#### RESEARCH ARTICLE



# V2 violations in different variants of Icelandic: A common denominator?

Ásgrímur Angantýsson<sup>®</sup>, Iris Edda Nowenstein<sup>®</sup> and Höskuldur Thráinsson<sup>®</sup>

Faculty of Icelandic and Comparative Cultural Studies, University of Iceland, Sæmundargata 2, 101 Reykjavík, Iceland

Corresponding author: Ásgrímur Angantýsson; Email: asgriman@hi.is

(Received 17 September 2022; revised 8 August 2023; accepted 10 August 2023; first published online 15 September 2023)

#### Abstract

In this article, we report on a number of violations of (or exceptions to) the so-called V2 constraint in different variants of Icelandic. The main purpose is to investigate what these violations can tell us about the nature of the V2 constraint, its vulnerability, the limits of syntax, and about children's ability to sort out what is relevant and what is not in the input they hear during the acquisition period. Three main explanatory possibilites are taken under consideration: the use and acceptance of sentences with V2 violations in Icelandic (i) is due to English influence, (ii) indicates an expansion of patterns existing in the language for language-internal reasons, (iii) is due to a task effect. In brief, our results support (i) for heritage Icelandic but not for non-heritage Icelandic, while different subsets of our data are best accounted for in terms of either (ii) or (iii).

**Keywords:** heritage languages; Icelandic; language acquisition; language contact; non-subject-initial V3; North-American Icelandic; subject-initial V3; V2 violations; verb-second; verb-third

### 1. Introduction

In this paper we attempt to give a fairly exhaustive overview of exceptions to the well-known verb-second (V2) phenomenon in Icelandic. By comparing these exceptions we hope to be able to shed new light on the nature of V2. We compare violations found in heritage Icelandic (North-American Icelandic), violations in non-heritage Icelandic, and violations found in Icelandic nursery rhymes and other popular lyrics. We argue that some of the violations can be attributed to influence from English (violations found in North-American Icelandic), while others are due to task effects (some of the violations observed in syntactic tests), and still others to special rules of poetry (the violations found in nursery rhymes). In general, the results show that despite the robustness and early acquisition of the V2 constraint in Icelandic, it does 'leak' in various contexts.

Indeed, our comparison of the observed violations gives useful information about the nature of the V2 constraint, the variants or genres of Icelandic studied, and the

© The Author(s), 2023. Published by Cambridge University Press on behalf of The Nordic Association of Linguists. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.



acquisition of V2. Thus we point out that in an experimental setting there is no clear relationship between the acceptance of V2 violations and the age of the participants, or their exposure to and use of English. On the other hand, many of the V2 violations accepted are similar to the V3 phenomena found in Germanic urban dialects as discussed by Walkden (2017) and others: they are found in structures with fronted non-subject elements, the preposed element is typically an adjunct, and the subject is preferably pronominal. We also point out that although V3 orders (and even V4, V5, and V6) are common in Icelandic lyrics sung to children during their language acquisition period, the children seem to acquire the V2 constraint relatively fast. The same is apparently true of Norwegian children's lyrics and the acquisition of V2 by Norwegian children. This sheds an interesting light on children's ability to disregard the 'ungrammaticality' of some of the input in their language environment.

In Section 2 we review the background of the discussion, referring to relevant literature on the subject. In Section 3 we report on an investigation of V2 in North-American Icelandic (henceforth NAI), considering the possibility of influence from English. In Section 4 we show that similar exceptions to V2 have been found in comparable experiments involving non-heritage Icelandic, although to a lesser extent, but these experiments revealed no evidence for influence from English. Section 5 completes the overview by considering V2 violations in Icelandic nursery rhymes and other popular lyrics. The discussion in Section 6 then compares the Icelandic V2 violations to similar violations in Germanic urban dialects and Norwegian children's lyrics, showing that there is an intriguing similarity between many of the V2 violations that calls for an explanation.

# 2. Background

## 2.1 The V2 phenomenon

As is well known, the so-called verb second (V2) phenomenon is a central trait of the Germanic languages other than English. This can be illustrated by main clause examples like the following from Icelandic (for detailed overviews see e.g. Holmberg 2015, Angantýsson 2020).<sup>1</sup>

- a. Ég keypti ekki bókina.
   I bought not book.the
  'I didn't buy the book.'
  - b. Bókina **keypti** ég ekki. book.the bought I not 'The book, I didn't buy.'
  - c. Ég hef ekki keypt bókina.
     I have not bought book.the
     'I haven't bought the book.'
  - d. Bókina hef ég ekki keypt. book.the have I not bought 'The book, I haven't bought.'

In all these examples the finite verb comes in second position, be it a main verb as in (1a, b) or an auxiliary verb as in (1c, d), regardless of the grammatical function of the

initial constituent. In the following we will refer to this phenomenon as the V2 CONSTRAINT for convenience, without implying anything about its theoretical or descriptive status by calling it a 'constraint'.

But although the V2 order illustrated here typically holds for main clauses in the Germanic V2 languages, there is a well-known set of exceptions to it, as discussed in considerable detail by Holmberg (2015; see also Angantýsson 2020).<sup>2</sup> These will be reviewed in the next subsections, using Icelandic examples for illustration as before (for a more detailed overview see Angantýsson et al. 2021).

#### 2.2 V1

The finite verb (apparently) sits in INITIAL POSITION in a number of constructions. These include the following.

- (2) a. **Polar questions** such as *Keyptir þú bókina* (literally 'Bought you the book?', i.e. 'Did you buy the book?').
  - Imperatives such as *Tak þú* (or *Taktu*) *bókina!* (literally 'Take you the book!' meaning 'Take the book!').
  - c. **Exclamatives** such as *Sefur bara í vinnunni!* (literally 'Sleeps simply at workl', i.e. 'You are simply sleeping at workl').
  - d. **Stage directions** such as *Gengur út til hægri* (literally 'Walks out to right', meaning 'Exit stage right').
  - e. **Narrative inversion** such as *Les hann þá bókina og ...* (literally 'Reads he then the book and ...') meaning 'He then reads the book and ...').
  - f. **Subject ellipsis** as in *Veit* (*það*) *ekki* (literally 'Know (it) not' meaning 'Don't know.')

As has often been pointed out in the literature, it is entirely possible that many of these examples are best analyzed as containing a non-overt preverbal element of some sort. Since we will not be concerned with (apparent) V1 constructions in this paper, we will not comment any further on these examples.

## 2.3 Non-subject-initial V3

A second class of well-known exceptions to V2 is characterized by initial non-subject constituents and the verb apparently in third position.

- (3) a. **Left dislocation** such as *Pessi bók* (Nom), *ég keypti hana* (Acc) *í Noregi* (literally and idiomatically: 'This book, I bought it in Norway').
  - b. **Contrastive dislocation** such as *Pessa bók* (Acc), *hana* (Acc) *keypti ég í Noregi* (literally 'This book, it bought I in Norway', meaning 'This book, that one I bought in Norway').
  - c. **Stacked adverbials** as in [Í gær] [um fimmleytið] [þegar ég kom heim úr vinnunni] *hitti ég gamlan félaga* (literally 'Yesterday, around five, when I came home from work, met I old fellow', meaning 'Yesterday, around five, when I came home from work, I met an old friend').

- 304
- d. **XP-***pá* **construction** like *Í fyrra* (*að*) *þá* **komu** fáir ferðamenn til *Íslands* (literally 'In former (that) then came few tourists to Iceland' meaning 'Last year, few tourists visited Iceland.'
- e. **Subjunctive exception** as in *Kannski (að) hann komi* (subjunct.) *á morgun* (literally 'Maybe (that) he come tomorrow' meaning 'Maybe he will come tomorrow').

Closer inspection reveals that there are several differences between the non-subject-initial V3 examples in (3), and they are not all equally well known or straightforwardly analyzed. But it is fairly obvious that the initial constituent in LEFT DISLOCATION in examples like (3a) is in some sense outside the main clause (base generated there or externally merged). One piece of evidence is the fact that case-marked left-dislocated constituents show up in the nominative case whereas their pronominal copy is appropriately case-marked (Acc in (3a) above). By contrast, the case of the initial constituent in the CONTRASTIVE DISLOCATION construction in (3b) is determined by the relevant case assigner in the main clause. This suggests a closer relationship between the initial constituent and the rest of the sentence (see e.g. Thráinsson 1979:59 ff., 2007:358–359; see also Zaenen 1980 and Holmberg 2015:section 2.3.3). Note also that in the CONTRASTIVE DISLOCATION example in (3b), the pronominal copy has been fronted and the subject follows the verb.

In examples like (3c) it appears that the finite verb is preceded by a number of adverbial constituents but it is followed by the subject. In this case the adverbial constituents are all of the same nature (temporal), so an adjunction analysis, where each adverbial is adjoined to the next one, would seem feasible. If so, examples of this sort do not represent a violation of the V2 constraint (see Holmberg 2015: section 2.3.2). Another possibility is that a cartographic analysis along the lines of Rizzi (1997, and later work, especially Benincà & Poletto 2004) is relevant in this context. In that kind of approach the 'left periphery' of sentences has a more complex structure than assumed in early generative structural accounts, which makes room for more than one preverbal constituent. But any analysis of the V2 constraint has to account for the fact that although examples like (3c) are perfectly fine, it is normally not the case that more than one constituent can precede the finite verb, as will be further discussed below.

The so-called XP-*pá* construction in (3d) has been analyzed in considerable detail by Jónsson (2019), who takes a cartographic approach and contrasts this Icelandic construction to the superficially similar XP-*så*-construction discussed by Eide (2011), for instance. Meklenborg (2020) explores resumptive adverbials of this type in all modern V2 languages and shows that the possibility of such resumption in Icelandic is relatively restricted in comparison to the other North-Germanic languages. According to her thorough overview, the most felicitous environment for resumptive adverbials in modern Icelandic is after an initial adverbial clause and after an initial temporal PP or adverbial.

Finally, the 'subjunctive exception' in (3e) is often mentioned as a violation of the V2 constraint. The fact that the initial *kannski* (historically related to *kann ske* 'may happen') may optionally be followed by the complementizer *að* 'that' and the following verb shows up in the subjunctive (*komi* in (3e)) indicates that the structure of examples of this sort may not be that of a simple main clause. Interestingly,

sentences like (4) contrast with (3e) in various ways, illustrated as follows (see e.g. Thráinsson 1986:187-188).

(4) Kannski (\*að) **kemur** hann á morgun. maybe that comes (ind.) he tomorrow 'Maybe he will come tomorrow.'

So if the verb following kannski is in the indicative (which is, of course, the default main clause mood), it has to show up in second position and cannot be preceded by the complementizer  $a\delta$ . We have nothing new to say about the difference between examples like (3e) and (4).

#### 2.4 V3 adverbials

A well-known class of subject-initial exceptions to the V2 contains adverbials of a certain type that can occur between the subject and the finite verb, as originally pointed out by Sigurðsson (1986:144–145) and Thráinsson (1986:175–176). In the following we will refer to these adverbials as V3 adverbials, and they are illustrated in (5).

- (5) a. Ég bara **keypti** bókina. *I just bought book.the* 'I just bought the book.'
  - b. Hann einfaldlega **kann** ekkert. he simply knows nothing 'He simply doesn't know anything.'
  - c. Jón [meira að segja] **hlær** að þessu. John more to say laughs at this 'John even laughs at this.'
  - d. Hann einfaldlega bara kann ekkert. he simply just knows nothing 'He simply just doesn't know anything.'

As (5c) shows, the relevant adverbial can have a complex structure, and as (5d) indicates (based on examples in Sigurðsson 1986:145), the relevant adverbs can be combined or stacked. Interestingly, a similar class of adverbials can 'trigger' V2 violations in Norwegian and Swedish, for instance (see especially the detailed discussion by Brandtler & Håkansson 2017, Julien 2018, and Lundquist 2018). This is exemplified in (6).

- (6) a. [Min dotter] bara **rörde** vid lejonet. (Swedish) my daughter just touched with lion.the 'My daughter just touched the lion.'
  - b. De [rett og slett] bare gjorde et nytt forsøk. (Norwegian) they simply just made a new attempt 'They just simply made a new attempt.'

As example (6b) indicates, the 'V3 adverbials' in Mainland Scandinavian need not be single words and they can also be stacked (compare the Icelandic examples in (5c, d)). We will return to the V3 adverbials below.

As the preceding overview shows, the V2 constraint is not entirely categorical in Icelandic. It can be said to 'leak', and comparable leakage is found in other Germanic V2 languages although they vary in detail in this respect. One question is, then, whether this leakage makes the V2 constraint vulnerable. If so, we might expect to find exceptions to it that could be considered extensions of this leakage, but it would be interesting to see where this leak occurs and what could trigger it. We will keep this in mind in the following sections.

## 3. V3 orders in North-American Icelandic main clauses

# 3.1 Why study V2 in heritage Icelandic?

As English is not a V2 language, it is often assumed that observed violations of the V2 constraint in Germanic V2 languages could be due to influence from English because of its omnipresence in modern European societies and cultures. As for North-American Icelandic (NAI), it is well known that certain characteristics of that language are in part the result of intense language contact with English (for overviews see Arnbjörnsdóttir 2006, Arnbjörnsdóttir & Thráinsson 2018, Arnbjörnsdóttir, Thráinsson & Bragason 2023). Before describing patterns in NAI speakers' preferences for V2/V3 orders, based on the results from Arnbjörnsdóttir, Thráinsson & Nowenstein (2018), it is necessary to give some background information on NAI and its speakers.

Speakers of NAI are heritage (language) speakers who align well with, for example, Polinsky's (2018:9) definition of a 'simultaneous or sequential (successive) bilingual whose weaker language corresponds to the minority language of their society and whose stronger language is the dominant language of that society'. NAI is therefore a heritage language, 'a language spoken at home or otherwise readily available to young children, and crucially this language is not a dominant language of the larger (national) society' (Rothman 2009:156). NAI is preserved in third and fourth generation Canadians and Americans of Icelandic descent. It is now mainly spoken in Canada, more precisely in the Interlake Region north of Winnipeg in Manitoba and in Northern Saskatchewan, and parts of the United States. The bulk of the emigration of Icelandic speakers took place between 1873 and 1914, when over 14,000 Icelanders, out of 75,000 inhabitants, moved to North America. But few emigrated from Iceland after 1914, resulting in almost no renewal of speakers since then. This has resulted in a dramatic decline of the number of persons claiming to speak Icelandic in North America, with few speakers under the age of 75. The data presented in Section 3.2 were collected between 2013 and 2015 within the pluridisciplinary project 'Heritage Language, Linguistic Change and Cultural Identity' (PIs Höskuldur Thráinsson and Birna Arnbjörnsdóttir). 126 Western Icelanders, as they are typically called, participated in the project, and about half of them participated in data collection targeting the V2 constraint.

The V2 constraint was one of many linguistic variables which were tested. It is of interest in the context of heritage languages more generally, in part because syntactic phenomena have been thought to be more 'resilient' than, for example, inflectional morphology in heritage languages, although differences in the development of complex syntax (in comparison with non-heritage speakers), that is, syntactic

constructions involving the higher projections of the CP domain, have also been observed (Benmamoun et al. 2013).<sup>5</sup> In this context, seemingly contradictory findings about V2 in non-heritage Icelandic and other languages are relevant. As mentioned above, V2 is generally robust in non-heritage Icelandic, despite certain leakage, and it is acquired early (Sigurjónsdóttir 1991; see also the discussion of this point in Arnbjörnsdóttir et al. 2018). At the same time, V2 is typologically rare, potentially difficult to acquire by adults in a second language (e.g. Håkansson et al. 2002, Walkden 2017) and the relevant cues involve non-subject-initial clauses (Westergaard 2009), i.e. complex syntax. Considering this, should we expect Icelandic V2 to be preserved in a heritage language situation? If we consider the fact that V2 is robust and acquired early in non-heritage Icelandic, as well as the 'resilience' of syntax in heritage languages, we would expect V2 conservation in NAI. But the possible difficulties of acquiring it in a second language,<sup>6</sup> the fact that cues depend on complex syntax, and the leaks outlined in previous sections, point in the opposite direction. Previous research does too. Indeed, there is clear crosslinguistic evidence of V3 patterns (which would be ungrammatical in the nonheritage language) in English-dominant heritage language situations. This has been shown for German (Schmid 2002), Danish (Kühl & Heegård Petersen 2018), Swedish (Larsson & Johannessen 2015), and Norwegian (Eide & Hjelde 2015, Johannessen 2015, Westergaard et al. 2021). Additionally, it is relevant that the stronger language, English, has SVO and residual V2. This leads to the question of whether the preservation of the V2 constraint in heritage languages, or lack thereof, is conditioned by the word order in the dominant language, i.e. English.

In Section 3.2, we use the data from Arnbjörnsdóttir et al. (2018) to investigate North-American speakers' preferences for V2 or V3. Specifically, we investigate the contexts in which heritage speakers of NAI are most likely to select V3 orders. We expect the speakers' choices to be conditioned by the exceptions documented for non-heritage Icelandic but maybe more so by the word order of the dominant language. We therefore hypothesized that the rate of V3 would be greater in nonsubject-initial clauses (as opposed to subject-initial clauses), where Icelandic is different from the dominant English in that it requires V2. On the other hand, because English is SVO, the subject-initial clauses often have the same word order in the two languages. Looking at subject-initial clauses more closely, we also hypothesized that the rate of V3 would be higher when the finite verb is the lexical verb rather than an auxiliary. The reason is that lexical verbs follow sentential adverbs in English more frequently than auxiliary verbs do, and it has also been reported that children acquiring Nordic languages seem to have a stronger tendency to move auxiliaries than lexical verbs early on (Westergaard 2009). Finally, we assumed that V3 adverbs would entail higher rates of V3, as opposed to V2 adverbs and negation (which also triggers V2 orders in English). Here it is important to note that we do not exclude the possibility that loss of V2 represents an internal change in heritage Icelandic instead of being contact-induced, as will be elaborated on in later sections.

#### 3.2 The results of the study

The data were collected during three visits to North America in 2013–2014. The regions visited were Alberta, British Columbia, Manitoba, Saskatchewan, North Dakota, and

Washington state. V2 was tested in 60 participants aged 26–98, with a mean age of 77. As described in Arnbjörnsdóttir et al. (2018), all the participants were exposed to Icelandic from birth, but 50.9% of them were exposed to English from birth as well, with the rest not encountering English until school. V2/V3 orders were mainly tested as part of a larger forced-choice task battery where participants chose between two or more options. A total of 28 sentences were tested for the V2/V3 variable, 8 non-subject-initial and 20 subject-initial. A typical example of the testing set-up is shown in (7).

(7) Við erum búin að borða. 'We are finished eating.' skulum við Núna við skulum fara í bíó. now shall we/we shall go in cinema 'Now let's go to the cinema.'

As shown here, the testing set-up contained a context sentence followed by the actual test sentence. The test sentence in (7) is a non-subject-initial example and the first option in this case is the V2 variant (*skulum við* 'shall we') and the second is the V3 version (the order of the variants was randomized in the test). In a corresponding English example only the V3 version would be grammatical. Further examples of the V2/V3 sentences tested are given in a simplified fashion in (8) with the context sentences omitted for space-saving reasons.

- (8) a. Hann **vinnur alltaf/alltaf vinnur** fram á kvöld. he works always/always works in to evening 'He always works into the evening.'
  - Hann hefur aldrei/aldrei hefur lesið hana.
     he has never/never has read her
     'He has never read it.'

The subject-initial test sentence in (8a) contains the sentence adverb *alltaf* 'always', which would normally follow the finite verb in non-heritage Icelandic, observing the V2 constraint. The same is true of (8b). In English it would be more natural for most speakers to have the adverb *always* precede the finite main verb in a sentence corresponding to (8a), whereas it would be more common to have the finite auxiliary precede the adverb *always* in an example corresponding to (8b).

The participants were presented with the context and test sentences orally but could also read them on a tablet screen before selecting one or both options. This type of relative judgment contrasts with the absolute judgment task used in various other studies, including Maling & Sigurjónsdóttir (2002), since both options are apparent, the targeted construction clear, and the attention to speech therefore arguably higher, prompting more standard forms. As is common in the fieldwork setting, there was extensive variation in the amount of presented sentences, making statistical analyses more complicated, but mixed effects logistic regression models were run when possible (lme4 in R, see Bates et al. 2015; full modeling results are provided in the supplementary material). In addition to the forced-choice task, elicitation data were collected through storytelling tasks but have only been partially analyzed.<sup>7</sup>

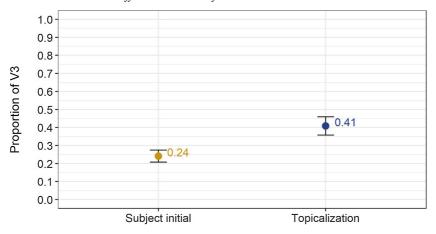


Figure 1. Rate of V3 selection and standard error in forced-choice task by fronting type, NAI.

Before presenting the results of the study, it is important to note that on average the NAI subjects selected V2 more often than the V3 alternative in both subject-initial and non-subject-initial constructions (see Arnbjörnsdóttir et al. 2018). As already pointed out, V2 would be expected in both constructions in non-heritage Icelandic but not in English. The fact that V2 is preferred over V3 would be consistent with the assumption that a V2 grammar is the target grammar during the acquisition of NAI. Hence that is how we will frame the following discussion.

We will first present the results for the selection between V2 and V3 in subject-initial and non-subject-initial examples. Figure 1 shows the difference in V3 rate between these two types of sentences.<sup>8</sup>

As can be seen,  $\overline{V3}$  is selected more frequently when fronting of a non-subject occurs. Non-subject-initial constructions also arguably involve more complexity (or movement) than subject-initial sentences, a factor which might contribute to lack of preservation in heritage languages. This could be explained by various reasons, one of them being simply less exposure to non-subject-initial clauses. In fact, Westergaard et al. (2021) report fewer non-subject-initial clauses in heritage Norwegian and associate this loss of context with lower rates of V2. It is still interesting that across the data, V2 is more commonly selected (73%) than V3 in our results. Even in non-subject-initial sentences, the rate of V3 only reaches 41%, showing that the speakers are clearly far from aligning completely with the word order of the dominant language. This fits individual response profiles. 56.3% of speakers who were presented with more than one non-subject-initial sentence (N=48) showed some intra-speaker variation, the rest chose V2 consistently, meaning that no speaker chose V3 consistently.

Taking a closer look at the subject-initial clauses, Figure 2 shows that the speakers align with the patterns in English and select V3 more often with lexical verbs than with auxiliaries. Figure 3 furthermore shows that the so-called V3 adverbs in non-heritage Icelandic trigger more V3 selection than negation (V2 with negation is consistent with English) and V2 adverbs. Interestingly, the statistical analysis shows that the effect of verb type disappears once we correct for adverb type. This means that the contrast in Figure 2<sup>11</sup> is actually a reflection of the contrast between adverb types in Figure 3, with more of the sentences containing lexical verbs also having V2

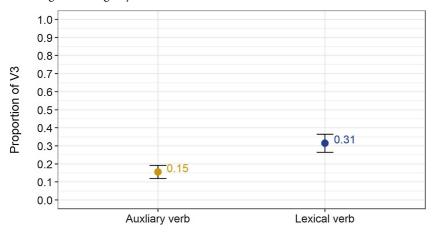


Figure 2. Rate of V3 selection and standard error in forced-choice task by verb type, NAI.

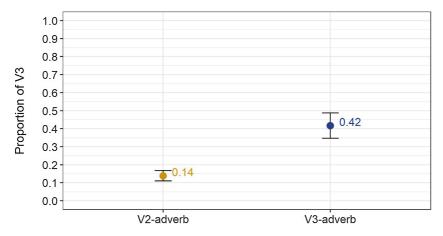


Figure 3. Rate of V3 selection and standard error in forced-choice task by adverb type, NAI.

adverbs or negation. We see that the adverb type triggers the sharpest contrast (Figure 3), with V3 orders only being selected in 14% of sentences with V2 adverbs and negation but reaching 42% with V3 adverbs.

Summarizing this reanalysis of the data from Arnbjörnsdóttir et al. (2018), it is clear that our results show only a partial preservation of V2 in NAI in comparison to non-heritage Icelandic, with speakers selecting V3 orders to varying degrees depending on context in a forced-choice task. V3 was selected more frequently in non-subject-initial sentences. Within subject-initial sentences, adverb type (and negation) also mattered. In line with the somewhat contradictory predictions which can be deduced from the literature, these results cannot be interpreted in any straightforward manner. V2 is in part present, which would be expected considering its robustness, early acquisition, and previously observed 'resilience' of syntactic phenomena in word order. But V3 is also very present, consistent with the dominant language, difficulties in late acquisition of V2, and possibly less exposure to the necessary cues. Additionally, the

conditioning patterns point towards influence from English (Figure 1) as well as the expansion of patterns existing in non-heritage Icelandic (Figure 3). The contrast between the rate of V3 in clauses which are subject-initial and clauses with fronting of a non-subject is consistent with English word order, while the adverb conditioning in Figure 3 is consistent with patterns in non-heritage Icelandic. This suggests that various factors are crucial to the understanding of possible and existing leaks to the V2 constraint. In the following section, we explore additional pieces to this puzzle by studying more closely the exceptions to V2 found in non-heritage Icelandic.

# 4. V3 orders in non-heritage Icelandic

# 4.1 The goal of this section

In their paper on V2 in NAI, Arnbjörnsdóttir et al. (2018) report on a small study designed to compare the selection of V2 and V3 in NAI and non-heritage Icelandic. In this study, the following four test sentences that had been used in the study of NAI were presented to 15 speakers of non-heritage Icelandic under the exact same conditions. The participants in Iceland and the NAI speakers were evenly matched in age, all being over 70 years of age.

- (9) a. Á morgun **við sjáum/sjáum við** það. tomorrow we see/see we it
  - b. Í gær hann fór/fór hann í búðina.

    yesterday he went/went he to store.the
  - c. Núna **vill hann/hann vill** ávexti. now wants he/he wants fruits
  - d. í kvöld **fer hún/hún fer** í bíó. tonight goes she/she goes to cinema

A comparison of the results for around 15 speakers of NAI and the 15 speakers of non-heritage Icelandic is shown in Table 1.<sup>12</sup>

This table is in line with the general belief that the V2 constraint is quite robust in non-heritage Icelandic. Thus the following remark by Maling & Sigurjónsdóttir (2002:114n), in their well-known paper on the NEW IMPERSONAL (aka NEW PASSIVE) construction in Icelandic, came as a surprise:

It is worth noting some curious aspects of the results for ungrammatical control sentences. It may be that subjects paid less attention to word order than to agreement. One of the ungrammatical controls involved a V2 violation:  $\hat{I}$  dag kennarinn er lasinn 'Today the teacher is sick.' A surprising 19% of the adolescents and 14% of the adults accepted this sentence. However, when adult subjects who accepted it were asked to read it back, they read it with grammatical V2 order. While this might be interpreted as reflecting an unconscious correction, it is noteworthy that Pouplier (2001) also found a surprisingly high acceptance rate for V2 violations. Further research is needed to determine how to interpret these results.

		NAI speakers	Non-herit	age spe	eakers	
Example	V2	V3	V2+V3	V2	V3	V2+V3
a. sjáum við/við sjáum	41.2% (7)	52.9% (9)	5.9% (1)	100% (15)	0	0
b. fór hann/hann fór	64.3% (9)	28.6% (4)	7.1% (1)	100% (15)	0	0
c. vill hann/hann vill	68.8% (11)	18.8% (3)	12.5% (2)	100% (15)	0	0
d. fer hún/hún fer	66.7% (10)	33.3% (5)	0	100% (15)	0	0

**Table 1.** Selection of V2/V3 orders in non-subject-initial structures in an interview. Number of speakers in parentheses

What Maling & Sigurjónsdóttir are talking about in this quote is the fact that they included example (10b) in their test as a control sentence. They expected that everybody taking the test seriously would reject it since it would be a clear 'V2 violation' and (10a) would be the only acceptable variant.

In (10a) the finite verb is in second position, as expected for a V2 language like Icelandic, but in (10b) it is in third position. So why did a considerable number of Maling & Sigurjónsdóttir's subjects accept this variant? Three possibilities come to mind.

- (11) Acceptance of V3 examples like (10b) by speakers of non-heritage Icelandic:
  - a. is due to English influence,
  - b. indicates an expansion of patterns existing in the language for language-internal reasons.
  - c. is due to a task effect.

We will now report on two studies that were designed to study these possibilities.

## 4.2 Non-subject-initial V3 examples

# 4.2.1 Results from the MoLiCoDiLaCo project

Non-subject-initial V3 matrix clauses were tested within the MoLiCoDiLaCo project (short for Modeling the Linguistic Consequences of Digital Language Contact) at the University of Iceland (PIs Sigríður Sigurjónsdóttir and Eiríkur Rögnvaldsson). The data were collected between 2017 and 2019, and consisted of a large-scale online survey as well as follow-up interviews and testing sessions (Sigurjónsdóttir & Rögnvaldsson 2018, Nowenstein & Sigurjónsdóttir 2021, Sigurjónsdóttir & Nowenstein 2021). The main goal of the project was to document the presence of English in the Icelandic language community and investigate the

possible effects of English input and use on Icelandic. Amongst other things, data on the distribution of English and Icelandic in participants' language environment were collected and a judgment task administered. 1,615 speakers aged 13-98 participated in the online questionnaire (completed independently by participants) and 126 did the follow-up sessions. 13 Sentences were rated on a five-point Likert scale, ranging from 'unacceptable' to 'completely natural', and each V3 sentence appeared with a context sentence. Each participant rated only one V3 sentence online (four versions were assigned at random, all with preposed adverbials and a pronominal subject) and two sentences in a comparable survey administered during the interviews (one with a pronominal subject and one with a full NP). Additionally, the participants who had accepted V3 sentences in the online survey (ratings 4 and 5) also rated four recorded sentences consisting of two minimal pairs where the variables subject type (pronoun/full NP) and a clear intonational break<sup>14</sup> after the preposed element (break/no break) were manipulated. For the purpose of this paper, we ran regression analyses and nested mixed model comparisons to find out whether contact with English predicted V3 acceptance.

The examples in (12) show the overall acceptance rate of non-subject-initial V3 in the large-scale online survey described above, where 1,504 participants (others did not complete the task) rated one of four sentences targeting the variable.<sup>15</sup>

(12)	N	on-subject-initial V3	acceptance online	rate N
	a.	Í dag <b>hann ætlar</b> að fá sér ís. today he intends to get self ice cream	31%	372
	b.	Bráðum <b>hann þarf</b> að endurnýja áskriftina. soon he needs to renew subscription.the	15%	356
	c.	Stundum <b>hún fer</b> eftir vinnu. sometimes she goes after work	30%	388
	d.	Á fimmtudögum <b>hún fer</b> til sjúkraþjálfara. on Thursdays she goes to physiotherapist	34%	388

This indicates that the mean acceptance rate was 27.5%, which is unexpectedly high. The question is then what the reason could be.

In (11) we listed three possible reasons for acceptance of V3 examples and these were all tested for in the analysis of the data. First, an English contact measure developed within the MoLiCoDiLaCo project, based on participants' answers on their English input and use, did not have a significant effect on their V3 acceptance. Second, V3 acceptance did not show a clear relationship with age, as one might have expected if this V3 acceptance were an indication of an ongoing expansion of existing V3 patterns in the language. This was also surprising because syntactic variation in Icelandic generally correlates with age rather than other social factors (see e.g. the papers in Thráinsson et al. (eds.) 2015). The regression model with the contact measure, including age as well, explained only a minor part of the variation (adjusted R-squared, 0.004017, F = 2.904, DF = 1,413, p < 0.05; full modeling results are provided in the supplementary

(

material). This leaves the third possibility, namely that the V3 acceptance is due to a task effect, i.e. some kind of stable processing effect where participants parse the sentence as V2 even though it is V3, possibly only in a reading task.

To investigate this (and other variables) further, 126 MoLiCoDiLaCo participants came to the University of Iceland for more extensive testing, with 35 of them (28%) having accepted V3 in the online survey. In this test, the acceptance rate of non-subjectinitial V3 dropped to 10.3% for light pronominal subjects and 5.6% for full NP subjects, as shown in (13). This result further points towards a processing task effect, but the difference between acceptance of pronominal and non-pronominal subjects is interesting and we will come back to this.

(13)						acceptance rate listening in an interview
a.					ís. ice cream	10.3%
b.	U	•	ætlar intends		ís. ice cream	5.6%

Although the set-up of the in-person questionnaire was identical to the online survey, the participants were in a different testing environment (university setting, investigator present) which might have prompted another approach to the task. In the testing interviews, more precise information about participants' English input and use were collected. These measures (average English use, input, and proportion) as well as the age of the participant, rating for V3 in the online survey and subject type (pronoun/full NP), were used in a nested mixed effects model comparison with the V3 rating of the in-person survey as the outcome variable. The only variable which improved the fit of the base model significantly was V3 acceptance in the online survey ( $\chi$ 2 (1) = 4.61, p < 0.05). As can be seen in Figure 4, speakers who accepted V3 in the online survey rated the V3 sentences in the in-person survey slightly higher.

This is still only a small effect, and the participants who accepted V3 in person did not necessarily do so online. Finally, the 35 subjects who accepted V3 in the online survey were asked to judge V3 orders by listening to a recording. As shown in (14), it does not really matter whether there is an intonation break (represented by the comma in (14b)) after the preposed constituent when the subject is pronominal.

(14)					acceptance rate listening in an interview
a.	U	ætlar intends		ís. ice cream	17.1%
b.	_	ætlar intends		ís. ice cream	17.1%

When there is a full NP subject as in (15), the example improves if an intonation break is inserted, as in example (15b), but this variable did not significantly improve the fit of a mixed effects model with a subject type/intonation break interaction.

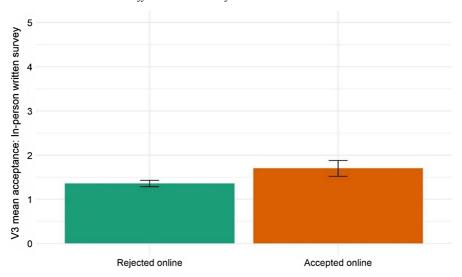


Figure 4. V3 rating and standard error in the in-person questionnaire by rejection/acceptance in the online survey, N = 126.

(15)						acceptance rate listening in an interview
a.	U	•	<b>ætlar</b> intends		ís. ice cream	8.6%
b.	O.	-	ætlar intends		ís. ice cream	17.1%

If this effect is in fact present in the judgments of speakers who accept V3, the effect in the general population is probably too small to be detected with N=35. In general, we can see that of the 35 speakers who accepted V3 in the online survey, only 17.1% of them accepted the sentences when listening to a recording containing the construction. This indicates that a task effect is indeed present, perhaps indicating that participants read the V3 order as V2, possibly in part due to the increased processing cost of parsing a V2 violation (documented by Sayehli et al. 2022 for Swedish).

Although a large part of the observed V3 matrix clause acceptance in the MoLiCoDiLaCo study seems to be due to task effects for the most part, there is still evidence for some leaks from what has traditionally been viewed as robust and categorical. This includes the fact that V3 examples with pronominal subjects get a higher acceptance rate than those with full NP subjects, but an intonation break improves the latter. A further study of the nature of these leaks is presented in the next subsection.

#### 4.2.2 Results from a new online study

The questionnaire data presented in this subsection were collected online by Jónsdóttir (2021) in March 2021 (159 participants of various ages).<sup>17</sup> The questionnaire included 28 minimal pairs contrasting subject-initial and non-subject-initial V2/V3 orders in

matrix clauses. For each test sentence, there were five possible responses, exactly the same as in the online survey in the MoLiCoDiLaCo project:

- (16) a. unacceptable
  - b. rather strange
  - c. neither natural nor unnatural
  - d. rather normal
  - e. completely natural

Seven out of the 28 minimal pairs were introduced with a context sentence in order to help the participants get the intended reading of the test sentences. For a direct comparison, the four relevant examples from the MoLiCoDiLaCo project (see (12)) were used in the questionnaire, and most of the other test sentences were either identical to or modeled after examples from Arnbjörnsdóttir et al. (2018). It should be emphasized here that in Arnbjörnsdóttir et al. (2018) the participants were asked to select between alternatives, while in Jónsdóttir's (2021) survey the speakers were asked to evaluate every example.

Based on the previously presented results from MoLiCoDiLaCo and the empirical observation made by Maling and Sigurjónsdóttir (2002), it is interesting to see to what extent the participants in Jónsdóttir's (2021) survey accepted sentences of this type. The evaluation of each non-subject-initial V3 example is shown in (17). Examples (17b) and (17d, e, f) are from MoLiCoDiLaCo; the other examples are modeled after Arnbjörnsdóttir et al. (2018). As can be seen, they are arranged here in the order from the most frequently to the least frequently accepted. 159 speakers participated in this survey and the acceptance rate is the percentage of speakers.

(17)		accepta online	nce rate
a.	Á morgun <b>við skulum</b> fara að sjá einhverja skemmtilega tomorrow we shall go to see some fun	mynd. <i>movie</i>	24.68%
b.	Stundum <b>hún fer</b> eftir vinnu. sometimes she goes after work		20.89%
c.	Núna <b>hann vill</b> ávexti. now he wants fruits		18.99%
d.	Í dag <b>hann ætlar</b> að fá sér ís. today he intends to get self ice cream		15.82%
e.	Á fimmtudögum <b>hún fer</b> til sjúkraþjálfara. on Thursdays she goes to physiotherapist		15.46%
f.	Bráðum <b>hann þarf</b> að endurnýja áskriftina. soon he needs to renew subscription.the		7.55%
g.	Í gær <b>kötturinn veiddi</b> mús. yesterday cat.the caught mouse		5.03%
h.	Manninn þarna <b>ég þekki</b> .  man.the there I know		4.4%

Note that 5 out of the 8 non-subject-initial test sentences presented here receive an acceptance rate of 15% or higher. In the most commonly accepted sentences the fronted element is an adverbial time frame-setter and the subject is a light pronoun. We will return to this issue in the discussion section. For the moment we will just note that a couple of examples of non-subject-initial V3 are accepted by more than 20% of the participants (around 30 out of 159 speakers). This can hardly be attributed to data noise.

## 4.3 Subject-initial V3 examples

The examples in (18) show the overall acceptance rate by 159 speakers of some selected subject-initial V3 sentences with potential V3 adverbials, arranged as before from the most frequently accepted to the least frequently accepted examples. The test sentences in (18b, c, f, h) are taken from Arnbjörnsdóttir et al. (2018).

(18)	acceptance rate online
a. Hann <b>bara gat</b> ekki lært hana utan a he just could not learn it by hed	
b. Við <b>kannski stoppum</b> á leiðinni heim. we maybe stop on way.the home	38.99%
c. Smiðurinn <b>nefnilega kemur</b> á morgun. carpenter.the namely comes tomorrow	27.85%
d. Hún <b>augljóslega þurfti</b> að fá plástur. she obviously needed to get band-aid	23.41%
e. Ég <b>líka ætla</b> að drífa mig. I also want to hurry myself	12.58%
f. Ég <b>bara vil</b> vatn. I just want water	9.11%
g. Hún <b>líka spilar</b> vel á píanó. she also plays well on piano	6.96%
h. Guðmundur <b>líklega getur</b> keyrt. Guðmundur probably can drive	3.17%

With the exception of (18e) and (18g), there is a speaker-oriented adverb intervening between the subject and the finite verb. Beforehand, one would expect such sentences to be acceptable for the most part because they contain the typical V3 adverbs mentioned above. However, some of them receive quite low scores. A possible explanation is that in all cases the participants were also asked to evaluate an equivalent example with subject-initial V2. Another possibility is that the participants were not thinking of the appropriate intonation since they were reading the examples online rather than listening to them. The relatively high acceptance rate of the English-like word order in (18e) is somewhat surprising as well.

In (19) there is a central sentence adverb intervening between the subject and the finite verb; the examples are all from Arnbjörnsdóttir et al. (2018). A priori, one would

(

not expect them to receive high scores. They were presented to the same 159 speakers as the examples in (18) and the acceptance rate was calculated in the same way as before.

(19)		acceptance rate online
a.	Hún <b>oft fer</b> til Bandaríkjanna. she often goes to USA.the	10.13%
b.	Freyja <b>alltaf hefur</b> unnið svo mikið um helgar. Freyja always has worked so much on weekends	4.43%
c.	Hún <b>alltaf vinnur</b> um helgar. she always works on weekends	2.53%
d.	Kristín <b>stundum talar</b> á ráðstefnum Kristín sometimes speaks on conferences	1.89%

The overall numbers are obviously much lower than we saw for subject-initial V3 with potential V3 adverbs. Interestingly, however, some 10% of the speakers accepted the English-like word order in (19a). This might be linked to the fact that the adverb is very short. But if the possibility of subject-initial V3 in sentences like (19b) and (19c) was somehow linked to English influence (auxiliaries, unlike main verbs, usually do not follow adverbs of this type in English), one would expect (19c) to receive a higher score than (19b), but that is not the case. However, since the scores are so low for both sentences, nothing can be concluded from this comparison. On the case of the score of

## 4.4 An interim conclusion for V2 violations in non-heritage Icelandic

The main results for the subject-initial V3 examples are summarized in (20).

- (20) a. As expected, most of the subject-initial sentences containing typical V3 adverbs (speaker-oriented adverbs like *bara* 'just, simply' or *kannski* 'perhaps') were widely accepted.
  - b. Examples with subject-initial V3 order where the element intervening between the subject and the finite verb was a typical sentence-medial adverb like *stundum* 'sometimes' or *alltaf* 'always' generally received a very low score.

Considering the non-subject-initial V3 constructions, the most interesting results described in this section include the following.

- (21) a. In a large-scale online survey (the MoLiCoDiLaCo study), four V3 sentences with non-subject-initial constituents were accepted by an unexpectedly large proportion of the participants (mean acceptance 27.5% of the population). The subject was pronominal in all instances.
  - b. In a further study of the acceptance of non-subject-initial V3 examples, the highest-rated V3 examples had fronted time adverbials and pronominal subjects. Comparable non-subject-initial examples with non-pronominal subjects received a lower score.

 Non-subject-initial examples with a fronted argument or a fronted clause received a low score.

These results bear a certain resemblance to the V3 data reported for Germanic urban dialects by Walkden (2017), in particular the preference for preposed adjunct over preposed arguments and for pronominal subjects over non-pronominal ones. The highest-rated non-subject-initial V3 examples also have similar clause-initial properties as the most natural resumptive V3 structures in Icelandic, described in Meklenborg (2020) and Van Kemenade & Meklenborg (2021). We will come back to these resemblances in the discussion section at the end of the paper.

# 5. V2 violations in children's lyrics

As already mentioned, it seems that the V2 constraint is acquired early by Icelandic children, despite the fact that the relevant cues to some extent involve relatively complex syntax, such as non-subject-initial sentences. Another set of facts that one might have expected to lead to late acquisition of V2 is the number of real and apparent exceptions to the V2 constraint found in Icelandic and described in the preceding sections. But Icelandic children are also bombarded with extensive exceptions to the V2 constraint in children's lyrics. It is perhaps not unexpected, given the preceding discussion, that many of these involve non-subject-initial structures with a pronominal subject. The preposed elements are not always adverbial, though they frequently are.<sup>21</sup>

```
(22) a. [Einu sinni] ég átti kú
                                                    (Sönglögin okkar, 15)
         one time
                     Ι
                         had cow
         'Once upon a time I had a cow'
     b. [Einn dag] hann var
                                     veiðum
                                                    (Sönglögin okkar, 17)
         one day
                    he
                           was on hunting
         'One day he was hunting'
     c. [Í dýragarð] ég fer ...
                                                    (Sönglögin okkar, 27)
         to zoo
                     Ι
         'I go to a zoo ...
     d. [Sól og vor]
                     eg syng um
                                                    (Vísnabók, 63)
         sun and spring I sing
                                  about
         'I sing about (the) sun and (the) spring'
```

As we can see, the category of the initial constituent is not restricted in any obvious way.

Subject-initial V3 examples are also easy to find in the children lyrics with varying kinds of constituents intervening between the subject and the finite verb.

```
(23) a. Gutti aldrei gegnir þessu (Sönglögin okkar, 39)
Gutti never obeys this
b. [Hún amma mín] það sagði mér
she grandma my that told me
'My grandma told me that'
```

c. Folöldin þá fara á sprett
foals.the then go on sprint
'Then the foals sprint'
d. [Lítill drengur] lúinn er
small boy tired is
'The little boy is tired'

The V3 examples from lyrics just cited, both non-subject-initial and subject-initial ones, can be said to differ rather minimally from normal prose. But there is more to the story. Thus it is possible to find examples of two or more preposed constituents followed by the finite verb and then a postverbal subject, as in (24).

- (24) a. Smeykur [um holtin] **var** hann að vaga (*Vísnabók*, 23) scared on hills.the was he to walk 'He was walking scared on the hills'
  - b. [Fyrr en dagur fagur rann] [freðið nefið] **dregur** hann (*Vísnabók*, 43) before day beautiful came frozen nose draws he 'He pulls his frozen nose before daybreak [from under . . . ]'

Moreover, it is possible to find various kinds of examples of V4, V5, and even V6 in Icelandic lyrics frequently sung to children, where one of the preverbal constituents is the subject (italicized here). The examples in (25) are all from Visnabók so only the page number is given to save space.

- (25) a. hátt nú *allir* **kveði** (V4, p. 15) *high now all sing* 'Everybody should sing loudly now'
  - b. Par [á klettasyllu] [svarti krummi] [sínum börnum] **liggur** hjá (V5, p. 93) there on rock-shelf black raven his children lies with "The black raven lies there by his children on a rock-shelf
  - c. Stundum [eins og hugur hraður] hann [í tröll] sér **getur** breytt (V6, p. 17) sometimes like mind fast he in giant self change can 'Sometimes he can in an instant change himself into a giant'

These examples show that the V2 constraint is considerably relaxed in Icelandic lyrics that are sung for children acquiring the language. Despite this, it seems that Icelandic children acquire the V2 constraint relatively early and easily, as pointed out above, and the literature (see e.g. Sigurjónsdóttir 1991) reports remarkably little V3 in child language production, implying that the evidence for V3 in the children's lyrics does not have a critical impact on the learning trajectories. We will return to this issue in the final section.

# 6. Summary and discussion

## 6.1 Summary of the results

First, let us summarize some of the results from the study of V2/V3 in heritage Icelandic (NAI) outlined in Section 3.

- (26) a. V3 was more frequently accepted (selected in a forced-choice test) in non-subject-initial sentences than in subject-initial sentences.
  - b. Adverb type played a role: V3 was more frequently accepted in the case of V3 adverbs as opposed to negation and V2 adverbs.

We argued that while (26a) suggests influence from English (V3 is the common order in non-subject-initial sentences in English), (26b) is consistent with the assumption that the target grammar of the NAI speakers is an Icelandic V2 grammar.

To verify the difference between the acceptance of V2 violations in NAI and nonheritage Icelandic, part of the V2 experiment that had been used in North America was administered to an equally large group of speakers in Iceland who were evenly matched with respect to age (the mean age of the participants was over 70 in both groups). The difference was very clear: the speakers of non-heritage Icelandic did not accept (or select) the V3 variants (see the discussion around Table 1 in Section 4.1 above). But because there had been some evidence that certain V2 violations were accepted by some Icelandic speakers, the extent and nature of such violations were examined in two studies, partly to check for evidence from English and partly to see if younger speakers were more likely to accept such violations. Somewhat surprisingly, the acceptance of V3 showed no significant relationship with the participants' age or any other sociological variables. Equally surprisingly perhaps, there was no significant relationship between acceptance of V3 and the participants' 'exposure to English' (as measured by their answers to questions about their English input and use), making influence from English unlikely. An investigation of the acceptance of subject-initial V3 examples also revealed that these were typically rejected unless they contained the well-known 'V3 adverbs' (e.g. 'just', 'simply', 'obviously'). Examples with other adverbs intervening between the subject and the finite verbs, such as 'sometimes' and 'always', generally received a very low score. Since comparable examples are typically fine in English, this is perhaps not what we would have expected if V3 orders in Icelandic were the result of influence from English.

Nevertheless, some of the non-subject-initial examples were accepted by an unexpectedly large proportion of the participants (mean acceptance 27.5% of the population in one of the online studies). The fact that the acceptance rate for V3 dropped significantly in interviews indicates that this high acceptance rate can partly be explained as a task effect, that is, the participants were actually processing some of the V3 examples as V2 constructions when presented with them visually (in reading). But a group of speakers persisted in their acceptance of V3, even when presented with audio recordings of the sentences. This suggests that the online acceptance cannot be explained solely as a task effect (perhaps based on processing cost; see Sayehli et al. 2022) as originally suggested by Maling & Sigurjónsdóttir (2002).

A further investigation of the nature of the V2 violations studied revealed interesting facts. First, the highest-rated non-subject-initial V3 examples had a fronted adjunct (a time or space adverbial) and a pronominal subject. Comparable non-subject-initial examples with non-pronominal subjects received a lower score,

as did examples with fronted arguments and clauses. Second, the insertion of an intonation break between fronted elements and a non-pronominal subject led to somewhat increased acceptance (see the discussion around the examples in (15)).

Finally, we did a brief study of V2 violations in Icelandic poetry. It is well known, of course, that poetic language does not always obey the same linguistic rules as nonpoetic language. This seems to be especially true of rules involving word order (see e.g. O'Neil 2001, Eythórsson 2009, Fabb 2010, Thoms 2010, Magnusson Petzell & Hellberg 2014, Häussler et al. 2019). Linguists disagree as to whether the rules of poetic language should be seen as an extension of the 'standard' rules of the relevant language, or at least as rules permitted by UG in some languages (see e.g. O'Neil 2001, Eythórsson 2009, Fabb 2010), or whether poetic language is to some extent generated by different means (Thoms 2010).<sup>22</sup> We do not have much to say about that issue at this point, but we would like to make two comments. First, many of the non-subject-initial V3 examples from poetry found in our study are similar to those accepted most frequently by Icelandic speakers in an experimental situation involving Icelandic prose: the fronted element is an adjunct and the subject is pronominal. Second, the most obvious difference between fronted constituents in the poetry we have looked at and fronted constituents in non-poetic Icelandic is the fact that there does not seem to be a clear upper limit on the number of fronted constituents in poetic language. In addition, it is not obvious that their relative order is governed by any syntactic principles (see Thoms 2010:43 passim for a similar observation on displacements in English poetry).

#### 6.2 Discussion

In our study of poetic language we concentrated on lyrics that are typically sung to children. The main reason was that we wanted to know how extensive violations of the V2 constraint were in this kind of input to children who are acquiring language. It turned out that they were quite extensive. Still it has been pointed out in the literature that Icelandic children seem to acquire the V2 constraint quite early. The same is apparently true of Norwegian children (see Westergaard 2009). Interestingly, Norwegian children are also 'bombarded' with the same kind of V2 violations in lyrics as shown by the following examples.<sup>23</sup>

- (27) Non-subject-initial V3 and V4
  - a. moro vi har fra morgen til kveld! (V3, '17. mai sang for de små') fun we have from morning to evening
     'We have fun from morning to night'
  - b. Tidt du **dansa** kringom meg (V3, 'Blåmann') often you dance around me
  - c. [På piano] jeg **spiller** (V3, 'Jeg er en liten spillemann') on piano I play
    'I play the piano'

- d. [Med krøllet hale og nesevis] [i bingen] **springer** en gris (V3, 'Grisevisa') with curly tail and impertinent in stall.the jumps a piglet 'An impertinent piglet with a curly tail jumps around in the sty'
- e. [Hver en dag] jeg [til mitt brød] **drikker** melka di ... (V4, 'Kua mi jeg takker deg')

  each day I to my bread drink milk your 'Every day I drink your milk with my bread'

#### (28) Subject-initial V3

- a. [Alle killebukkene] [på haugen] **sprang** ('Alle killebukkene') all he-goats.the on mound.the jumped 'All the he-goats jumped on the mound'
- b. [En liten kylling] [i egget] lå ('En liten kylling')

  a small chick in egg.the lay

  'A small chick lay in the egg'
- c. [Mors lille Ole] [i skogen] **gikk** ('Mors lille Ole')

  mother.GEN little Ole in wood.the went

  'Mother's little Ole went into the woods'

Thus the Norwegian facts support the observation made above. Children acquiring language can disregard the potentially 'misleading' word order input they receive in lyrics frequently sung (or read) to them, just as they can ignore certain instances of grammatically deviant input when building their grammar. Still, they do encounter these V2 violations in their input, and we could therefore speculate that this exposure builds up a tolerance for V3 (and other violations) and an ability to reinterpret it as V2. This exercise might consequently play a role in the task effects described in previous sections.

Another theoretically interesting fact about the V2 violations discussed is the following: the fronting data from non-heritage Icelandic typically resemble the V3 data reported for Germanic urban dialects by Walkden (2017), who largely based his study on data reported by Freywald et al. (2015) (see also Meklenborg 2020, Van Kemenade & Meklenborg 2021). Walkden's main findings can be summarized as follows.

- (29) a. The V3 orders are typically non-subject-first structures rather than subject-first sentences.
  - b. The first element is almost always an adjunct and not an argument. Although it is not categorically restricted, adverbs or adverbial phrases are most common, i.e. 'frame-setters' in terms of time, place, or condition, as he calls them (Walkden 2017:55).
  - c. The second element is almost always the subject, usually pronominal.

Although V3 is still exceptional in such constructions in Icelandic, the experimental data discussed in Section 4 showed that some V3 examples that had the properties described by Walkden were typically better received than other V3 main clauses. Many of the examples cited from Icelandic and Norwegian children's lyrics are also

of this kind. This is very interesting because the V3 data presented by Walkden arise in a completely different linguistic situation. Hence the observed similarity indicates that this particular type of V2 violation is somehow more 'natural' or more likely to occur than others. But the data from the study of NAI show that the violations of V2 can be extended, as it were, in a heritage language, presumably in part because of influence from the dominating language of the area. Different extensions of these violations are found in the poetic language studied, although 'Walkden-like' examples were also common there.

Thus we can conclude that violations of V2 that have the properties described by Walkden have a special status. They are the most common type, together with the subject-initial V3 examples involving the V3 adverbs discussed above (e.g. 'just', 'simply'). Other types of V2 violation are more exceptional. They are found in heritage Icelandic (NAI) and in poetic language. But in some instances such violations can be made more acceptable with certain prosodic factors. This has been demonstrated by Breitbart (2022) for German V2 violations. It is also reminiscent of the observation made by Eide (2011) in her study of Norwegian non-V2 declaratives. Eide argues that in the Norwegian så-construction (e.g. [I forrige uke] så sa Marit at ... lit. 'In last week then said Mary that ...', i.e. 'Last week Marit said that ...') and the COPY LEFT DISLOCATION (CLD) as she calls it (e.g. [Ei leiligheit] det skulle vi hatt = lit. 'An apartment it should we had', i.e. 'An apartment, we should have had one'), the resumptive elements (så and the relevant pronominal copy) are necessarily light. Hence they can occupy the 'Wackernagel position' right before the verb whereas heavier constituents cannot. She also points out (Eide 2011:191; see also Anderson 1993) that 'the constructions we are discussing here are typically spoken phenomena ... making the potential importance of prosody and stress patterns more likely'.

In any case, the data presented here show that V3 acceptance persists through various testing scenarios in a minority of non-heritage Icelandic speakers, and that it is not predicted by a possible contact scenario. We believe that further investigation of such a marginal phenomenon with well-established parallels in related languages might be informative in the context of language variation and change more broadly, but future work should also further investigate the implications for work on acceptability judgment reliability and sentence processing (e.g. Ferreira 2005, Sprouse & Almeida 2012).

Supplementary material. To view supplementary material for this article, please visit https://doi.org/10.1017/S0332586523000148

**Acknowledgements.** Many thanks to the editors and reviewers of *Nordic Journal of Linguistics* for extremely useful comments and suggestions, including several helpful references to relevant literature. Special thanks go to all the participants in the various research projects described in the paper.

#### **Notes**

- 1. The glossing of linguistic examples in this paper follows the Leipzig Glossing Rules. In some instances linguistic abbreviations need to be used in other contexts, but they only involve ones that should be familiar or straightforward, such as *Acc* for accusative, *Adv-Vfin* for a word order where an adverb precedes a finite verb, *ind.* for indicative, *Nom* for nominative and *subjunct*. for subjunctive.
- 2. For early descriptions of some of these example types see Thráinsson (1986) and Sigurðsson (1986, 1990).

- **3.** Note also that CONTRASTIVE DISLOCATION can occur in some embedded clauses whereas LEFT DISLOCATION cannot (see e.g. Thráinsson 2007:359). Eide (2011) discusses a variety of dislocation constructions, and mentions (p. 185) that the case-marking difference between LEFT DISLOCATION (or HANGING TOPIC LEFT DISLOCATION) and CONTRASTIVE DISLOCATION (her COPY LEFT DISLOCATION, CLD) is also found in German.
- **4.** As Sigurðsson shows (1986:141–142), there are some more 'subjunctive exceptions' that are reminiscent of (6e) such as the following.
- (i) a. Ætli (að) Jón komi?
   wonder that Jón come (subjunct.)
   'I wonder if John will come.'
  - b. Bara (að) Jón komi!
     only that Jón come (subjunct.)
     'If only John would come!'

Sigurðsson refers to these as 'unembedded but inherently subordinate'. We have nothing interesting to say about them.

- 5. Although we refer to previous literature where terms such as 'resilience' (here in reference to the review by Benmamoun et al. 2013), 'incomplete acquisition', and 'attrition' are used to describe the differences between heritage and non-heritage speakers, we do agree with Kupisch & Rothman (2018), Polinsky (2018:25), and others regarding the problematic aspects of such terminlogy.
- **6.** A comparison between heritage language acquisition and simultaneous bilingual acquisition would provide an additional (and arguably more relevant) contrast than the comparison to second language acquisition, but unfortunately we are not aware of extensive recent studies on V2 in such contexts.
- 7. More examples from the elicitation task are illustrated in Section 4.1.
- 8. Here 'Topicalization' refers to non-subject-initial structures that may not all qualify as TOPICALIZATION in the strictest sense.
- **9.** Adding the fronting variable to a base model (random intercept for participants) for the data fit significantly (likelihood ratio test,  $\chi 2$  (1) = 10.85, p < 0.001). Full modeling results are available in the supplementary material.
- 10. ANOVA for the model including verb and adverb type (random intercept for participants; full modeling results are available in the supplementary material):

	estimate	standard error	z-value	<i>p</i> -value
verb type	0.3266	0.3783	0.863	0.388
adverb type	1.4777	0.3801	0.3801	< 0.001

- 11. We still consider Figure 2 relevant, as it provides descriptive statistics of the results.
- 12. Although the subjects had been told that they could check (or point to) more than one alternative, they very rarely did so. The relevant numbers are shown in the V2+V3 columns.
- 13. 724 children aged 3-12 also participated in the project but their results are not discussed here.
- 14. The length of the intonation break was not measured.
- **15.** The acceptance rate here, and in the report in Section 4.2.2 on similar studies that used the five-point Likert scale (see also (16)), consists of the combined results for the 'completely natural' and 'rather normal' ratings.
- **16.** Full modeling results are provided in the supplementary material.
- 17. Full descriptive results and stimuli are available in her BA thesis (Jónsdóttir 2021).
- 18. Recall that all the non-subject-initial V3-alternatives presented to the speakers in the NAI study were also of this kind, but still the elderly non-heritage speakers never selected them in the comparative study (see Table 1). It should also be noted in this connection that Jónsdóttir's (2021:34–36) comparison of age groups did not reveal any significant results.
- 19. Walkden (2017:56) reports examples with light adverbials in preverbal position from Kiezdeutsch, and his analysis is able to account for these. Similarities between our results and the data presented by Walkden are discussed in the final section.
- **20.** Angantýsson (2007) claims that the acceptability of subject-initial V3 in embedded clauses containing sentence adverbs like *ekki* 'not', *stundum* 'sometimes', and *aldrei* 'never' depends to a certain extent on the

subject type. More specifically, he argues that Adv-Vfin orders are more natural with light pronouns than non-pronominal subjects in relative clauses modifying an AP, indirect questions with a *wh*-adverb, and in some adverbial clauses, i.e. concessive clauses, causal clauses, conditional clauses, and temporal clauses. According to him, examples like (iib) are more natural than (iia), and this holds especially if the pronominal subject in the temporal clause in (iib) is pronounced as if it were cliticized (i.e. *þegar'ún*).

- ?Jón venjulega á fyllerí fer þegar konan hans ekki heima. on drinking wife his home Jón goes usually when not
  - b. Jón fer venjulega á fyllerí þegar hún ekki er heima. Jón goes usually on drinking when she not is home 'Jón usually gets drunk when his wife/she is not at home.'

A clitic pronoun is obviously not possible in initial position since there is no element for the clitic to be associated with. Thus the option of improving examples like (19a) and (19c) by using a clitic-like pronominal subject is not available.

- 21. The Icelandic examples are taken from collections of children's lyrics as indicated. See the References.
- 22. It is interesting to note in this connection that certain kinds of potential violations of grammatical rules do not seem to occur, or are very rare, in poetic language. Thus we have not observed any violations of casemarking and agreement rules. Häussler et al. (2019) also report that the participants in their German experiment rejected all examples involving violations of agreement rules, 'poetic' and non-poetic, but accepted violations of the V2 constraint if the examples were made to sound like poetry.
- 23. All the Norwegian examples are taken from the website *barnesanger.no* and the names of the songs are included here. Similar examples can be found in Swedish poetry, although Magnusson Petzell & Hellberg (2014:207) claim that 'deviant word order has gradually been ruled out in high quality poetry' in Swedish.

#### References

Anderson, Stephen R. 1993. Wackernagel's revenge: Clitics, morphology, and the syntax of second position. *Language* 69. 68–98.

Angantýsson, Ásgrímur. 2007. Verb-third in embedded clauses in Icelandic. Studia Linguistica 61(3). 237–260

Angantýsson, Ásgrímur. 2020. The distribution of embedded Verb Second and Verb Third in modern Icelandic. In Woods & Wolfe (eds.), 240–264.

Angantýsson, Ásgrímur, Iris Edda Nowenstein & Höskuldur Thráinsson. 2021. English-like V3-orders in matrix clauses in Icelandic. *Working Papers in Scandinavian Syntax* 106 (2021). 17–46.

Arnbjörnsdóttir, Birna. 2006. North American Icelandic: The life of a language. Winnipeg: University of Manitoba Press.

Arnbjörnsdóttir, Birna & Höskuldur Thráinsson. 2018. Hvað einkennir vesturíslensku? Yfirlit um fyrri rit og rannsóknir [What characterizes North-American Icelandic? An overview of previous research]. In Birna Arnbjörnsdóttir, Höskuldur Thráinsson & Úlfar Bragason (eds.), Sigurtunga: Vesturíslenskt mál og menning [Victorious language: North-American Icelandic language and culture], 211–255. Reykjavík: Háskólaútgáfan.

Arnbjörnsdóttir, Birna, Höskuldur Thráinsson & Úlfar Bragason. 2023. Introduction. In Birna Arnbjörnsóttir, Höskuldur Thráinsson & Úlfar Bragason (eds.), *Icelandic heritage in North America*, 1–31. Winnipeg: University of Manitoba Press.

Arnbjörnsdóttir, Birna, Höskuldur Thráinsson & Iris Edda Nowenstein. 2018. V2 and V3 orders in North-American Icelandic. *Journal of Language Contact* 11(3). 379–412.

Bates, Douglas, Martin Mächler, Ben Bolker & Steve Walker. 2015. Fitting linear mixed-effects models using lme4. Journal of Statistical Software 67(1). 1–48.

Benincà, Paola & Cecilia Poletto. 2004. Topic, focus, and V2: Defining the CP sublayers. In Luigi Rizzi (ed.), The cartography of syntactic structures, vol. 2, The structure of CP and IP, 52–75. Oxford: Oxford University Press.

- Benmamoun, Elabbas, Silvina Montrul & Maria Polinsky. 2013. Heritage languages and their speakers: Opportunities and challenges for linguistics. *Theoretical Linguistics* 39(3–4). 129–181.
- Brandtler, Johan & David Håkansson. 2017. V2 eller V3? Om preverbal placering av adverbial i svenskan [V2 or V3? On the preverbal placement of adverbials in Swedish]. *Norsk Lingvistisk Tidsskrift* 35(1). 11–26.
- Breitbart, Anne. 2022. Prosodie, Syntax und Diskursfunktion von V>2 in gesprochenem Deutsch. *Deutsche Sprache* 50(1). 1–30.
- Eide, Kristin Melum. 2011. Norwegian (non-V2) declaratives, resumptive elements, and the Wackernagel position. *Nordic Journal of Linguistics* 34(2). 179–213.
- Eide, Kristine Melum & Arnstein Hjelde. 2015. Verb second and finiteness morphology in Norwegian heritage language of the American Midwest. In B. Richard Page & Michael T. Putnam (eds.), Moribund Germanic heritage languages in North America: Theoretical perspectives and empirical findings, 64–101. Leiden: Brill.
- Eythórsson, Thórhallur. 2009. The syntax of the verb in Old Icelandic: Evidence from poetry. In Tonya Kim Dewey & Frog (eds.), *Versatility in versification: Multidisciplinary approaches to metric*, 61–77. New York: Peter Lang.
- Fabb, Nigel. 2010. Is literary language a development of ordinary language? *Lingua* 120(5). 1219–1232. Ferreira, Fernanda. 2005. Psycholinguistics, formal grammars, and cognitive science. *Linguistic Review* 22(2–4). 365–380.
- Freywald, Ulrike, Leonie Cornips, Natalia Ganuza, Ingvild Nistov & Toril Opsahl. 2015. Beyond verb second: A matter of novel information-structural effects? Evidence from Norwegian, Swedish, German and Dutch. In Jacomine Nortier & Bente A. Svendsen (eds.), Language, youth and identity in the 21st century: Linguistic practices across urban spaces, 73–92. Cambridge: Cambridge University Press.
- Håkansson, Gisela, Manfred Pienemann & Susan Sayehli. 2002. Transfer and typological proximity in the context of second language processing. Second Language Research 18(3). 250–273.
- Häussler, Jana, Anne Mucha, Andreas Schmidt, Thomas Weskott & Marta Wierzba. 2019. Experimenting with *Lurchi*: V2 and agreement violations in poetic contexts. In J. M. M. Brown, Andreas Schmidt & Marta Wierzba (eds.), *Of trees and birds: A festschrift for Gisbert Fanselow*, 307–321. Potsdam: Universitätsverlag Potsdam.
- Holmberg, Anders. 2015. Verb second. In Tibor Kiss & Artemis Alexiadou (eds.), Syntax Theory and Analysis: An International Handbook, vol. I, 242–283. Berlin: Mouton de Gruyter.
- Johannessen, Janne Bondi. 2015. The corpus of American Norwegian speech (CANS). Proceedings of the 20th Nordic Conference of Computational Linguistics (NODALIDA 2015), 297–300. Linköping: Linköping University Electronic Press.
- Jónsdóttir, Írena Rut. 2021. *Enskuleg orðaröð í íslensku: 'Hún líka spilar vel á píanó'* [English-like word order in Icelandic . . . ]. Reykjavík: University of Iceland Bachelor's thesis. Available at http://hdl.handle.net/1946/39897.
- Jónsson, Jóhannes Gísli. 2019. The XP-þá-construction and V2. In Ken Ramshøj Christensen, Henrik Jørgensen & Johanna L. Wood (eds.), *The sign of the V: Papers in honour of Sten Vikner*, 341–360. Aarhus: Department of English, Aarhus University.
- Julien, Marit. 2018. Om preverbale adverbialer [On preverbal adverbials]. Norsk Lingvistisk Tidsskrift 36(1). 161–178.
- Kemenade, Ans van & Christine Meklenborg. 2021. Issues in the left periphery of Old French and Old English: Topic types and the V2 constraint. In Sam Wolfe & Christine Meklenborg (eds.), *Continuity and variation in Germanic and Romance*, 248–274. Oxford: Oxford University Press.
- Kühl, Karoline & Jan Heegård Petersen. 2018. Word order in American Danish declaratives with a nonsubject initial constituent. *Journal of Language Contact* 11(3). 413–440.
- Kupisch, Tanja & Jason Rothman. 2018. Terminology matters! Why difference is not incompleteness and how early child bilinguals are heritage speakers. *International Journal of Bilingualism* 22(5). 564–582.
- Larsson, Ida & Janne Bondi Johannessen. 2015. Incomplete acquisition and verb placement in heritage Scandinavian. In B. Richard Page & Michael T. Putnam (eds.), Moribund Germanic Heritage languages in North America: Theoretical perspectives and empirical findings, 153–189. Leiden: Brill.
- Lundquist, Björn. 2018. Mer om de preverbala adverbialens syntax, semantik och prosodi [More about preverbal adverbial syntax, semantics and prosody]. Norsk Lingvistisk Tidsskrift 36(1). 179–195.

- Magnusson Petzell, Erik & Staffan Hellberg. 2014. Deviant word order in Swedish poetry. *Lingua* 143. 203–223.
- Maling, Joan & Sigríður Sigurjónsdóttir. 2002. The 'new impersonal' construction in Icelandic. *Journal of Comparative Germanic Linguistics* 5. 97–142.
- Meklenborg, Christine. 2020. Adverbial resumptive particles and Verb Second. In Woods & Wolfe (eds.), 90–125.
- Nowenstein, Iris Edda & Sigríður Sigurjónsdóttir. 2021. Stafrænt málsambýli íslensku og ensku: Áhrif ensks ílags og málnotkunar á málfærni íslenskra barna [Digital language contact between Icelandic and English: The effect of English input and usage on the language proficiency of Icelandic children]. *Ritið* 21(3). 11–56.
- O'Neil, Wayne. 2001. Grammar games: Unscrambling skaldic syntax. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 339–354. Cambridge, MA: MIT Press.
- Polinsky, Maria. 2018. Heritage languages and their speakers. Cambridge: Cambridge University Press.
- Pouplier, Marianne. 2001. Verb-second violations in Modern Icelandic. New Haven, CT: Yale University Ms.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: Handbook in generative syntax*, 281–337. Dordrecht: Kluwer.
- Rothman, Jason. 2009. Understanding the nature and outcomes of early bilingualism: Romance languages as heritage languages. *International Journal of Bilingualism* 13(2). 155–163.
- Sayehli, Susan, Marianne Gullberg, Aaron J. Newman & Annika Andersson. 2022. Native word order processing is not uniform: An ERP study of verb-second word order. Frontiers in Psychology 13. 668276.
- Schmid, Monika S. 2002. First language attrition, use and maintenance: The case of German Jews in anglophone countries. Amsterdam: John Benjamins.
- Sigurðsson, Halldór Ármann. 1986. Verb post-second in a V2 language. In Östen Dahl & Anders Holmberg (eds.), *Scandinavian syntax*, 138–149. Stockholm: Institute of Linguistics, University of Stockholm.
- Sigurðsson, Halldór Ármann. 1990. V1 declaratives and verb raising in Icelandic. In Joan Maling & Annie Zaenen (eds.), *Modern Icelandic syntax*, 41–69 (Syntax and Semantics 24). San Diego, CA: Academic Press.
- Sigurjónsdóttir, Sigríður. 1991. Spurnarsetningar í máli tveggja íslenskra barna [Interrogative sentences in the language of two Icelandic children]. Reykjavík: Málvísindastofnun Háskóla Íslands. (The author's 1987 MA thesis at the University of Iceland.)
- Sigurjónsdóttir, Sigríður & Iris Edda Nowenstein. 2021. Language acquisition in the digital age: L2 English input effects on children's L1 Icelandic. Second Language Research 37(4). 697–723.
- Sigurjónsdóttir, Sigríður & Eiríkur Rögnvaldsson. 2018. Stafrænt sambýli íslensku og ensku [Digital language contact between Icelandic and English]. *Netla* (special issue).
- Sönglögin okkar = Sönglögin okkar: 20 vinsæl sönglög [Our songs: 20 popular songs]. 2017. Reykjavík: Sögur.
- Sprouse, Jon & Diogo Almeida. 2012. Assessing the reliability of textbook data in syntax: Adger's Core Syntax. *Journal of Linguistics* 48(3). 609–652.
- Thoms, Gary Stewart. 2010. Poetic language: A minimalist theory. Glasgow: University of Strathclyde doctoral dissertation.
- Thráinsson, Höskuldur. 1979. On complementation in Icelandic. New York: Garland. (Also published by Routledge, Abingdon, 2016.)
- Thráinsson, Höskuldur. 1986. V1, V2, V3 in Icelandic. In Hubert Haider & Martin Prinzhorn (eds.), *Verb second phenomena in Germanic languages*, 169–194. Dordrecht: Foris.
- Thráinsson, Höskuldur. 2007. The syntax of Icelandic. Cambridge: Cambridge University Press.
- Thráinsson, Höskuldur, Ásgrímur Angantýsson & Einar Freyr Sigurðsson (eds.). 2015. *Tilbrigði í íslenskri setningagerð II: Helstu niðurstöður: Tölfræðilegt yfirlit* [Variation in Icelandic Syntax II: Main results: A statistical overview]. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Vísnabók = Vísnabókin [Verse book], 5th edn. 1973. Poems selected by Símon Jóh. Ágústsson. Reykjavík: Hlaðbúð
- Walkden, George. 2017. Language contact and V3 in Germanic varieties new and old. *Journal of Comparative Germanic Linguistics* 20. 49–81.

- Westergaard, Marit. 2009. The acquisition of word order: Micro-cues, information structure, and economy. Amsterdam: John Benjamins.
- Westergaard, Marit, Terje Lohndal & Björn Lundquist. 2021. Variable V2 in Norwegian heritage language: An effect of crosslinguistic influence? *Linguistic Approaches to Bilingualism* 13(2). 133–162.
- Woods, Rebecca & Sam Wolfe (eds.). 2020. Rethinking Verb Second. Oxford: Oxford University Press.
   Zaenen, Annie. 1980. Extraction rules in Icelandic. Cambridge, MA: Harvard University doctoral dissertation. (Published by Garland, New York, 1985.)

Cite this article: Angantýsson Á, Nowenstein IE, and Thráinsson H (2025). V2 violations in different variants of Icelandic: A common denominator? *Nordic Journal of Linguistics* **48**, 301–329. https://doi.org/10.1017/S0332586523000148