e.g., Lohndal et al. 2019).

Before exploring the C-domain in AmSw in more detail, we now provide an overview of the general patterns of the C-domain of homeland Swedish.

#### 3. General Patterns in the C-Domain of Homeland Swedish

In this section, we first consider V2 and left dislocation structures, and present the analysis of the C-domain that we will assume for homeland Swedish (building on Eide 2011 and Holmberg 2020). In Section 3.2 we briefly discuss the structure of SV clauses in homeland Swedish; this will be of importance for our analysis of SV in AmSw in Sections 5 and 6.

#### 3.1. V2 and the Structure of the C-Domain in Homeland Swedish

Swedish is a V2 language. We adopt Holmberg's (2015) general analysis of V2, whereby this property can be decomposed into two parts:

- 1. A functional head in the left-periphery attracts the verbal head.
- 2. This functional head wants a constituent moved to its specifier position (Holmberg 2015, p. 375).

In Swedish, V moves to Fin, which serves as the bottleneck (e.g., Roberts 2004)—only one element can move past Fin to the C-domain. Approximately 65% of homeland Swedish declarative clauses have SV-order (i.e., the subject moves past the verb to the clause-initial position); 35% have XVS-order (i.e., initial objects, predicates, adjuncts etc.) (e.g., Jørgensen 1976). One example of SV-order is given in (3a), and examples of XVS are provided in (3b–c). (3d) is an example of a V2 violation, with XSV order.

(3)	a.	Grannen		såg	spår	i	skogen.
		neighbo	neighbor.DEF		tracks	in	forest.DEF
	b.	Ι	skogen	såg	grannen		spår.
		in	forest.DEF	saw	neighbor.DEF		tracks
	c.	Spår		såg	grannen	i	skogen.
		tracks		saw	neighbor.DEF	in	forest.DEF
	d.	*I	skogen	grannen		såg	spår.
		in	forest.DEF	neighbor.D	EF	saw	tracks
		'The ne	ighbor saw t	racks in the f	forest.'		

There are some systematic exceptions to V2 in the strictest sense. The adverb *kanske* 'maybe' can appear in a non-initial position in front of the verb; see (4a). In these cases, the verb remains in situ and *kanske* can be analyzed as a C element (Platzack 1986; Andréasson 2002). In addition, focus adverbs such as *bara* 'just, simply' may intervene between the initial constituent and the verb (Brandtler and Håkansson 2017; Lundquist 2018); one example is given in (4b).

(4)	a.	Ι	skogen	kanske	grannen	såg	spår.
		in	forest.DEF	maybe	neighbor.DEF	saw	tracks
		'Maybe th	ne neighbor saw trad	cks in the fore	est.'		
	b.	Vargen	bara	försvann.			
		wolf.DEF	just	disappear	red		
		'The wolf	just disappeared.'				

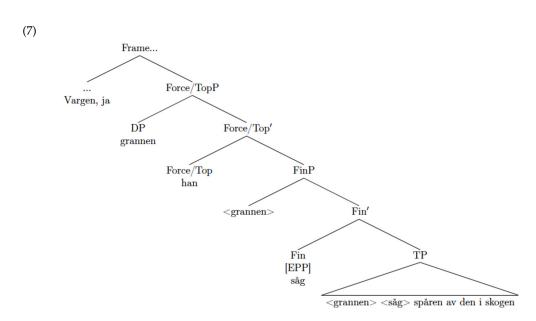
Moreover, Swedish allows two types of left dislocation that (superficially) yield V>2 orders: Copy left dislocation (CLD) and hanging topic left dislocation (HTLD) (Eide 2011; Holmberg 2020). In CLD, the dislocated phrase is directly followed by a pronoun (if it is an argument) or a light adverb, often *så* 'so, then', (if it is an adjunct), without a prosodic break. The pronoun or light adverb is coreferent with the dislocated phrase; pronouns exhibit agreement. Eide (2011) and Holmberg (2020) analyze CLD as movement from spec-Fin to the specifier of a projection labelled spec-ForceTop.<sup>4</sup> Notably, English does not seem to allow this type of left dislocation. HTLD, on the other hand, involves base-generation of the dislocated phrase in a Frame-domain above ForceTop (Eide 2011). Thus, HTLD does not interact with V2. In HTLD, there is a prosodic break, and a discourse particle (*ja* 'yes' or *då* 'then') can intervene between the hanging topic and the rest of the clause. The two types of left dislocation may co-occur in a strictly ordered fashion (hanging topics before CLD); see (5) (from Holmberg 2020, his Ex. (5)). This is clear evidence that the two types of left dislocation should be distinguished, and that they have dedicated positions in the left-periphery.

(5)	Vargen		ja,	grannen	(*ja)	han	såg	spåren
	wolf.DEF		PRT	neighbor.DEF	PRT	he	saw	track.PL.DEF
	av	den	i	skogen				
	of	it	in	forest.DEF				
	'The wolf	, you ki	now, m	y neighbour saw its	tracks in the	forest'.		

We can summarize the relevant parts of the structure of the Swedish C-domain as shown in (6) (we do not sketch out the internal structure of the Frame-domain):

(6) [<sub>Frame</sub> ... [<sub>ForceTopP</sub> ForceTop [<sub>FinP</sub> Fin [<sub>TP</sub> T ]]]]

In (7), we provide a (simplified) analysis of example (5) based on this structure (see also Holmberg 2020, p. 43):



As the tree structure shows, the verbal head (spelled out by såg 'saw') is attracted to Fin by an EPP feature (Holmberg 2020). The subject *grannen* 'the neighbor' is moved to the specifier of Fin and further to the specifier of ForceTop; the weak pronoun *han* 'he' spells out the head of ForceTop (this is characteristic of CLD). *Vargen* 'the wolf' is a hanging topic base generated in the Frame domain, followed by a discourse particle (*ja*), as is characteristic of HTLD.<sup>5</sup>

#### 3.2. Symmetric V2

One of the long-standing debates in comparative Germanic syntax has been whether V2 in subject-initial (SV) clauses has the same underlying structure as V2 in non-subject initial (XVS) clauses. Our point of departure, following, e.g., Greco and Haegeman (2020) (see also Westergaard et al. 2019 and references therein), is that the derivation of V2 may differ across varieties, implying that some varieties may have the same derivation in SV and XVS clauses (symmetric V2, see e.g., den Besten 1983; Schwartz and Vikner 1996; van Craenenbroeck and Haegeman 2007), whereas others may have different derivations (asymmetric V2, see e.g., Travis 1984; Zwart 1997; Mikkelsen 2015). As is evident from the discussion above, we assume the standard view that homeland Swedish has symmetric V2 (e.g., Holmberg 2015, 2020). In this section, we elaborate on this view in the context of recent work on the closely related language of Norwegian.

It has recently been suggested by Westergaard et al. (2019) that (varieties of) Norwegian have asymmetric V2, i.e., that subject-initial declaratives (SV declaratives) and non-subject-initial declaratives (XVS declaratives) do not have the same syntactic structure. Westergaard et al. (2019) propose that SV declaratives have the subject and the finite verb in the T-domain. In XVS declaratives, on the other hand, the finite verb has moved to C, whereas the subject remains in the T-domain (in spec-TP). One of the arguments for this analysis comes from AmNo, which, as we will see, looks very similar to AmSw; we will return to this in the discussion in Section 6.

Symmetric V2 analyses of Swedish have been put forward by a number of authors (see e.g., Platzack 1986; Holmberg and Platzack 1995; Holmberg 2015, 2020; Lindahl and Engdahl 2022, to name a few; see, e.g., Walkden 2017 for discussion and additional references). In the following, we will assume (with Holmberg 2020) that the finite verb moves to Fin in all V2 clauses; as mentioned, this is a defining property of V2. In SV declaratives, the subject moves at least to spec-FinP (and perhaps further to spec-ForceTopP), and in XVS declaratives, X moves at least to spec-FinP, whereas the subject remains in spec-TP. The main argument for a symmetric analysis is that V2 relates to clause type—V2 is restricted to root clauses and a restricted set of embedded clauses with root properties (so-called

embedded V2; see Julien 2015). In relative clauses and embedded questions, the verb remains in situ (following a sentence adverb); see (8a) below (and cf. Section 2 above). Also left dislocation and XVS-order are root phenomena and unacceptable in relative clauses; see (8b–d).

(8)	a.	boken	SO	m	Lisa	{*har}	inte	{har}	läst	ännu	(V-in-situ)
		book.def	tha	at	Lisa	has	not	has	read	yet	
		'the book t	hat Lis	sa has	n't reac	l yet'					
	b.	boken	SO	m	Lisa	{*hon}	har	inte	läst	ännu	(*CLD)
		book.DEF	tha	at	Lisa	she	has	not	read	yet	
	c.	*boken	som	Lisa	ja,	hon	har	inte	läst	ännu	(*HTLD)
		book.DEF	that	Lisa	PRT	she	has	not	read	yet	
	d.	*boken	som	ännu	ı har	Lisa	inte	läst			(*XVS)
		book.DEF	that	Lisa	has	Lisa	not	read			

There are further empirical arguments for a symmetric account of V2 in Swedish, and we will briefly mention one. In Swedish, the order between subject and negation can vary in XVS declaratives and in embedded clauses (e.g., *igår svarade {Lisa} inte {Lisa}*, 'yesterday, Lisa didn't answer'); this is commonly referred to as subject shift (see Larsson and Lundquist Forthcoming and references therein). However, the proportion of S-negation and negation-S order is not the same in main and embedded clauses: embedded clauses have considerably more S-negation than main clauses (see Andréasson 2007). As proposed by Larsson and Kinn (2021) for (American) Norwegian (which has the same difference between main and embedded contexts), this can be straightforwardly accounted for if we also include SV declaratives in the discussion, and apply a symmetric analysis of V2. On the symmetric analysis, main clauses have three possible positions for subjects (spec-CP, and two positions in the T-domain), whereas embedded clauses only have two (two positions in the T-domain). Since spec-CP is a possible subject position in main clauses, but not in embedded clauses, the factors determining the order between negation and subject will not be exactly the same in main and embedded contexts. With an asymmetric account of V2, SV declaratives have the same subject positions as embedded clauses (the two positions in the T-domain, but not spec-CP), and the difference with respect to subject shift will be harder to explain.

Westergaard et al. (2019) point to an interesting argument in favor of an asymmetric analysis of V2 in Norwegian, namely *wh*-extractions from clauses with embedded V2 (see also Hrafnbjargarson et al. 2020, pp. 303–304). Speakers of (certain varieties of) Norwegian can extract a *wh*-constituent from an embedded SV clause with V2-order, as in (9a); here the order V-negation shows that the clause has embedded V2. On the other hand, extraction is not possible from embedded XVS clauses; see (9b). As pointed out by Westergaard et al., this suggests that there is a landing-site in the C-domain of the embedded clause allowing extraction from the SV clauses. In XVS clauses, X occupies this landing-site, and extraction is therefore impossible.

(9)	a.	Hvem <sub>i</sub> who	sa said	han he		1	kunne could	ikke not	e synge sing	denne this	sange song.	
		'Who di	d he say	y could	ln't sin	g this s	ong?'		0		0	
	b.	*Hvem <sub>i</sub> who 'Who di (Westerg	•	y hadn	that 't give	n this b	book.		hadde t <sub>i</sub> had	ikke not	gitt given	Kari? Kari?

(

Now, Swedish does not behave like the Norwegian varieties described by Westergaard et al. (2019) with respect to extractions. Holmberg (1986, p. 111) notes that *wh*-extractions are impossible from clauses with embedded V2, whether they have XVS- or SV-order; an example from Holmberg is given in (10). Extraction is not possible if the embedded clause has V2-order (here visible as verb movement across negation), even in an SV clause.<sup>6</sup>

(10)	Vilken	festi	sa	hon	att	vi	{*behöver}	inte	{behöver}
	which	party	said	she	that	we	need	not	need
	köpa	roliga	hattar	till t <sub>i</sub> ?					
	buy	funny	hats	to					
	'Which p	oarty did s	she say tha	at we didn	't need f	to buy fi	inny hats for?	,	
	(Holmbe	erg 1986, p	. 111)						

To sum up, there are good reasons to assume that homeland Swedish has symmetric V2. We will return to the analysis of AmSw in Sections 5 and 6 below.

#### 4. Material and Methods

#### 4.1. Corpora

The AmSw data in this study are drawn from the Swedish part of CANS (Johannessen 2015), version 3.1. CANS is a morphologically tagged corpus of spontaneous speech (semi-structured interviews and conversations); the Swedish part of the corpus consists of 45,000 word tokens produced by 22 speakers. The speakers are mostly 2nd or 3rd generation heritage speakers born in the US; some 1<sup>st</sup> generation speakers (i.e., individuals who were born in Sweden and emigrated) are also included in the corpus, but these speakers have been excluded from this study, as they do not qualify as heritage speakers, leaving us with a sample of 17 speakers producing 39,500 word tokens. The heritage speakers have grown up learning Swedish in the home as an L1; some are simultaneous and some are sequential bilinguals (Swedish–English). Most of the speakers were born in the 1920s or 1930s, but some are younger (the youngest born in 1999 according to the corpus metadata). As mentioned in Section 2, the Swedish CANS data were collected in 2011–2014.

To establish a baseline for comparison with AmSw, we used a sample from the Swedish part of the Nordic Dialect Corpus, version 4.0 (NDC, Johannessen et al. 2009). This corpus consists of spontaneous speech data that were collected in a similar manner to the speech data in CANS and tagged according to the same principles. For the present study, only speakers from the regions of Ångermanland and Småland were included, a total of 12 speakers producing 36,626 word tokens. In both CANS and NDC, it is possible to listen to the recordings through the search interface.

#### 4.2. Data Extraction and Analysis

CANS and NDC are not syntactically tagged; thus, our queries are based on morphological features. Only finite verbs move to the C-domain; in order to obtain a sample size that could feasibly be annotated and analyzed manually, we limited the search to verbs in the past tense. The clauses included in the study are predominantly declarative main clauses; however, unambiguous contexts for embedded V2 (which are structurally similar to declarative main clauses in Mainland Scandinavian, see e.g., Julien 2015, and cf. Section 3.2 above) were also included. We have mostly been relying on the transcriptions when analyzing the word order; however, in cases of possible V2 violations and/or unclear segmentation, the sound files were consulted. A few unclear examples were excluded.

#### 4.3. Annotation

All relevant clauses were manually annotated and categorized according to a detailed annotation scheme. The annotation scheme was designed to capture relevant distinctions and nuances is AmSw—but also to capture potential nuances in the homeland Swedish baseline (cf., e.g., Wiese and Müller 2018; Breitbarth 2022 on how standard, homeland German allows for exceptions to V2 that have gone unnoticed until recently).

A main distinction was drawn between V2 and non-V2 clauses. Clauses treated as V2 are clauses whose word order is clearly acceptable in the homeland baseline (SV or XVS) although they may be superficially V1 or V3. Clauses with topic drop (i.e., dropping of an initial constituent) are thus included, although the strings are verb-initial (they are counted as SV if an initial subject is dropped and XVS if a non-subject is dropped; see Mörnsjö 2002). CLD (with a coreferent, agreeing pronoun or a light adverb (often *så*)

intervening between the initial constituent and the verb, see Section 3) is also included in the V2 category, although these clauses are superficially V3 (counted as SV if the subject has undergone CLD and XVS if a non-subject has undergone CLD).

In the non-V2 category we draw a distinction between V2 violations and V2 exceptions. V2 violations are clauses in which the word order is V>2, and in which this word order is not covered by any known exceptions in the homeland. V2 exceptions include focus adverbs intervening between the clause-initial element and V (see Section 3). This category also includes HTLD. The reason why these types of strings, which may be grammatical even in homeland Swedish, are singled out as V2 exceptions rather than grouped together with V2 clauses, is that they can be difficult to distinguish from interruptions or false starts, particularly in AmSw. AmSw speakers are generally elderly heritage speakers who in many cases speak slowly, with pauses and hesitation; sometimes sentence boundaries can be hard to determine, or it can be difficult to judge whether we are dealing with HTLD (which commonly includes a prosodic break) or a false start. The implications of these methodological challenges are, however, limited when we have a separate category for the V2 exceptions that are typically hard to analyze; they will have less impact on the more clear-cut V2 and non-V2 categories.

#### 5. Results

In this section we present the findings from the corpus study of AmSw and homeland Swedish. Section 5.1 gives an overview of the results. Section 5.2 focusses on properties that remain stable in AmSw. Section 5.3 is concerned with two changes—non-V2-order and a shift in the frequency of SV-order.

#### 5.1. Overview

Table 1 gives an overview of the word order in declarative main clauses in NDC (homeland Swedish) and CANS (AmSw). In NDC, 64.1% of the clauses are subject initial; this is as expected from previous studies of homeland Swedish (see, e.g., Jørgensen 1976). However, in the heritage language context (AmSw), the amount of SV-order has increased considerably. In CANS, the proportion of SV is clearly higher than in NDC, at 81.4% (the difference between the proportions is statistically significant, p < 0.001).<sup>7</sup> The increase in SV-order will be discussed further in Section 5.3.2 below.

Table 1. Overview of the word order in AmSw declarative main clauses.

	SV	XVS	V2 except.	V2 viol.	Total
NDC	1037 (64.1%)	564 (34.9%)	15 (0.93%)	0	1616
CANS	1583 (81.4%)	306 (15.7%)	21 (1.1%)	35 (1.8%)	1945

With respect to XVS clauses, the difference between NDC (34.9%) and CANS (15.7%) is a direct reflection of the difference in SV-order. We look closer at the XVS clauses in Section 5.2.1.

In both NDC and CANS, there are a small number (around 1%) of V2 exceptions. Except for two examples of preverbal focus adverbs in CANS, all these cases involve HTLD. In CANS, there are also 35 (1.8%) V2 violations; these would be unacceptable in (standard) homeland Swedish, and this type is not attested in NDC. Left dislocation is discussed in Section 5.2.2 below, and we look more closely at the V2 violations in Section 5.3.1.

#### 5.2. Stability

AmSw and homeland Swedish differ in terms of the proportions of SV- and XVS-order. At the same time, there is also evidence of stability, both with regard to the properties of the clauses with XVS order and left dislocation. We look closer at the XVS clauses in 5.2.1 before we turn to CLD in Section 5.2.2, and HTLD in Section 5.2.3.

#### 5.2.1. XVS-Clauses

As we saw above, the proportion of declarative main clauses with XVS-order is lower in AmSw than in homeland Swedish. However, when we consider the initial constituent in the XVS clauses, homeland Swedish and AmSw look similar; see Table 2.

Table 2. Initial element in XVS-declaratives.

	Advl	Light adv	Topic drop	Other	Total
NDC	143 (25.4 %)	323 (57.3%)	16 (2.8%)	82 (14.5%)	564
CANS	72 (23.5%)	187 (61.1%)	6 (1.96%)	41 (13.4%)	306

A majority of the XVS clauses are introduced by a light adverb, such as *sen* 'then, after that', da 'then' or sa 'so'; see (11a) and (12a) below.<sup>8</sup> About a quarter of the XVS clauses have a longer adverbial (typically a PP or a clausal adjunct) in initial position, as in the examples in (11b) and (12b). On occasion, there is topic drop (2.8% in NDC, and 1.96% in CANS), often of an initial light adverbial or pronominal object, as in (11c) and (12c); since the initial element is silent, these clauses are superficially verb-initial.<sup>9</sup>

(11)	a.	och	då	gick	han	in	till	mor	
		and	then	went	he	in	to	mothe	er
		'and the	n he went	in to moth	ner' (torsas	5_0w3, NI	DC)		
	b.	men	i	mina	ögon	var	han	rätt	
		but	in	my	eyes	was	he	right	
		'but in n	ny eyes, h	e was righ	t' (ankarsı	rum_om3,	NDC)		
	c.	kom	väl	pappa	in	och	var	glad	
		came	PRT	dad	in	and	was	happy	
		'then da	d came in	and was h	nappy' (an	undsjo_o	m2, NDC)		
(12)	a.	så	då	adoptera	ade	vi	en	liten	flicka
		so	then	adopted	l	we	а	little	girl
		'so then	we adopt	ed a little g	girl' (mn1	1_f011, CA	ANS)		
	b.	och	i	testamer	ntet	hade	han	sagt	
		and	in	testamer	nt.DEF	had	he	said	
		'and in l	nis testamo	ent had he	e said ′	(mn11_m	013, CANS	5)	
	c.	skulle	jag	säga	alla fall				
		would	Ι	say	anyway				
		'that's w	vhat I wou	ld say, any	yway' (tx1	4_f001, C	ANS)		

The category "Other" in Table 2 includes several different types of initial elements, e.g., topicalized objects, predicatives or verb phrases; (13a) gives an example of a topicalized predicative in AmSw, and (13b) has a topicalized object. Here, the object pronoun refers to the celebration of Thanksgiving.

(13)	a.	så	dåligt	var	det
		SO	bad	was	it
		'It was that bad	.' (mn11_m008, 0	CANS)	
	b.	det	hade	mormor	också
		it	had	grandma	too
		ʻgrandma had i	t too' (tx14_f019,	CANS)	

There are a few types of topicalized elements that are attested in NDC, but not in CANS. For instance, there are no examples of topicalized verb phrases in CANS; cf. the example from NDC in (14a). Moreover, there are no topicalized weak object pronouns with clearly nominal reference in CANS, as in the NDC-example in (14b) below. The closest example is (13b) above, where the object pronoun is deaccented, but the reference is not obviously nominal.

(14)	a.	sparka	fick	man	inte	göra				
		kick	got	one	not	do				
		'one wasn't a	llowed to l	kick' (asby <u></u>	_om3, NDC)					
	b.	räven #	försvann		med	skabben #				
		fox.DEF	disappeared		with	scabies.DEF				
		den	jagade		vi	mycket				
		it	hunted		we	much				
		'The fox disappeared with the scabies. We hunted it much.' (torsas_om3, NDC)								

Examples like (14a) and (14b) are rare also in NDC; there are altogether only three topicalized verb phrases in our data, and less than a handful of topicalized weak objects with nominal reference. Given that there are overall fewer XVS clauses in CANS, the absence of examples like these does not necessarily say anything about grammaticality; speakers of AmSw may accept them even though they are not attested in our sample of production data.

The overall picture is that there is considerable stability in AmSw with respect to the properties of topicalized non-subjects. Although the proportion of XVS is smaller in AmSw, there is still ample evidence of a V2 system that looks much like homeland Swedish. In the next sections, we turn to left-dislocation structures. As we will see, also the use of left dislocation in AmSw shows that there is stability in the C-domain.

#### 5.2.2. Copy Left Dislocation

In the overview in Table 1 above, sentences with CLD are included among the SV and XVS clauses, and, as we will see below, on occasion also in the V2 exceptions (when CLD co-occurs with HTLD). In Table 3, we provide the number of examples of CLD in V2 clauses with different initial elements; here, clauses with topic drop are not included. As is clear from the table, the overall frequency of CLD is very similar in NDC (7.4%) and CANS (6.7%).

Initial Element	SV	Advl	Light Adv	Other	Total
NDC	36/1037 (3.5%)	78/143 (54.5%)	0/323 (0%)	3/82 (3.7%)	117/1585 (7.4%)
CANS	60/1581 (3.8%)	49/72 (68.1%)	17/187 (9.1%)	0/41 (0%)	126/1881 (6.7%)

Table 3. Copy left dislocation in V2 clauses with different initial elements.

In subject-initial declaratives (SV clauses), there is a small amount of CLD both in NDC (3.5%) and CANS (3.8%); examples are given in (15a) and (16a) below. Recall that these examples are prosodically different from HTLD; there is no prosodic break. It should be noted that most subjects in both NDC and CANS are pronominal, and in those cases, we do not find CLD.<sup>10</sup>

In fact, when we disregard subject initial clauses (which are more frequent in CANS than in NDC, as noted), the proportion of CLD in AmSw is higher (66/300, 22.0%) than in the homeland Swedish data set (81/548, 14.8%).

In sentences with an initial adverbial, CLD is considerably more common than in SV clauses; 54.5% in NDC and 68.1% in CANS. Here, the resumptive element is most often sa, but on occasion it is the light temporal adverb da 'then' (after a temporal adverbial) or dar 'there' (after a locative adverbial). Examples with sa are given in (15b) and (16b).

(15)	a.	ja	far	min	min		var	taxich	aufför		
		yes	father	my		he	was	taxi.d:	taxi.driver		
		'yes, r	ny father	was a taxi dri	ver' (anka	arsrum_o	m1, NDC)				
	b.	för	i	somras	så	gick	han	ju	ner		
		for	in	summer	so	went	he	PRT	down		
		'because this summer he went down' (asby_ym1, NDC)									

- (16)bror han ville icke till skolan a. min gå utan mig brother school.DEF without my he wanted not go to me 'my brother didn't want to go to school without me' (mn11\_f011, CANS) så mycket b. när yngre var det jag var mer when it much T was younger so was more
  - 'when I was younger, there was much more' (tx14\_f001, CANS)

With initial light adverbs, there are no examples (0/323) of CLD in our data from NDC, but 9.1% (17/187) in CANS; examples are given in (17).

(17)	a.	och	då	så	ringde	bjällrorna	i	skolan				
		and	then	so	rang	bell.PL.DEF	in	school.DEF				
		'and then the bells in school rang' (mn11_f011, CANS)										
	b.	sedan	så	gick	vi	ner	till	Falköping				
		then	SO	went	we	down	to	Falköping				
		'then we went down to Falköping' (tx14_m005)										

It seems unlikely that this difference between the two corpora reflects a difference in grammaticality. Although examples like those in (17) are not attested in the part of NDC that we have investigated, they do occur in homeland Swedish. For instance, there are 51 examples of *sedan så* 'then so' in NDC when we include speakers from all dialect areas. Descriptions of Swedish also often include examples like these (see, e.g., Teleman et al. 1999, p. 694).

There are at least two possible reasons why CLD with light adverbs might be more frequent in our CANS-data than in NDC. First, it is possible that CLD is preferred by heritage speakers when possible, since it might make processing easier (see also Bousquette et al. 2021 on CLD in AmNo and Wisconsin Heritage German). Second, it seems likely that normative pressure is involved. In homeland Swedish, CLD with  $s^{a}$  is not used in the written standard language or in formal registers (see, e.g., Teleman et al. 1999, p. 695). The normative grammarian Wellander (born 1844) described this use of så as part of spoken, colloquial language (Wellander 1973, p. 29). More modern normative grammars also suggest that CLD with så should be avoided in more formal registers (see, e.g., Språkriktighetsboken 2005).<sup>11</sup> Whereas the homeland Swedish speakers in NDC are literate in Swedish and have some (conscious or unconscious) knowledge of the norms of the standard language and of different registers, the same cannot be said about the heritage speakers. Rather, the AmSw speakers are generally illiterate in Swedish and do not have competence in different registers (see Larsson et al. 2015). It is therefore possible that the frequency of CLD with short adverbs in CANS better reflects the frequency of informal usage (or the colloquial language of the time of emigration) than the data in NDC. In this case, the difference in frequency is not due to a change in the heritage language.

Finally, there are no examples of CLD in the 'Other' category in CANS, but 3 (out of 82) in NDC; one is given in (18). Since, for instance, pronominal objects are not expected to occur in CLD (see footnote 10), it is not surprising that the number of examples is small in NDC and non-existing in CANS, where the 'Other' category includes fewer attestations altogether.

(18)	det	virket	det	torkade	han #	i	kökstaket	inne	
	that	wood.DEF	it	dried	he	in	kitchen.roof.DEF	inside	
	i	det	huset						
	in	that	house.DEF						
	the dried that wood in the kitchen roof inside that house' (asby $003$ NDC)								

Overall, the distribution of CLD in AmSw looks much like homeland Swedish, and unlike English (where CLD is not possible). There is no evidence for a decrease in the use of CLD; if anything, the opposite holds, and it is possible that CLD is used as a strategy to ease processing for the heritage speakers (as well as for the homeland speakers).

#### 5.2.3. Hanging Topic Left Dislocation

As pointed out in Section 3, HTLD seems to involve base-generation in a position high in the left-periphery, and it does not trigger V2. In Table 1 above, hanging topics are therefore categorized as V2 exceptions. As mentioned, this is the most common type of V2 exception; there are only 2 attestations of preverbal focus adverbs in our data. However, hanging topics are also much less common than CLD. In both NDC and CANS, around 1% of the main clause declaratives have HTLD; examples are given in (19) and (20), where the hanging topic is underlined.

(19)	a.	<u>denna</u>	friveck	omarkna	<u>d</u>		då	den	var	ju
		this	free.we	ek.marke	et		PRT	it	was	PRT
		också	en		höjdp	unkt				
		also	а		highli	ght				
		'this mar	ket on the	free wee	ek, the	n, it v	was also a	n highlight	′ (torsas_	ow3, NDC)
	b.	<u>min</u>	<u>farfar</u>		jag		var	fjort	on å	r
		my	grand	father	Ī		was	four	teen y	vears
		när	min	fa	rfar		dog			
		when	my	gr	andfat	her	died			
		'my gran	dfather, I	was four	teen w	hen 1	my grand	father died	d' (torsas	_om3, NDC)
(20)	a.	rätt som d	let var #	drottni	ngen	rest	e	sig		
		right as it	was	queen.	DEF	got.	up	REFL		
		och		sade #		god		natt		
		and		said		goo	d	night		
		'Suddenly	, the quee	n got up	and s	aid go	ood night	:.' (mn11_1	n008, CA	NS)
	b.	<u>när</u>	jag	var	ung	#	vi	gjorde	mycket	arbete
		when	I	was	you	ng	we	did	much	work
		'when I v	vas young	, we did	a lot o	of wor	rk' (mn11	_f010, CA	NS)	

In (19a), the hanging topic is followed by a discourse particle (*då* 'then'), preceding the subject and finite verb. In (19b), the hanging topic is *min farfar* 'my grandfather'; the same phrase is repeated as the subject in the sentence-final *when*-clause; there is no agreeing pronoun following the initial, dislocated phrase. In both these cases, it is therefore clear even from the transcriptions that the initial phrase is a hanging topic. More commonly, however, HTLD can only be identified (and distinguished from a V2 violation) using the sound files. In the examples in (20a) and (20b) from CANS, the intonation, and a prosodic break, makes it clear that also these examples should be analyzed as hanging topics. We also note that the hanging topics can be of slightly varying types. In (19b), it is clear that the hanging topic (*min farfar* 'my grandfather') introduces a new topic. In (20a), it is rather used as a narrative device to create suspense, and in (20b) it sets the frame for the rest of the utterance.

In both homeland Swedish and AmSw, HTLD and CLD can co-occur (cf. example 5 above from Holmberg 2020); examples from our data are given in (21) and (22).

(21)	då jag var liten,	mamma	hon	sa	att					
	when I was little	mum	she	said	that					
	'when I was little,	, my mother sa	aid that $\dots$ ' (a	anundsjo_om	2, NDC)					
(22)	på den tiden	mina	föräldrar	de	kunde	inte				
	in those days	my	parents	they	could	not				
	'In those days, my parents couldn't ' (mn11_m013, CANS)									

As mentioned in Section 3 above, the co-occurrence of HTLD and CLD is evidence for the distinction between the two, and for a left periphery with several available positions for dislocated elements. It seems clear that both the homeland Swedish speakers in NDC, and the AmSw speakers in CANS have a C-domain with the properties discussed in Section 3.

#### 5.3. Change

In the previous section, we observed stability in AmSw as compared to the baseline represented by the homeland Swedish data in NDC. There are, however, also some dif-

ferences between AmSw and homeland Swedish. In this section, we first consider V2 violations, before we turn to the frequency of SV-order.

#### 5.3.1. V2-Violations

There are altogether 35 V2 violations in CANS (1.8%; see Table 1 above), and no corresponding examples in NDC (as expected). Of the V2 violations, 25 have XSV-order, as in the examples in (23) below.

(23)	a.	När when	jag I	var was	tjugoett 21		get Ir.DEF	började started	i in	Europ Europ	
		'When I	was 21,	the war s	started in	Europe	015, CAN	S)	1		
	b.	när	jag	var	född #	hon	sade #	kan	icke	ha #	mer
		when	Ι	was	born	she	said	can	not	have	more
		än	två	som		sådäı	•	i	vä	världen	
		than	two	lik	e	such		in	W	orld.DEF	
		'When	I was boi	rn, she sa	id "you c	an't hav	e more f	than two c	f those i	n the wo	rld‴
		(mn11_	f010, CA	NS)							
	c.	ja	för	fyra	and	а	halv	t år	han	var	
		yes	for	four	and	а	half	years	he	was	
		'Yes, fo	or four ar	nd a half <u>y</u>	years, he	was' (m	n11_f012	1)			

In most of these cases (21/25), the initial element is a temporal adverbial; often, but not always, a *when-*clause (as in (23a) and (23b)). In examples like these, it can be difficult to distinguish V2 violations from HTLD. The different analyses of (23) (V2 violation) and (20) (HTLD) above are based on prosody, and the prosodic patterns are not always clear, not least as the speakers are elderly heritage speakers, who often speak slowly, with hesitation and often with difficulty in lexical retrieval. It is also possible that the heritage speakers use base generation above ForceTopP as a strategy to facilitate processing and speech planning, and that some examples like those in (23) should be analyzed in terms of an extended use of HTLD.

There is also another type of V2 violation, which involves SV-order, but where the verb has not moved across a sentence adverb; this yields an SadvV-order that is unacceptable in declarative main clauses in homeland Swedish. Examples are given in (24). In CANS, we find altogether 10 examples of SadvV-order in declaratives.<sup>12</sup>

(24)	a.	Men	ee	andra	världs	skriget #	just	slutade			
		but	eh	second	world	l.war.DEF	just	finished			
		'But the se	cond world	l war just fi	inished' (tx	nished' (tx14_m006, CANS)					
	b.	och	han	aldrig #	learna	ade #	engelska				
		and	he	never	learne	ed	English				
		'And he never learned English' (mn11_f003, CANS)									
	c.	vi	aldrig #	aldrig	em #	slog	till				
		we	never	never	eh	hit	to				
		'We never	struck' (mr	n11_f003, C	ANS)						

In these examples it seems clear that the V2 violation is a consequence of the placement of the verb: the verb has not moved to the C-domain, but remains in situ in the VP, below sentence adverbs (we adopt the common assumption that sentence adverbs, including negation, mark the boundary between vP/VP and TP, e.g., Platzack 2011). This is also a possible analysis for most of the other V2 violations. However, 2 of the XSV-declaratives have evidence of verb movement, since the verb precedes a sentence adverb; one of these examples is given in (25).

(25)	när	de	gick	till	kyrkan	och	blev	konfirmerade		
	when	they	went	to	church.DEF	and	got	confirmed		
	det	var	alltid	svenska						
	it	was	always	Swedish				(X-S-V-adv)		
	'When they went to church and were confirmed, it was always in Swedish.'									
	(mn11_n	n006; CA	NS)							

We suggest that V-to-C movement is absent also in these two cases, and that the order V-adverb is a consequence of verb movement to T; as mentioned above, it has previously been shown that AmSw has variable V-to-T movement in embedded clauses. More generally, we propose that all of the V2 violations in AmSw should be analyzed in terms of absence of V-to-C (or perhaps as HTLD). Notably, there are no clear examples of CLD in the sentences with non-V2; this would be expected with a split C-domain of the type otherwise found in both homeland Swedish and AmSw, particularly when the initial element is a temporal adverbial.<sup>13</sup>

In Section 6.2 below, we propose that the sporadic cases of non-V2 are due to attrition in individual speakers, leading to CLI from English.

#### 5.3.2. Subject-Initial Declaratives

As is evident from Table 1 above, there is a considerable difference between NDC and CANS with respect to the proportion of subject-initial declaratives. In NDC, the frequency of SV is 64.1%, and this is what is expected from homeland Swedish (cf. Jørgensen 1976). In AmSw, the frequency of SV is clearly higher, 81.4%. Since the frequency of SV has been rather stable in homeland Swedish for at least a century (Andréasson and Larsson Forthcoming), we can conclude that there has been a change in AmSw. As we will see further below, there is reason to believe that this change should be understood as a shift in the preference for one of several options, but not a change in the underlying syntactic structure.

SV clauses are generally structurally ambiguous. Without a sentence adverb, we cannot say whether the verb has moved, or if it remains in situ. However, if we consider only SV clauses with sentence adverbs (which, as mentioned, mark the boundary between vP/VP and TP), 205/215 (95.3%) show evidence of verb movement at least to T. As noted in Section 2 above, there is variable V-to-T movement in embedded clauses in AmSw (and AmNo, see Larsson and Johannessen 2015), which could, on the face of it, be seen as an argument in favor of V-to-T in SV clauses as well. However, if only V-to-T (and not V-to-C) was involved in the SV clauses, the high proportion of verb movement in main clauses as compared to embedded clauses would be difficult to account for (and we could possibly also expect more XSV, as a landing site in the C-domain, before the subject, should be readily available). In embedded clauses, the verb remains in situ around half of the time (see Section 2 above), but in main clauses less than 5% stay in situ. Given standard assumptions, we do not expect V-to-T movement to be sensitive to clause type, as clause type is encoded in the C-domain, but the difference can be straightforwardly explained if 95.3% of the main clauses have V-to-C. We will therefore assume that also the potentially ambiguous SV clauses with V2 involve the same structure as in homeland Swedish: the verb moves to Fin, and the subject moves at least to spec-FinP. In other words, we assume that AmSw has symmetric V2, just like homeland Swedish. Recall also that there is CLD in the SV clauses to the same extent in AmSw as in homeland Swedish (see Table 3 above). We return to the shift in frequency in Section 6.3 below, where we will also discuss the structure of the SV clauses further.

#### 6. Discussion: Heritage Language, Language Change and Cross-Linguistic Influence

In the previous sections, we have observed both stability and change in the word order in the left periphery of AmSw, as compared to spoken, present-day homeland Swedish. In this section, we discuss the findings further, focusing first on the AmSw C-domain compared to both homeland Swedish, other Scandinavian heritage varieties and urban vernaculars (a different, multilingual context). In Section 6.2, we discuss the V2 violations found in AmSw, while Section 6.3 is concerned with the increase of SV-order. We will propose that the changes in AmSw are due to two different kinds of cross-linguistic influence (CLI); only the former, which, we will argue, is due to attrition, involves a deviation from the syntactic structure in the baseline.

#### 6.1. The American Swedish C-Domain

The main picture that emerges in our study of AmSw is one of stability. We have observed that there is still considerable evidence for a V2-system with 15.7% XVS-order and where different types of constituents can be topicalized, much as in the baseline. Following, e.g., Holmberg (2015, 2020), we assume that the verb moves to Fin in AmSw (as in homeland Swedish), and one constituent (a subject or non-subject) moves to spec-FinP, and possibly higher to spec-ForceTopP. The use of CLD and HTLD is similar in AmSw and homeland Swedish, which also strongly suggests that the C-domain is stable in the heritage language.

Our conclusion with respect to the AmSw C-domain is in line with previous work that shows that core syntax is often stable in the heritage language context (see Lohndal et al. 2019). It seems that verb placement in declaratives (V-to-C movement) is more stable than verb placement in embedded clauses (i.e., V-in-situ); recall that AmSw has variable V-to-T movement in embedded clauses. As argued by Larsson and Johannessen (2015), the difference between main and embedded contexts is expected considering the evidence for verb placement in the input during acquisition. Embedded verb placement is known to be particularly difficult also in monolingual acquisition in the homeland, due at least in part to the scarcity of relevant input (see Section 2 above, and Johannessen 2015). Evidence for V2, on the other hand, is amply present in the input, and V2 is acquired much earlier than embedded word order (see e.g., Waldmann 2008; Johannessen 2015 and references therein).

Previous studies of heritage Scandinavian in North America have also shown evidence of considerable stability (see Westergaard and Lohndal 2019; Westergaard et al. 2021 on AmNo; Kühl and Petersen 2018 on American Danish). These studies have not considered left dislocation, but Bousquette et al. (2021) show some examples of CLD in AmNo, and we can easily find additional attestations in the AmNo part of CANS:

(26)	a.	vel	han	bestefar		han	kom	ifra	Norge	
		well	he	grandfather		he	came	from	Norway	
		'well, my grandfather came from Norway' (Fargo_ND_01gm, AmNo)								
	b.	kona	hun	e	døde	to	år	nu		
		wife.DEF	she	eh	died	two	years	now		
	'My wife has been dead for two years now.' (Blair_WI_07gm, AmNo)									

Although the overall tendency in the C-domain in AmSw is stability, we have observed some differences between the heritage variety and the homeland baseline: there are scattered examples of non-V2 of a type that does not occur in the homeland variety, and there is an increase in the frequency of SV-order. These changes will be discussed in turn in the following, where we will also see that similar changes have been observed in the other Scandinavian heritage languages in North America.

#### 6.2. V2-Violations—Attrition and CLI

We have observed 1.8% V2 violations in AmSw. A similar frequency has been noted for AmNo; Westergaard et al. (2021) find 2.2% non-V2 in declaratives in the Norwegian part of CANS (N = 10.609). Some of these examples could, however, be interpreted as base-generated adjuncts (HTLD), possibly making the frequencies even more similar.<sup>14</sup> As in AmSw, the V2-violations involve both XSV and SadvV-order. However, Westergaard et al. (2019) observe that there is less S-Neg-V than XSV-order; they interpret the low frequency of S-Neg-V as an argument for asymmetric V2 in Norwegian. With the additional data from Westergaard et al. (2021), however, the argument is weakened, as SadvV-order is more common with other sentence adverbs than with negation (see Westergaard et al. 2021, p. 22). As mentioned in Section 3, there are good reasons to assume that homeland Swedish has symmetric V2, and as we will see below, there is no reason to assume that heritage Swedish has innovated an asymmetric V2 system.

Kühl and Petersen (2018) investigate V2 in American Danish, but only include nonsubject-initial declaratives and investigate both first-generation immigrant speakers (i.e., speakers who were born in Denmark and subsequently emigrated to North America) and heritage speakers; they find 5.6% non-V2 (N = 1615). There is possibly more instability in American Icelandic (see Arnbjörnsdóttir et al. 2018), but the Icelandic study uses a different methodology, combining formal elicitation (mainly a selection task) and production data. The selection task seems to suggest that V2 violations are to some extent accepted as an option by AmIce speakers, but the production data are not analyzed quantitatively in Arnbjörnsdóttir et al.'s study, which makes it difficult to compare their results directly to ours.

With respect to the social context and age of onset of the second language (English), AmSw is similar to AmNo. AmSw also seems to pattern with AmNo both with respect to frequency of non-V2 and the type of V2-violations: for instance, XSV is overall the most common type of non-V2 in both varieties. Neither AmSw nor AmNo behaves like European urban vernaculars with respect to non-V2 (cf. Alexiadou and Lohndal 2018 on AmNo). Among other things, the initial element in AmSw and AmNo XSV clauses is often a when-clause or a temporal adverbial PP (cf. Eide and Hjelde 2015 on AmNo); it is generally not a light adverb like sedan 'then'. In Swedish urban vernaculars, on the other hand, adverbs like sedan are the most common initial element V3 declaratives (see Ganuza 2008; Walkden 2017). There are no fronted objects in our non-V2 examples from AmSw, and in this respect AmSw looks like the urban vernaculars, where fronted objects are generally unacceptable in XSV contexts (see Alexiadou and Lohndal 2018 and references therein). However, fronted objects are rare overall in AmSw, so we can hardly draw any conclusions from this. More importantly, urban vernaculars seem to maintain V-to-C, even in V3-examples (Walkden 2017, see also Meelen et al. 2020). For AmSw, we have argued that the non-V2 cases (both XSV and SadvV) lack V-to-C, and have the verb either in situ, or, occasionally, in T. As mentioned above, some of the XSV clauses might also involve base generation of the initial element high in the C-domain, as in HTLD.

We suggest that the sporadic cases of absence of V-to-C, leading to non-V2, are due to attrition during the life-span of the individual speakers; this has previously been proposed by Larsson and Johannessen (2015) and most recently by Westergaard et al. (2021) for AmNo. This means that V2 is fully acquired by the heritage speakers in their childhood, but becomes somewhat attrited when English later on becomes their dominant language. A strong argument is that also Danish immigrant speakers in the study by Kühl and Petersen (2018) have some cases of non-V2; these speakers have acquired Danish not as a heritage language, but as an L1 in the homeland (Denmark), prior to emigrating to North America. The non-V2 examples produced by these speakers can hardly be attributed to the acquisitional context of their L1; it must rather be related to reduced use of Danish later in life.

The V2 violations in AmSw (and AmNo) have a syntax that looks like English. As argued above, the verb remains in situ (in English, main verbs generally remain in situ in the verb phrase; Pollock 1989), and there is no CLD. We propose, consistently with previous accounts of nominals in AmNo (see Anderssen et al. 2018; Kinn 2020), that the English-like syntax is due to simultaneous activation of two languages in the bilingual mind. Note that we are not suggesting borrowing of English syntactic structures into the grammar of AmSw; instead, we propose that speakers sometimes fail to inhibit their English grammar when speaking their non-dominant language Swedish. This is in line with previous works suggesting that bilingual speakers cannot simply deactivate one of their languages (e.g., Biyalystok 2009; de Groot 2016 and references therein). In our case, the heritage speakers occasionally fail to inhibit their dominant language, English, leading to non-V2. We take this type of inhibition problem to be a result of attrition. On our view, attrition does not involve language loss, but rather difficulty in *accessing* the heritage grammar (see Perez-Cortes et al. 2019; Kinn 2020). Given that attrition is involved, it is hardly surprising that non-V2 in AmSw (and AmNo) is not of the same kind as in Swedish (and Norwegian) urban vernaculars; non-V2 there must clearly have a different origin (see, e.g., Walkden 2017 for discussion).

On our account, the V2 violations in AmSw (and AmNo) are due to cross-linguistic influence from English, arising from the simultaneous activation of the two languages of

the heritage speaker. In the next section, we consider the increase in SV-order and suggest that this is due to another kind of CLI.

#### 6.3. Frequency Change within the Baseline System

We have seen that there is significantly more SV-order in declarative main clauses in AmSw (81.4%) than in the homeland (64.1%). As argued in Section 5.3.2 above, the SV clauses with V2 order most likely have the same syntax as homeland SV declaratives; the large majority of them have verb movement, and there is nothing that suggests that heritage Swedish has innovated an asymmetric V2 system. Such an innovation seems highly unlikely; on the contrary, the data clearly suggest that the heritage speakers have acquired a C-domain of the same type as in homeland Swedish, based on very similar input (apart from the frequency of SV; see also the discussion in Westergaard and Lohndal 2019 on AmNo). As far as we are aware, there is no unequivocal evidence in heritage Scandinavian suggesting that the heritage speakers have a stronger preference for smaller structures than homeland speakers do, at least not to the extent that this is a driving force for change.<sup>15</sup>

With respect to the frequency of SV-order, AmSw also resembles AmNo. Westergaard and Lohndal (2019) show that there is a considerable increase in SV-order in present-day AmNo. Larsson and Kinn (2021) similarly observe that present-day AmNo has as much as 93% SV-order in negated declarative clauses. Notably, the frequency of SV seems to have started to increase somewhat already in an earlier generation of AmNo heritage speakers, but without any concomitant V2 violations (cf. the data in Larsson and Johannessen 2015; Eide and Hjelde 2015) (Larsson and Kinn 2021).

Similar shifts in favor of SV-order have been noted also in other heritage languages (see Laleko 2021 for an overview and further discussion). Several studies report underproduction of non-canonical word orders in favor of SVO-order (see, e.g., Montrul 2004; Polinsky 2006; Albirni et al. 2011 among others). One possible reason for this has to do with processing: it has been shown that non-canonical word order is harder to process than canonical word order (e.g., Gibson 1998). It seems relevant here that the dominant language for the AmSw and AmNo speakers has canonical SV-order. Both Spanish and Russian heritage speakers in America have also been shown to have an increased preference for SV order over VS (see Laleko 2021 and references therein). On the other hand, a study of Spanish heritage speakers with Dutch as the dominant language by van Osch and Sleeman (2018) shows increased acceptance of postverbal subjects in a grammaticality judgment task, a finding that could be attributed to postverbal subjects being frequent in Dutch.

We have argued that the SV clauses do not involve English syntax, but have verb movement to Fin, and the subject in spec-FinP or spec-ForceTopP. This makes the increase in SV order different from the V2 violations, which we argue have English structure. Note that all SV clauses (except the 10 cases included among the V2-violations) would be grammatical in homeland Swedish. In other words, in the case of SV-order, the cross-linguistic influence from English does not involve underlying structure, but is a more superficial effect. As pointed out by Laleko (2021, p. 697), transfer effects do not need to involve radical changes in the underlying grammar, but can involve a "narrowing of the existing options still within the limits of acceptability imposed by the baseline system". This is, we believe, what we see in AmSw and AmNo. One possibility is that the SV-order in English affects also the processing of SV and VS in the heritage language; this remains to be investigated in an online processing study.<sup>16</sup>

Westergaard and Lohndal (2019) have previously proposed that the increase in SV in AmNo does not involve representational change. They suggest that the pragmatic structure of the dominant language affects the distribution of initial elements in the heritage language (Westergaard and Lohndal 2019, p. 99). It remains to be investigated if there are systematic pragmatic differences between the homeland language and the heritage language with respect to fronting (cf. e.g., Bohnacker 2010; Bohnacker and Lindgren 2014 on L2 Swedish).

#### 7. Conclusions

Our study of AmSw reveals considerable stability in the structure of the C-domain of this heritage variety. Building on work by Eide (2011) and Holmberg (2020), we have argued that there is verb movement to Fin in both homeland and heritage Swedish, and that one constituent (subject or non-subject) moves to spec-FinP, and perhaps higher. Both AmSw and homeland Swedish have copy left dislocation (CLD), where the dislocated phrase is in spec-ForceTop above FinP, and ForceTop is spelled out by a pronoun or light adverb (often så). CLD is used in a similar way in both homeland Swedish and AmSw. In addition, both varieties have the possibility of hanging topic left dislocation (HTLD), which involves base-generation in a Frame-domain above ForceTopP. HTLD and CLD can co-occur in both AmSw and homeland Swedish.

However, in some respects AmSw deviates from homeland Swedish. First, we find some V2 violations in AmSw, much like what has been previously observed in AmNo (e.g., Westergaard et al. 2021). We have suggested that these cases of non-V2 have English syntax; there is no V-to-Fin movement, and no CLD. We propose that this is a result of attrition in the heritage language, whereby the heritage speakers fail to access the grammar of their weaker language (Swedish) and deactivate the grammar of the dominant language (English); this leads to CLI. On this view, CLI does not involve syntactic borrowing, and attrition does not really involve language loss, but rather problems with *accessing* the structures of the non-dominant language (Perez-Cortes et al. 2019; Kinn 2020).

We have also observed that the heritage speakers overproduce SV-order at the expense of XVS-order, compared to homeland speakers; again, this has been observed also in AmNo (Westergaard and Lohndal 2019; Westergaard et al. 2021). This shift has previously been observed in other American heritage languages, too (see Section 6.3), and it can be understood as another case of CLI, but, importantly, CLI of a different kind than in the case of non-V2 order. The SV clauses in AmSw have the same syntax as corresponding homeland Swedish SV declaratives (V-to-Fin, S in spec-Fin or higher, and, possibly, CLD). In other words, this type of CLI does not affect syntactic structure, but only the choice between different options made available by the baseline grammar. The preference for SV-order can be attributed either to ease of processing (canonical structures are easier to process) and/or pragmatic influence from English.

Our study of AmSw corroborates previous observations that core syntax is stable in heritage languages (Lohndal et al. 2019). Our results also highlight the importance of having a nuanced understanding of the notion of cross-linguistic influence.

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#### Notes

An early contribution on the C-domain more generally is Platzack (2001), who discusses the C-domain in L1- and L2-acquisition, and in specific language impairment and Broca's aphasia.

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- <sup>2</sup> The search string included the relative complementizer *som* or the complementizer *om* 'if' followed by negation (*inte*) and a finite verb with the possibility of 2 intervening words, varying the order of negation and verb.
- <sup>3</sup> See Kinn (2020) and references therein for discussion of divergent attainment.
- <sup>4</sup> With initial adjuncts, the light adverb can be either for instance *då* 'then' (with temporal adverbials) or *där* 'there' (with locative adverbials), or the less specialized adverb *så*. It is possible that the two types of CLD should be kept distinct. In that case, the use of the more specialized adverbs would be cases of CLD-proper, and left dislocation with *så* could be referred to simply as the SÅ-construction, as in Eide (2011). Since both types are evidence of a split C-domain, and neither is possible in English, we will treat them together in the following. The difference between the two can presumably be analyzed in terms of what features are spelled out in ForceTop, but we refrain from a discussion of the precise featural set-up of ForceTop here.
- <sup>5</sup> As mentioned by Holmberg (2020, p. 45, n. 3), it is sometimes possible to have reflexive hanging topics, which might seem unexpected on the assumption that HTLD involves base-generation. We agree with Holmberg's intuition that these cases are possible in restricted contexts, as responses to utterances where the reflexive is properly locally bound.
- <sup>6</sup> There is an interesting difference between *wh*-extraction and topicalization in Swedish, which suggests that there is more involved than the availability of a single escape-hatch in the left periphery of the embedded clause. At least for some Swedish speakers, topicalization is possible from embedded clauses with V2-order, given that the extracted phrase is resumed by a pronoun in the embedded clause (and with the right prosody). Crucially, however, there is still no asymmetry between XVS clauses and SV clauses: to the extent that extraction is at all possible, it is allowed both in XVS and SV clauses; see (i) and (ii). In (i)a., a subject is extracted from an embedded XVS clause; the resumptive pronoun is *det*. In (i)b., an object is extracted from an XVS clause; it is resumed by *den*. In (ii)a–b., a subject or object is extracted from an embedded SV clause with V2-order.

(i)	a.	Det	brödet	vet	jag	att	imorgon	kommer	det	att	vara	torrt.
		That	bread.DEF	know	I	that	tomorrow	will	it	to	be	dry
		'I know that that bread will be dry tomorrow.'										

b. Den tårtan misstänker jag att redan imorgon kommer barnen att ha ätit den upp that cake.DEF suspect that already tomorrow will kids Ι to have eaten up it 'I suspect that the kids will have eaten that cake already tomorrow.'

		1								
(ii)	a.	Den grannen		vet	jag	att	han	gillar	inte	dig.
		that	neighbor.DEF	know	Ι	that	he	likes	not	you
		'I know that that neighbor doesn't like you.'								
	b.	Den grannen		vet	jag	att	Lisa	gillar	inte	honom.
		that	neighbor.DEF	know	Ι	that	Lisa	likes	not	him
		'I kno	w that Lisa does	esn't like that neighbor.'						

The analysis of these extractions and the nature of the resumption is not clear to us; further investigation is needed.

- <sup>7</sup> We used the function *prop.test()* in the *ctest* package in R (R Core Team 2022).
- <sup>8</sup> Note that the form *så* is not exclusively used in CLD, but is highly multifunctional. (12a) is introduced by the coordinating conjunction *så*. *Så* can also be a complementizer or an adverb; the adverb is common in sentence-initial position in XVS clauses. In example (13a) below, *så* modifies an adjective to express grade.
- <sup>9</sup> Examples are rendered as orthographic transcriptions. Prosodic breaks are marked as #.
- <sup>10</sup> Our own intuitions are that CLD of pronouns is marginally possible in Swedish and Norwegian. Examples like (i) and (ii) are not attested in our data, but we find them acceptable if the first pronoun is stressed; with an unstressed first pronoun they are unacceptable. We have, however, not investigated this systematically.

(i)	Kalle, ja,	HAN	han	sover	gott.	
	Kalle PRT	he	he	sleeps	well	
(ii)	Kalle, ja,	HONOM	honom	gav	hon	blommor.
	Kalle PRT	him	him	gave	she	flowers

- <sup>11</sup> *Språkriktighetsboken* (2005, p. 377) states that this use of *så* can seem 'verbose' (Sw. *pratigt*).
- <sup>12</sup> There are too few examples to systematically distinguish between different types of sentence adverbs, but we can note that non-V2 is attested with several different adverbs, but not negation. Notably, English has the order Aux-neg or requires *do*-support in sentences with negation.
- <sup>13</sup> There is one possible example, but it involves considerable hesitation and is hard to analyse; see (i).

när	jag	gick	så #	jäntorna	mina ##	em #	gav	mig	en #	liten	book
when	Ι	went	so	girl.PL.DEF	my	eh	gave	me	а	small	book
'When I went, my girls gave me a small book.' (mn11_f003, CANS)											

<sup>14</sup> We have listened to the examples in CANS via the search interface.

- <sup>15</sup> For instance, with respect to possessive placement, many AmNo speakers seem to prefer postnominal possessives to prenominal possessives; the former are generally assumed to involve movement of the possessed noun to a high functional projection within the DP (see Westergaard and Anderssen and also Anderssen et al. 2018). Kinn (2020) argues that representational economy (a preference for fewer features, see Scontras et al. 2018) might be factor promoting the stability of bare nouns in AmNo, but this does not imply a deviation from the baseline.
- <sup>16</sup> As an anonymous reviewer points out, it might be difficult to conduct an online processing study with elderly heritage speakers. However, a study of younger Swedish (or Norwegian) heritage speakers in an English-dominant context could also shed light on this issue.

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