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**VARIATION IN FINITE VERB PLACEMENT IN HERITAGE IOWA LOW GERMAN:
THE ROLE OF PROSODIC INTEGRATION AND INFORMATION STRUCTURE.**

A Dissertation in
German

by
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ABSTRACT

Finite verb placement in German(ic) contact languages has received heightened attention in recent years. In particular, the occurrence of main clauses with two preverbal constituents instead of the “canonical” only one, or verb-third word order (V3), has attracted researchers’ interest especially for Germanic contact varieties. Although previous studies of V3 in urban vernaculars, heritage languages and monolingual populations have used a variety of different methodologies, and proposed an abundance of theoretical approaches, to date, there has been no study (1) using variationist methodology, (2) exploring the contributions of prosody and information-structure to V3 syntax, (3) offering a longitudinal perspective, and (4) focusing on heritage Low German in the United States. This dissertation seeks to fill these gaps.

The dissertation is based on a total of 58 interviews recorded in 1998 and 2018/19 with 46 heritage East Frisian Low German speakers from Grundy County and surrounding counties in Iowa, USA. The community was established in the USA in the mid-19th century and is now acutely endangered by communal language shift to English as the majority language. In addition to a detailed sociolinguistic history of this speech community, the dissertation presents a quantitative description of the linguistic and social factors contributing to the use of V3-structures.

A statistical analysis of more than 2000 main clauses confirms the presence of a sentence-initial adverbial (i.e. a temporal adverb) to be the most significant constraint on V3-structures. The exploration of a more narrowly defined data-set of more than 600 main clauses with sentence-initial adverbials reveals both linguistic and social factors contributing to the variable use of V3-structures. Most notably, V3-structures are most strongly favored by

prosodically separated adverbials which occur in a preceding intonation unit from the finite main verb and/or are followed by a pause. An additional factor that favors V3-structures is greater prosodic weight (i.e., more preverbal syllables). These prosodically separated adverbials may serve to highlight a contrast between information from the previous discourse and new (contrary) information in the subsequent intonation unit, and seem to be consciously employed as effective narrative devices by the speakers.

Also promoting V3 are verbs conjugated in the present tense. From a more exploratory survey of the data, it emerges that V3-structures are preferred in longer, uninterrupted narrations, where a narrative present tense may be used as a storytelling strategy. Moreover, V3-structures may be more frequently used when the subject has been mentioned in the 10 preceding intonation units but importantly is different from the subject referent in the immediately preceding intonation unit. In other words, V3-structures seem to be more likely, if the subject is topical and accessible but needs to be “reactivated” after an utterance with a different subject referent.

Concerning the social factors, it is shown that men use V3-structures markedly more often than women and that the usage of V3-structures increased over time, both with regard to speakers’ year of birth and between the two points of data collections. Nevertheless, because the usage of V3-structures remains constrained by linguistic factors and is systematically motivated by discourse-pragmatic needs, these structures do not occur arbitrarily. Thus, the observed verb placement variation seems to be part of an ongoing communal language change.

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1 Introduction

In recent years, there has been an increase in the study of heritage languages, broadly defined as a “language spoken at home or otherwise readily available to young children, and crucially [...] not a dominant language of the larger (national) society” (Rothman 2009: 156). In the US-American context, this definition holds true for those immigrant communities that were established in the nineteenth century, often referred to as *Sprachinseln* or language islands, where children still learned their ancestors’ language decades or even centuries after the initial establishment of the settlement. Attracting scholars’ attention have been issues of language change, as they may arise from contact with the majority language, due to systematic linguistic developments in the community, or a mix thereof.

One phenomenon that has gained widespread interest is the positioning of the finite verb in German main clauses. German and Low German varieties are traditionally considered to be verb second (V2) languages, meaning that the finite verb occurs after a single sentence-initial constituent. However, an abundance of newer studies calls this notion into question, showing that structures with two sentence-initial preverbal constituents, usually referred to as verb third (V3) structures, are found in a number of German varieties. However, the actual patterns in the data of natural speech production remain understudied. What does V3 mean in the speech stream? Which effects do prosody and information-structure have on verb positioning? And which other (socio-)linguistic factors influence the occurrence of V3-structures? This dissertation seeks to answer these overarching questions by providing a detailed analysis of one particular community: the East Frisian Low German heritage speakers in Iowa, USA.

1.1. Overview of aims and research questions

This dissertation offers a new approach to an extensively-studied phenomenon in German syntax, namely verb placement variation in declarative main clauses, by combining aspects of variationist comparative analysis, prosody and information-structure. Numerous studies suggest that language-contact situations may foster the development of syntactic variation different from that found in monolingual varieties, as evidenced in studies on verb placement variation in Germanic contact-varieties, such as “urban vernaculars” (e.g., Freywald et al. 2015, Opsahl & Nistov 2010, Quist 2008, Wiese et al. 2016, 2020) and heritage varieties (e.g., Alexiadou & Lohndal 2018, Bender 1980, Pecht 2019, Sewell 2015, Wirrer 2009). While some studies have shown variation in verb-final structures in subordinate clauses (Hopp & Putnam 2015, Pecht 2019), verb placement variation in declarative main clauses, which are commonly referred to as verb-third (V3) structures have been reported in many German(ic) contact varieties. Take (1) as an example of this structure:¹

(1) Kiezdeutsch (urban vernacular in Germany):

<i>dann</i>	<i>die</i>	<i>sind</i>	<i>zur</i>	<i>Ubahn</i>	<i>gerannt</i>
then	they	be-AUX	to the	metro	run-PART

‘Then they ran to the metro.’

(adapted from Wiese et al. 2008)

Although V3-structures have been assessed from different theoretical perspectives and methodologies, there is an ongoing debate as to why V3-structures may be more likely in

¹ For consistency throughout the dissertation, all examples have been adapted to the illustrated format even if the original citations may vary. If the examples were phonetically transcribed, they were adapted to standard orthography, if glosses or translations were missing, these were added by the author. Additionally, the finite verbs were marked in bold for better comprehensibility in all examples.

language-contact situations, and whether or not they are more common in the context of certain environments when compared with others. So far, suggestions include individual language attrition (Bender 1980, Wirrer 2009), cross-linguistic interference from the contact language (Alexiadou & Lohndal 2018, Sewell 2015), discursive motivations (Selting & Kern 2009, Wiese 2011, Wiese et al. 2016), and communal language change (Pecht 2019). This dissertation will provide an in-depth analysis of verb placement variation in current and older conversational data produced by heritage speakers of East Frisian Low German in the United States. I employ a variationist approach to inform our understanding of the distribution and characteristics of this phenomenon in natural conversational data. Particularly novel is the examination of the role of the prosodic integration of pre-verbal constituents as well as the role of information-structure are examined as potential contributing factors to finite verb placement variation in declarative main clauses.

As such, the dissertation analyzes two sets of spontaneous conversational data, recorded in informal interviews with a total of 58 speakers of heritage Low German (LG) in Iowa, USA. The first data set, which was recorded as part of a community project to preserve the local LG variety by Prof. Phillip Webber in 1998, comprises six hours of data from 33 speakers and will serve as the first point of reference in a longitudinal comparison. The second data set was recorded by the author in 2018 and 2019 in the same community, with a total of four hours of data from 25 speakers, allowing for a test of communal language change. Twelve speakers are part of both data sets, which further allows for an in-depths analysis of intra-speaker changes across twenty years.

The dissertation addresses two major issues, namely the social and linguistic factors that potentially favor the use of V3-structures, as well as the underlying sources of verb placement

variation in heritage speakers of a contact-variety. More precisely, the dissertation aims to answer the following research questions:

- 1) To what extent are V3-structures used in main declarative clauses in heritage LG in the USA?
- 2) Which social and linguistic factors condition the use of V3-structures?
- 3) What is the role of prosody and information structure in the use of V3-structures?
- 4) Are there changes in the use of V3-structures at the individual or community level over time?

The remainder of the Introduction-Chapter will provide a short overview of the speech community, the target syntactic structure, the methodology and the outline of the dissertation.

1.2. The East Frisian-Americans in Iowa

Before immigration, the community showed a stable diglossia, with LG as the main spoken language in the private domains (i.e., the “L-variety”) and High German (HG) as the formal and written language (i.e., as the “H”-variety) (Reershemius 2004), although the extent to which speakers gained proficiency probably varied. Like many other European groups at the time, many East Frisians migrated to the USA between 1840 and 1890. While East Frisian settlements existed in Texas and Illinois earlier, the first East Frisian colony in Iowa was founded in Grundy County in the late 1850s (Frizzel 1992, Schnucker 1917). By the 1880s, the area had become the largest settlement of East Frisians in the USA, spreading into the neighboring Hardin, Franklin and Butler counties (Schnucker 1917: 228).

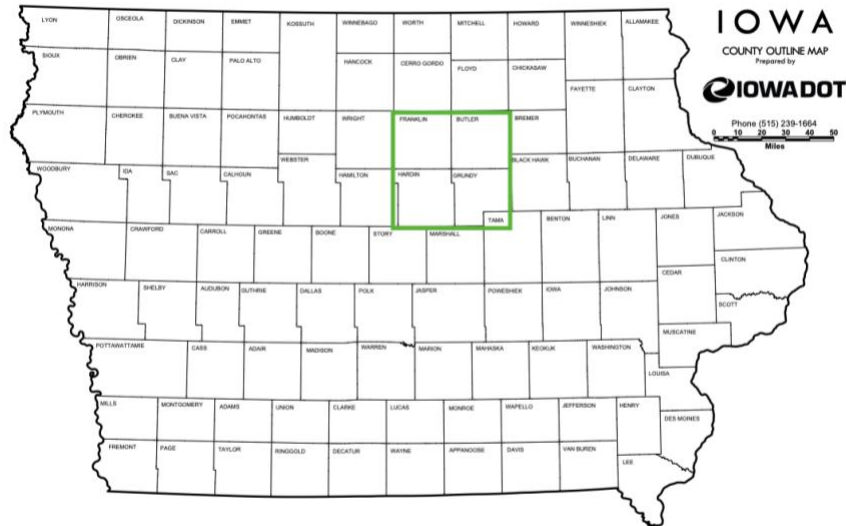


Figure 1-1: Map of Iowa and its counties.

(Source: State maps, [https://iowadot.gov/maps/msp/pdf/CountyOutline_11x17.pdf], accessed 01/13.2022))

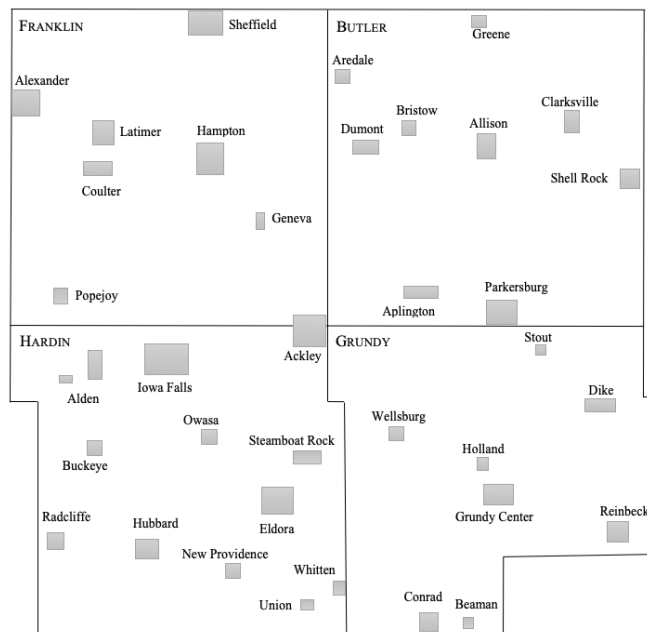


Figure 1-2: Map of Franklin, Butler, Hardin and Grundy counties.

(created by the author based on county maps by iowadot.gov)

Local institutions were founded and initially maintained the community's diglossic linguistic habits. In addition to HG and LG, English was used with the majority society, and as the main educational language for the younger generation. Although it seems that the use of HG

in church and in religious education initially played an important role for the community, there is no evidence of HG being used in the local schools, where English was the only language of instruction. Because HG was only used in Sunday school for reading the bible, the American-born generation preferred English as the language of worship. Despite restrictions during World War I, many churches returned to HG in the 1920s. But eventually, the younger generation led the shift to English in the local churches.

The shift from HG to English as the H-variety did not immediately have a major impact on the usage of LG as the L-variety. It seems that the stable diglossia that marked the linguistic habits of the community before immigration helped to preserve the spoken vernacular, namely LG. Since the East Frisians were used to having an H-variety in some domains (education, church, media), they basically slowly replaced one H-variety with another and finally gave up their already marginal use of HG in favor of English in the same distinct domains. LG, however, was preserved somewhat longer in the private domains.²

The last active LG speakers in Grundy County, who are the focus of this dissertation, were born approximately between 1925 and 1950. The older speakers still remember HG church services and Sunday school, but self-report to neither understand nor or speak the language (unless they learned it elsewhere). Those speakers generally report that they grew up speaking (only) LG at home and in the community, and that they learned English only upon entering elementary school. Throughout their lives, speakers report using LG in a slowly decreasing number of domains and with fewer interlocutors. None of the speakers taught their children the language, and very few LG-speaking couples use the language regularly with their spouse.

² For a very similar speech community showing the same gradual linguistic shift, see Bousquette & Ehresmann's (2010) description of the West Frisian community in Wisconsin.

Overall, all speakers can nowadays clearly be characterized as English-dominant and LG is used very rarely for a short amount of time, if at all.

Since the community has been geographically removed from the European variety and without major immigration for about ninety years,³ and has simultaneously been in close contact with English, communal developments in its LG-variety may be expected, such as variation in verb placement, as will be shown in the next Section.

1.3 Verb placement variation in Germanic language-contact varieties

A growing number of recent studies find that some Germanic contact varieties (e.g. spoken by heritage speakers or in bilingual groups) show verb placement variation, in the form of verb third (V3) structures. This means that two constituents may occur *before the finite verb* in a declarative clause, where only one constituent would be expected in almost all Germanic languages (with the exception of English). Although verb second (V2) structures are generally very robust across all Germanic varieties, evidence of V3 has been found in “urban vernaculars” of Norwegian (Opsahl & Nistov 2010), Dutch (Freywald et al. 2015), Danish (Quist 2008), Swedish (Kotsinas 1998), and German (te Velde 2017a, Walkden 2017, Wiese 2011), as well as in heritage speakers of Norwegian (Alexiadou & Lohndal 2018), High German (Sewell 2015) and LG (Wirrer 2009) in the USA. One interesting similarity across all of these groups is that

³ Note that individuals and families in the East Frisian colonies across the US were highly inter-connected through personal correspondences and an ethnic newspaper (Lindaman 2004, Rocker 2021) despite their geographic distance from each other. Studies from other settlements of East Frisian Low German speakers (e.g. Bender 1971, Wirrer 1995) may be used for diachronic comparison, but for the sake of simplicity, the dissertation will focus only on the largest settlement in Iowa, as this seems to be the location with the highest number of East Frisian LG heritage speakers today.

V3-structures typically occur with Adverbial-Subject-Verb (AdvSV) structures, including a (short) temporal adverbial and a (pronominal) subject, as can be seen in examples (2-4):

(2) Cité Duits in Belgium:

<i>un</i>	<i>EIN</i>		<i>tag</i>		<i>ich</i>		<i>geh</i>		<i>gucken</i>
and	one		day		I		go-1SG		look-INF

‘And one day, I take a look.’

(adapted from Pecht 2019: 90)

(3) Heritage German in the USA:

<i>hier</i>	<i>de</i>	<i>hund</i>	<i>dääd</i>		<i>gucken</i>	<i>for</i>	<i>die</i>	<i>frog</i>
here	the	dog	do-PRE		look-INF	for	the	froh

‘Here the dog is looking for the frog.’

(adapted from Sewell 2015: 242)

(4) Heritage Low German in the USA:

<i>in</i>	<i>2001</i>		<i>wi</i>		<i>sünd</i>	<i>in</i>	<i>Arizona</i>	<i>ween.</i>
in	two thousand one		we		be-AUX	in	Arizona	be-PART

‘In 2001, we were in Arizona.’

(adapted from Wirrer 2009: 141)

Since V3-structures have been attested in American LG, but have not been systematically studied,⁴ my goal is to study verb placement in East Frisian LG in Iowa from a variationist perspective, in order to gain an understanding of the frequency and (socio-)linguistic features that condition the use of V3-structures. Two main conditioning factors are assumed based on Selting & Kern (2009) and Wiese et al. (2016), namely prosody and information structure. The next section will thus give a brief introduction to the variationist approach, and the influence of prosody and information-structure on spoken language.

⁴ Bender (1980) provides two examples, while Wirrer (2009) quotes three instances.

1.4 The variationist approach, prosody, and information-structure

The variationist methodology allows for a holistic analysis of syntactic variation and considers both linguistic and social factors which may influence speaker's choice between alternating structures. At the core of variationist studies is the comparison of all *potential* surroundings, meaning all the environments in which the target item could occur. In this case, the target structure (V3) could potentially occur in any main declarative clause with a finite verb. Thus, by analyzing a particular number of main clauses per participant, we may gain valuable information on how frequently V3-structures occur in the spontaneous discourse of heritage speakers. Additionally, comparing V2-clauses to instances of V3-structures can shine a light on linguistic, prosodic or information-structural features that trigger such forms.

Broadly speaking, prosody or intonation can be defined as the melody, or the rise and fall of tune in an utterance. Intonation is used for a number of different linguistic functions, such as “phrasing (i.e., dividing the speech stream into chunks), signaling sentence mode (i.e., distinguishing, for example, declaratives from yes / no questions), and highlighting information (i.e., focus)” (O'Brien 2020: 167). In studies of spoken language, the standard measurement of analysis is comprised of *intonation units (IUs)*, which may vary in length from a single syllable to a complete sentence (Croft 1995, Du Bois et al. 1993).⁵ Although the meaning of an intonation contour preceding the end of an IU can be inconsistent, generally speaking, falling intonation is used with unmarked statements, categorical assertions, and to signal finality. Slightly rising intonation or level tone is used in incomplete utterances to mark continuation, and sharply rising intonation occurs in requests (O'Brien 2020: 175). The end of an IU is typically signaled by a

⁵ Note that O'Brien (2020: 167) uses the term intonation phrase (IP), which mostly overlaps with Croft's understanding of intonation units.

longer final syllable followed by a pause, while the beginning of a new IU is indicated by pitch resetting.

In addition to their prosodic properties, IUs can be conceptualized as “discrete segment[s] of information” (Chafe 1994: 53) which can be understood “in one focus of active consciousness” (Chafe 1994: 140). Because of the constraints on human cognition, ideas have to be expressed in small segments to allow the interlocutor to comprehend the content of these utterances. The larger “cognitive units” or “centers of interest” are defined as “superfoci of consciousness” which are expressed in “super-intonation units” (Chafe 1994: 140). In other words, while each IU may only express a single, simple piece of information, a string of connected IUs can be used to express an overarching, more complex idea. This concept is called a “prosodic sentence” (PS) (Chafe 1994: 142). While IUs may end in slightly raised or level intonation, indicating the continuation of the utterance, speakers indicate that they have expressed the entire idea by using intonation that marks the end of the utterance (i.e., sharply falling in declarative statements and sharply rising in requests). In practice, a prosodic sentence may comprise a single IU (see example 5), or consist of two or multiple IUs (see examples 6 and 7).⁶

(5) *un dann de kinner mu- **mutten** finnen,* | and then the children must-PAST
find-INF

‘And then the children had to find [them].’

Derek–1932–2019–318

⁶ In line with Du Bois et al. (1993: 49), I will use pseudonyms that “retain some flavor of the actual names” for those speakers interviewed in 2018/19. In those cases where the speaker is part of the 1998 and 2018/19 data set, the pseudonym is used throughout. Since the video project (Webber 1998) is publicly available and speakers’ names are shown in the video, first names of these speakers will be used to allow for transparency and comparability of results. The codes for each example from the heritage Low German corpus are made up of Pseudonym year of birth – year of interview line(s) in the transcript (e.g., Derek–1932–2019–318).

- | | | |
|-----|---|------------------------------------|
| (6) | 102 <i>un dann,</i>
103 <i>wi mussen antrecken.</i> | and then
we must-PAST dress-INF |
| | ‘And then we had to get dressed.’ | |
| | | Lisa–1939–2019–102-103 |

- | | | |
|-----|--|--|
| (7) | a <i>erste, ... (1.2)</i>
b <i>mien ollen,</i>
c <i>... (2.6) grotfather un urgrot- grotfather .. un familie,</i>
d <i>... (1.1) hebben all binanner kommen.</i> | first
my parents
grandfather and greatgrandfather
and family
have-AUX all together come-
PART |
| | ‘First, my parents, grandfather and greatgrandfather and family all got together.’ | |
| | | (Daniel–1928–2018–11-15) |

Selting & Kern (2009: 2502) suggest that “prosodically integrated constituents” in V3-structures serve to present new information, while “non-integrated constituents” emphasize a critical point in the narrative. To transpose this into Chafe’s terminology, when all constituents of a V3-structure are contained in a single prosodic sentence (see example 5), this could serve to present new information in the narrative, but when the constituents are divided across several IUs within one prosodic sentence (see examples 6 and 7), the V3-structure may be interpreted as a high point in the narration. Whether Selting & Kern’s hypotheses are borne out in this data set will be determined. Thus, prosody serves two important causes in the dissertation: first, it is used to delimit the units of analysis, and second, it serves to interpret the results, especially in terms of information structure.

Briefly summarized, information-structural perspectives view communication as a means to transfer and modify information in order to meet the needs of the interlocutors (Krifka 2008: 245), and are concerned with the way information is stored in memory, which is expressed in

prosodic and syntactic structures. According to Féry (2020: 661), three information structural pairs can be found in every sentence, namely focus-background, given-new, and topic-comment. These features have considerable effects on the grammar, as they can influence the use of focus particles and pitch accents, or have an effect on word order.

By couching the data extracted and coded in a variationist methodology into an information-structural perspective while simultaneously considering prosody as an important factor, the study may provide a deeper understanding of the discourse-pragmatic mechanisms that favor the occurrence of verb placement variation and may enhance the opportunity to find cross-linguistic patterns in similar speech communities.

1.5 Outline of the dissertation

The dissertation is divided into six chapters. Chapter 1 introduced the overall goals and motivations and already provides some insights into the assumptions underlying this research. Chapter 2 gives a detailed account of the sociolinguistic history of the speech community. While the focus of the dissertation will lie on the syntactic variation found in the last generation of speakers, I believe that the social and historical developments leading up to this point in time are essential to understand the influences that may have caused the current discourse-pragmatic preferences and grammatical structures to emerge. Following the speech community, Chapter 3 provides a detailed description of the core grammatical structure of this research, namely verb placement variation in declarative main clauses. Here, previous methodologies, findings and their interpretations will be outlined and discussed, in order to guarantee an adequate foundation for the methodology and predictions of this study. Chapter 4 presents the data collection and transcription methods, introduces the participants and the data extraction. Chapter 5 provides an

analysis of verb placement variation in a corpus of 2043 main clauses, including 150 V3-tokens (7%). A generalized linear mixed model shows that V3-structures overwhelmingly occur with sentence-initial adverbial (i.e. temporal adverbials) and with prosodic separation of this constituent. For this reason, a more closely defined variable context is used in Chapter 6, which analyzes 664 main clauses with sentence-initial adverbials for verb placement variation, showing 180 V3-tokens (27%). A statistical analysis as well as detailed explorations of descriptive and qualitative differences in the data provide new insights into V3-usage in heritage speakers of East Frisian Low German in Iowa. Thus, it is shown that prosodic factors (prosodic separation, pauses and more prosodic weight) are the strongest predictors for V3-structures, followed by present-tense verbs and complex verb phrases. After the linguistic factors that favor the use of V3 are described in Chapter 6, Chapter 7 shows the sociolinguistic factors affecting V3-usage, finding that men show far higher proportions of V3-usage and that speaker's year of birth seems to correlate with V3-rates, as speakers born later show higher proportional V3-use. These findings point to a systematic intergenerational language change in the usage of verb placement. However, it should be pointed out that the overall rate of V3 (7%) still underscored the stability of this heritage language in the syntactic realm. Finally, Chapter 8 summarizes the findings and discusses their importance in light of the previous literature. The results obtained through a novel combination of different approaches will help to understand verb placement variation from a new perspective

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2

The sociolinguistic history of the East Frisian community in Iowa

This chapter provides an overview of the sociolinguistic history and development of the East Frisian Low German community in and around Grundy County, Iowa.⁷ Countless studies in contact-linguistics have shown that linguistic developments do not spontaneously occur but arise from changes in social dynamics (see e.g. Matras 2009, Thomason 2001). Thus, in order to arrive at a holistic description and accurate interpretation of syntactic variation found within this community, the social and cultural factors that have influenced and continue to influence the speech community are of utmost importance. For this reason, this chapter provides a detailed account of the community's historical development, as well as current trends and attitudes towards the language.

2.1 Introduction to the theoretical framework

In order to systematically describe the sociolinguistic development of the East Frisian community, a translated, terminologically updated and expanded version of Mattheier's (2003) *Sprachinsel-Lebenslaufmodell* ('language island life model') in combination with Bousquette's (2020) domain-based language usage continuum was developed and used here. This Chapter is based on a presentation given at the Germanic Linguistics Annual Conference (Rocker 2021) and a Chapter submitted to Putnam & Page (to appear; Rocker, to appear) and closely resembles the findings in those works.

⁷ Although similar developments are expected for East Frisian communities in other geographical locations (e.g., around Flatville, IL), this dissertation only refers to the community in Grundy, Franklin, Hardin and Butler counties, Iowa. Based on the fact that most Low German speakers there know each other and originate from the same historical settlements, the group will be defined as one community for the sake of simplicity.

The sociolinguistic history of many German language islands in the USA is well-described. Studies have focused on (Low) German-speaking communities in Texas (Boas 2002, Fuchs 2017, Salmons 1983), Wisconsin (Bousquette 2020, Litty et al. 2015, Loudon 2011, Salmons 2005, Wilkerson & Salmons 2008), Kansas (Keel 2015, Seeger 2006), Illinois (Frizzel 1992, Wirrer 1995), Missouri (Ballew 1997), and Nebraska (Bender 1971, 1980), to name but a few.⁸ All of these communities have one thing in common: they have maintained their language for more than three generations, defying the typical language shift in immigrant communities (Fishman 1965). Based on the findings for these language islands, some generalizations can be made: (1) initially, the settlements were often rural and geographically isolated from other groups or the majority society; (2) the groups developed an in-group identity based on their ethnic or regional heritage; (3) institutions (e.g., churches, schools, newspapers, shops, *Vereine*) were established and controlled by community members. These factors, in addition to the common endogamy in these groups, likely benefitted prolonged language maintenance (Louden 2006). Based on similar observations in a number of language islands, Mattheier (2003) developed a model reflecting trends in the prototypical development of language islands (“Sprachinsel-Lebenslaufmodell”), which will be used as a theoretical framework in this chapter.

In the model, Mattheier (2003: 28) proposes that language islands develop in seven stages, beginning with the initial situation in the home country (*Ausgangskonstellation*). After migration to the new host country, there is a foundation phase of the initial settlement (*Konstituierungsphase*) followed by a consolidation phase (*Konsolidierungsphase*) during which

⁸ Since patterns of language maintenance may differ for groups with strong religious affiliations, these will not be taken as a point of comparison here. The interested reader may turn to these studies on language maintenance in the Pennsylvania Dutch community (Fuller 1996, Huffines 1986, Loudon 2006), the Iowa *Amana*-colonies (Webber 2009), and Mennonite Low German communities (Burns 2021, Hovland 2020, te Velde & Vosburg 2021) for more information.

the community develops or adapts their identity to the new surroundings. If this process is successful, a phase of stability with minimal language change or shift may follow (*Stabilitätsphase*). At some point, this social and linguistic stability may be affected by socio-cultural changes which lead to a turning point (*Umschlagpunkt*) in the linguistic behavior of the community. These changes then lead to an assimilation phase (*Assimilationsphase*) in form of a belated three-generation assimilation process and eventual 'death' of the language island.

Although I agree with the model's basic premises, in accordance with recent terminological and theoretical discussions (e.g., Cabo & Rothman 2012, Kupisch & Rothman 2018, Putnam & Sánchez 2013) I two terminological updates because of their negative connotations. First, instead of the term "language decay" (*Sprachinselverfall*), I will use the terms "linguistic change" for systematic changes within the linguistic properties of the language and "linguistic shift" for socio-cultural changes in the domain-specific usage of the heritage language. Although heritage speakers' output may differ from that of baseline speakers, their grammars should not be regarded as inferior, but rather as distinct. In addition, there are numerous studies finding that linguistic 'decay' is not a necessary developmental phase in the life of a language island, since the final generation of proficient heritage speakers may in fact maintain intact grammars (Bousquette 2014, 2019, Bousquette & Putnam 2020, Dorian 1978, Keel 2015).

Further, instead of speaking about "language death", I will use the term "conclusion of language shift" to describe the discontinuation of heritage language usage in all domains. Previously, language decay was viewed as an unavoidable stage in the development of heritage languages which inevitably resulted in its 'death' (e.g. Boas 2002, 2009, Roesch 2012). This idea, however, conflates linguistic change and language shift. Although linguistic change can

cause heritage languages to evolve and become more distinct from their baseline variety, these processes do not equal the death of a heritage language (Bousquette & Putnam 2020). Only in the event of a complete intergenerational shift to a new language, and the passing of the last remaining heritage speakers, does a heritage language "die" (Bousquette & Putnam 2020: 190) (Bousquette & Putnam 2020:190). However, determining the metaphorical moment of may still be problematic, if partially proficient speakers or receptive bilinguals may be able to show knowledge of the heritage grammar or when the community's identity and traditions live on in post-vernacular communities. Thus, the term *conclusion of language shift* will be used instead of "language (island) death".

Besides the two terminological changes, I suggest two content-related updates to the model. Interestingly, Mattheier (2003: 29) already describes that socio-cultural changes in the immigrant community may lead to a "turning point" (*Umschlagpunkt*) in its language use, i.e. mark the onset of language shift. He suggests that these changes are often caused by the end of the community's isolation, general processes of modernization in society, including more institutional and administrative organization and other historical developments, such as the world wars. Thus, he reports many of the characteristics of communal change outlined in Warren (1963), which is the foundation for Salmons' (1983, 2005) verticalization process theory. According to this approach, Mattheier's "turning point" may be interpreted as the onset of language shift caused by verticalization processes, meaning the loss of communal control over local institutions in favor of state- or government control, which has been found to result in linguistic shift (Bousquette & Ehresmann 2010, Salmons 1983, 2005).

Finally, since the East Frisian community is traditionally High German - Low German diglossic (Reershemius 2004), the interaction between the two immigrant languages may be of

interest in the contact-situation with English. Since the concept of diglossia has been a topic of much debate since Ferguson's (1959) and Fishman's (1965, 1967) initial proposals,⁹ Bousquette's (2020) expanded approach will be adopted here. Bousquette (2020: 512) criticizes the commonly used definition of the dialect as the “low variety” and the Standard language as the “high variety”, as these terms may be too broad and not applicable to bidialectal German immigrant communities in the US. Instead, he proposes to envision the “low variety” as more closely resembling the “heritage variety” which is used in more internally oriented domains and the and the “high variety” as referring to a “hegemonic variety”, which may be used in more externally oriented domains. More importantly, to better visualize verticalization processes and linguistic shift in communities with more than one immigrant variety he suggests a continuum of six domains (home - religion - education - media - regional - national) that range from “internally oriented” to “externally oriented”. This domain-based continuum model can augment Mattheier’s model for a comprehensive and coherent description of the sociolinguistic history of the Iowa East Frisians and will thus be adopted to the model.

Table 2-1 shows Mattheier’s translated, shortened and updated model, including Bousquette’s domain-based language use continuum. The left column represents the phase and approximate timeframe, the middle column describes the expected major events and developments during this phase, and the right column provides a description of language use on a “gradient scale of internally and externally oriented domains,” with the most outward-oriented (National language) on top and the most internally focused (Home language) on the bottom. The remainder of this chapter will follow the model’s outline, in order to provide a detailed

⁹ See Hudson (2002) or Maher (2019) for comprehensive overviews of the development of the term.

description of the sociolinguistic developments of the East Frisian community in and around Grundy Center.

Table 2-1: Model of a language island life
(left two columns translated and shortened from Mattheier (2003: 28) including terminological changes in italics; right column based on Bousquette's (2020: 512) domain continuum)

Phase and time frame	Situation / Event(s)	Language by domain
Initial situation	Sociohistorical developments that cause mass migration Phase of migration	National Regional Media Education Religion Home
Establishment of settlement	Settlement as a group (sometimes group identity only develops due to settlement)	National Regional Media Education Religion Home
Phase of consolidation	Linguistic processes of mixing or koineization; development or adaptation of group-identity to new surrounding If no group identity is developed, assimilation may be expected sooner	National Regional Media Education Religion Home
Phase of stability	No or minimal language loss / change In this phase, language spread may be possible	National Regional Media Education Religion Home
Between the phase of stability and the phase of assimilation, sociocultural changes in the language island or its surrounding are expected (<i>Verticalization processes; Salmons 2005</i>)		
Turning point		
Phase of assimilation	Often as a belated three-generation assimilation process Decay of language island ('Sprachinselerfall') <i>Linguistic change or linguistic shift</i>	National Regional Media Education Religion Home
Language island death ('Sprachinseltod') <i>Conclusion of language shift</i>	Late phases of a language island as 'culture islands' or tourist attraction	National Regional Media Education Religion Home

2.2 Historical context

Before we can focus on the grammar and syntactic variation observed in this community, we must first understand the settlement history of the East Frisian immigrants in Grundy County in order to comprehend how they were able to maintain their dialect well into the twenty-first century. This section will therefore provide an overview of the target community's sociolinguistic history, beginning with their origins in (modern-day) Northern Germany, their migration patterns and settlement, before detailing factors contributing to language shift, and finally describing the speaker group interviewed for this dissertation in 2018/2019.

2.2.1 Sociolinguistic circumstances in East Frisia before migration

Between 1820 and 1930, approximately 5,8 million Germans came to the United States to avoid political upheaval, armed conflicts, famines, and extreme poverty, or to seek religious freedom (Jacob 2002: 37, Luebke 1990: 95). While some chose to live in metropolitan areas such as New York, Chicago, or Milwaukee, most German immigrants were attracted to the newly formed states of the so-called *Midwest*,¹⁰ where they formed rural farming communities and small towns. One such immigrant community is the one in Grundy County, Iowa, which was established by East Frisian immigrants in the 1860s, and is the focus of this dissertation.

East Frisia is located in modern-day Germany's northwest corner, bordering the Netherlands and the North Sea. The multilingualism of the region, as well as the many changes in governance, have clearly influenced its history (see Deeters 1985 or Melchers 2002), and the

¹⁰ Following the Census Bureau, in alphabetical order: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

sociopolitical problems true for most of Europe at the time affected the rural East Frisian population immensely. Between 1840 and 1900, an estimated 20,000 East Frisians emigrated to the United States mainly due to the frequent changes in governance and the general poor economic circumstances (Lindaman 2004: 78). These immigrants formed the majority of the settlers in Grundy County and their linguistic, cultural and social characteristics influenced the nature of the community. At this time, the North-Eastern part of East Frisia was predominantly Lutheran and used High German (HG) in worship, while the South-Western part was dominated by Reformed churches with Dutch services.¹¹ In the mid-nineteenth century, Reformed congregations that had previously worshipped in Dutch started to use HG, and the Kingdom of Hanover mandated HG as the language of instruction in local schools across the region. But independent of church affiliation, most East Frisians used LG as the spoken vernacular. HG, however, was an acquired language for most speakers and the extent to which speakers gained proficiency greatly varied. Nonetheless, the community has been defined as traditionally diglossic (Reershemius 2004).

¹¹ In 1859, the *Fürstenthum Ostfriesland* ('Principality of East Frisia') reported the religious confessions as: 69.5% Lutheran, 26.5% Reformed, 2.5% Catholic, 1.3% Jewish, and 0.3% Mennonite (Frizzel 1992: 166).

Table 2-2: Sociolinguistic developments: Initial situation and migration (columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514).

Phase and time	Situation / Events	Language by domain	
Initial situation ~ 1840-1900s	Low German as an autochthon minority language which became increasingly stigmatized; HG (or Dutch) as literary, formal and church language, LG as spoken community language. Political and economic instability.	National	HG
		Regional	HG (LG)
		Media	HG
		Education	HG
		Religion	HG (Dutch)
		Home	LG
Phase of migration 1840-1900	Ca. 20,000 East Frisians emigrated to the USA, often for economic reasons. Initial settlements in the 1840s in Illinois (small groups in Texas).		

2.2.2 Migration to the USA and establishment of settlements

Like many other Europeans at this time, many East Frisians migrated to the USA between 1840 and 1890. Some East Frisian families settled down in Texas, but the first large “mother settlement” was established in Golden Valley, Illinois, in 1847 (Frizzel 1992: 161). From there, “daughter settlements” were established in Flatville and Golden, IL, before some families eventually moved to Iowa, North and South Dakotas, Minnesota and Nebraska. Despite the geographical distance between these settlements, they were well-connected among each other similar to *strawberry vines* as Reschly (2000: 183) puts it with relation to Amish communities:

[...] the Amish system of migration seems best described as strawberries, which create new plants with runners, spreading while retaining connections with other plants. To be sure, all Amish plantations are not genetically identical, but there is a freedom of movement among all the locations that would tend to modify the localism of reconstructed ethnicities based on immigrant networks in one location.

Such ‘strawberry systems’, or the notion of establishing new colonies while maintaining ties to previous settlements and maintaining active relationships between individual groups, are not only true for Amish groups but for a variety of other immigrant communities as well (see Johnson 2018, for a Finnish community in Wisconsin). Intergroup ties were developed through

migration patterns, and maintained throughout both by individual effort and through the East Frisians' supra-regional newspaper (see more in Section 2.2.3; also Rocker 2021).

The East Frisian colony in Grundy County, IA, is first mentioned in the Census in 1856 (Frizzel 1992, Schnucker 1917), with a population of 435 residents (Jackson 1885). In the following years, many families moved there from Illinois or directly from East Frisia, increasing the total population of Grundy County to 6,399 by 1870, and doubling it to 12804 people in 1885 (Jackson 1885). By the late 1880s, the area had become the largest settlement of East Frisians in the USA, spreading into the neighboring Hardin, Franklin and Butler counties (Jackson 1885: 228). Although the total percentage of German-born residents in Grundy County, at 21%, was significantly higher than the Iowa state average of 7%, the townships of Colfax (40%), Shiloh (41%), Pleasant Valley (42%), and German (49%) have even higher proportions of German-born residents (see Table 2-3). Grundy County's Beaver and Lincoln townships, as well as Butler County's Washington and Monroe townships, Franklin County's Osceola township, and Hardin County's Etna and Clay townships, all had more than 20% German-born residents, mostly of East Frisian origin. It seems that the number of other German-speaking immigrants in the area was rather limited, so that the community did not undergo koineization or other linguistic adaptation processes as described in communities with speakers who immigrated from different dialect region (Louden 2011, Bousquette, 2014). Based on this information, I will treat this region as a single linguistic speech island, relying on reports and data from these townships and towns represented below in Figure 2-1.¹²

¹² Despite the fact that Black Hawk township and the town of Reinbeck had more than 20% German-born inhabitants, this region is known for its Schleswig-Holstein heritage and will therefore be excluded from this study.

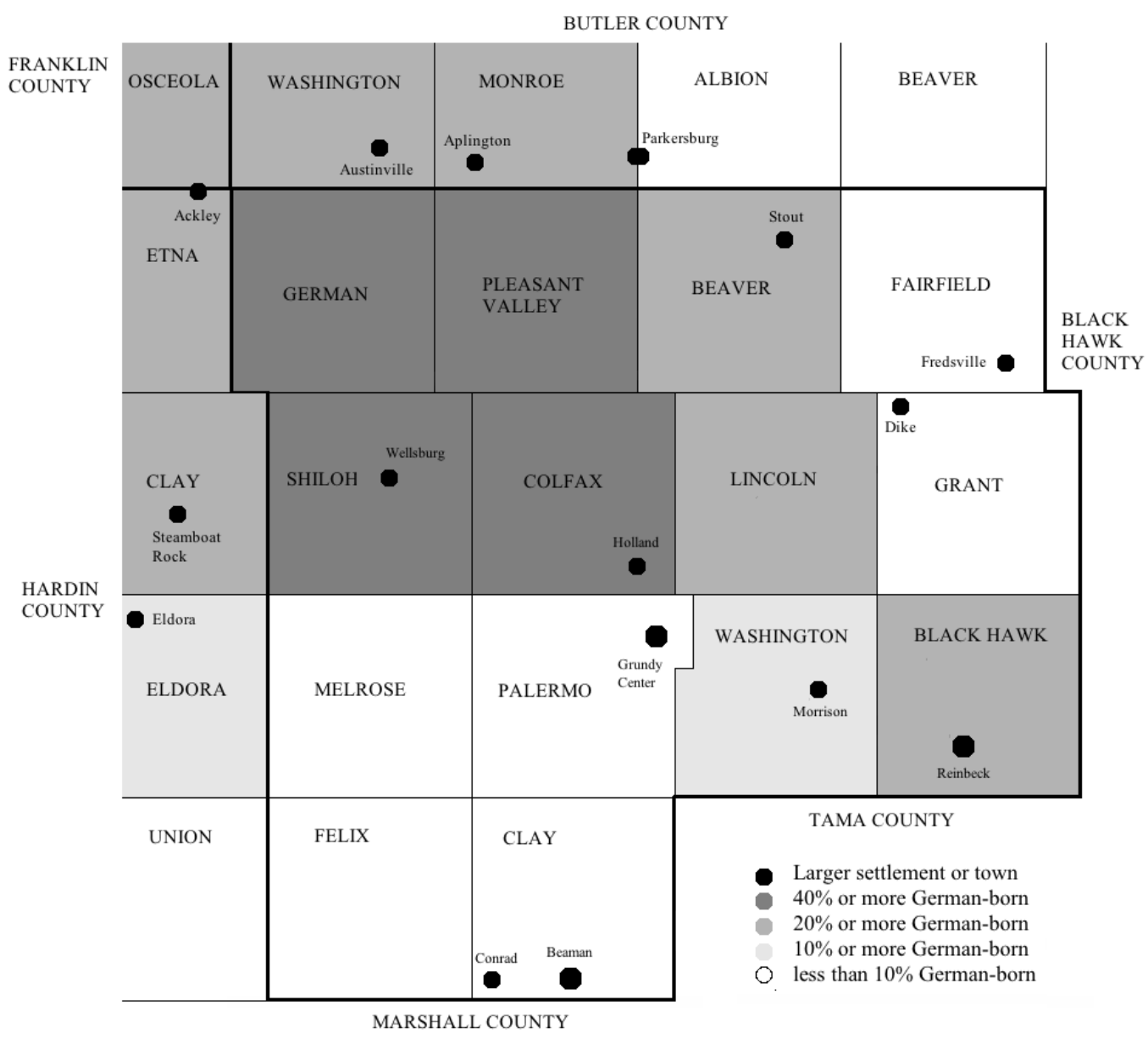


Figure 2-1: Map of Grundy County and surrounding townships. (Showing proportion of German-born residents in 1885; based on Census data).

Table 2-3: Grundy County population and nativity by township in 1885.

	Total native born	Total foreign- born	Of that German- born	Total popu- lation	% German- born
Beaver	500	299	223	799	28
Black Hawk (exc. Reinbeck)	475	211	143	686	21
Reinbeck, town of	496	256	165	752	22
Clay (exc. Beaman)	831	97	36	928	4
Beaman, town of	206	12	5	218	2
Colfax	590	423	407	1013	40
Fairfield	499	210	57	709	8
Felix	616	43	17	659	3
German	513	584	542	1097	49
Grant	479	209	38	688	6
Lincoln	425	235	195	660	30
Melrose	533	69	52	602	8
Palermo (exc. Grundy C.)	536	60	32	596	5
Grundy Center, town of	1050	159	74	1209	6
Pleasant Valley	465	396	364	861	42
Shiloh	424	315	300	739	41
Washington (exc. Morrison)	256	130	60	386	16
Morrison, town of	162	40	6	202	3
Total	9056	3748	2716	12804	21

Table 2-4: Sociolinguistic developments: Settlement and group consolidation.
(Columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language use by domain	
Establishment of settlement 1856	Beginning in the 1850s: large settlements in Iowa; later settlements in Missouri, the Dakotas and Nebraska.		
Phase of consolidation 1856-1890	Development of group identity as East Frisian- American; inclusion of newer immigrants into the group; establishment of institutions (schools, churches, non-local ethnic newspaper: <i>Ostfriesische Nachrichten</i> , local English newspapers).	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	HG
		Home	LG

2.2.3 Phase of stability: Development of multilingual speech community

The East Frisians traditionally have been described as “quiet, inward looking, and oriented towards home and family” (Frizzel 1992: 162). Thus, unlike most other German immigrant groups, they did not form *Gesangsvereine*, *Turnvereine* or *Schützenvereine* (singing, acrobatics/sports or rifle clubs) (Frizzel 1992: 162, Saathoff 1930: 88), which is the most notable distinction from the neighboring colony of LG-speaking *Schleswig-Holsteiners*. It may also be one of the key reasons why the East Frisians remained largely separate from other (German) immigrant groups. Church was the essential pillar of East Frisian communities, to the point where “a history of the Eastfriesian (sic) people is practically a history of the church among them” (Saathoff 1930: 89). They were unified in their strong Christian values, despite being split into different Protestant congregations (Presbyterian, Reformed, Lutheran, Methodist). Unsurprisingly, many churches and Sunday schools were established already during the first phase of settlement, to meet the community’s need for religious guidance.

Ultimately, “thirty East Frisian congregations were divided among seven denominations” (Lindaman 2004: 97, endnote 5), but all local churches were vital components of social life especially in terms of language preservation. The congregations valued HG as their language of service, mainly because LG and English were deemed unsuitable for religious worship (Saathoff 1930: 100). For this reason, Sunday schools became an important component of all East Frisian churches, in the hopes that the American-born generation would gain “knowledge of religious and Biblical history and a reading knowledge of the German language at the same time” (Saathoff 1930: 101). One early indication that the congregants were probably not very proficient in HG comes from Saint Paul’s Lutheran church, whose Pastor (Mato Kosyk) spoke Low

Sorbian and HG, but *not* LG. Dalitz & Stone (1977: 60) note about his brief employment with the community from 1885-1886:

The Lutherans in the Wellsburg parish were mainly immigrants from East Friesland, and their language must have given rise to some difficulties of communication between Pastor Kosyk and his flock. This may have been in part, at least, the reason why Kosyk resigned this position and left the Wartburg Synod after one year.

Although the group valued the traditional use of HG in the religious domain, they quickly embraced the English language in public schools and written media. As a result, all local newspapers were published in English from the beginning (e.g., the *Grundy County Atlas* founded in 1868, the *Parkersburg Eclipse* founded in 1872, the *Aplington News* founded in 1891 and the *Wellsburg Herald* founded in 1906). Aside from national and international news, the papers focused on local news, and regularly published articles on agricultural topics, both of which were clearly intended for a local readership. Compared to the local English-language newspapers, the *Ostfriesische Nachrichten* (OZ; 'East Frisian news') is a notable exception. It was established in 1882 in Breda, Iowa, with the intention of connecting the East Frisians, who were scattered across the United States, with each other and with their native country (see Lindaman 2004, Rucker Forthcoming). The venue included news from or reports about East Frisia, letters from other colonies, political editorials, literary texts, advertisements, and family events. Despite being intentionally non-denominational, the newspaper frequently included articles that expressed the readership's strong religious commitment. By targeting a supra-regional readership and focusing on the group's religious, political and linguistic ideologies, the newspaper greatly contributed to the formation of an East Frisian-American identity. The newspaper was published for almost ninety years despite decreasing subscriber numbers, and maintained the HG-LG diglossic traditions of its readership until its cessation following the second editor's death in 1972.

After the community had successfully established local institutions, a phase of relative stability followed from ca. 1890 to 1915, in which social and linguistic habits did not change significantly. At this point, immigration directly from East Frisia decreased, and by 1915, the proportion of German-born residents dropped to 10%, as compared to 20% in 1895 (Swan & Williams 1915). By this time, the American-born descendants of the East Frisian immigrants made up the majority of the community, and the language island began to stabilize.

The community continued to grow, and local institutions, including stores and banks catered to the residents' needs, both economically and linguistically, as this newspaper description from the OZ illustrates:

Unser Parkersburg ist ein schönes Städtchen mit größtenteils ostfriesischen Einwohnern, fast in jedem Geschäft wir plattdeutsch gesprochen. Zwei Eisenbahnen haben wir, drei Banken, und wer kreditwürdig ist, kann Geld genug bekommen.¹³
(*Ostfriesische Nachrichten*, Correspondences, Parkersburg, IA; 1912, January 20, page 1)

Similarly, the local church congregations continued to grow, and HG-speaking preachers were educated by the German Theological College and Seminary in Dubuque¹⁴ so that vacant positions were filled quickly, often by a community member. Church services and Sunday school were usually held in HG, and English services were the exception rather than the norm. Even the so-called Dunham Bill, which was introduced in 1902 and regulated mandatory attendance in school education, did not seem to have a major impact on the linguistic habits of the East Frisians in Iowa. The Bill was moderate compared to other state's educational regulations¹⁵ in

¹³ “Our Parkersburg is a beautiful little town with a majority of East Frisian residents, Low German is spoken almost in every store. We have two trains, three banks, and if you are credit-worthy, you can receive plenty of money.” Translated by the author.

¹⁴ Founded 1852 in Dubuque, the institute was renamed to German Theological School of the Northwest in 1864, later known as the University of Dubuque Theological Seminary, nowadays called University of Dubuque (Encyclopedia Dubuque 2014).

¹⁵ The Bennet Compulsory Education Law in Wisconsin (passed in 1889), required children between seven and fourteen to attend school at least twelve weeks per year and ordered that “reading, writing, arithmetic and United States history [shall be taught] in the English language” (as cited in Kellogg 1918:4). Similar legislation was passed in Illinois in the form in the same year (Edwards Law). In both cases, the German population was outraged as they

that it did not mandate English as the only language of instruction, granted private and parochial schools freedom from state supervision, and only required seven- to fourteen-year-olds to attend school for a minimum of twelve weeks per year (Engelhardt 1987: 70).¹⁶ But since the local public schools had already used English as the language of instruction prior to the law, and parochial schools were allowed to continue their religious teaching in HG, the law did not immediately affect the community's linguistic habits.

Table 2-5: Sociolinguistic developments: phase of stability.
(Columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language use by domain	
Phase of stability 1890-1915	No or minimal changes within the community; no language shift or changes in linguistic behavior. 1902: "Compulsory education law" did not seem to affect language of instruction, but verticalization processes imminent	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	HG
		Home	LG

2.2.4 Turning point

Grundy County's population peaked in 1915, with 14,051 inhabitants (Swan & Williams 1915). Through better road systems, railways, radio and telephone, communities became increasingly connected with each other and the greater society, and community interests broadened, as indicated by advertisements in the local newspaper for various sports, plays, music, and other activities. Diversification of community interests, urbanization, the transfer of

disapproved of the state control of personal affairs and feared the end of German parochial schools (Engelhardt 1987:64). Under the initiative of various religious organs, a strong political opposition developed and both states had to repeal the laws (Wisconsin in 1891 (Kellogg 1918: 24), Illinois in 1893 (Sakash 2005).

¹⁶ It seems that the mandatory attendance was not enforced very vigorously, as this excerpt from the *Wellsburg Herald*, 1908 January 02, page 1 illustrates: "Supt. Cavana has set his foot down on the "hooky" habit that a number of pupils of our city schools have been cultivating of late. [...] Hardly a school day passes but children are found upon our streets with no excuse for being out of school, except the indifference of their parents and the fact that the law is not enforced (sic)."

authority to non-local groups and government, and growing linkages to the majority society are all crucial factors that can affect small communities (Warren 1963: 53). As a result, viewing this period as a starting point for social change, I postulate that anti-German political legislation and sentiments implemented in response to World War I did not have a direct impact on East Frisian linguistic habits, but rather co-occurred with communal changes already underway. Although many scholars have blamed anti-German sentiments and policies during WWI for the decline of German-speaking groups in the US (Kloss 1966,¹⁷ Luebke 1990, Wittke 1936, 1943), their effects on language shift within German-speaking communities were neither as unexpected nor as rigorous as some researchers make belief. Rather, communal changes due to industrialization, urbanization and verticalization processes were already underway before WWI, and, more importantly, German dialects were still spoken and transferred younger generations long after the end of WWI (Huffines 1985, Kurthen 1998, Loudon 2006, Salmons 1983, 2005).

In the early years of World War I, the *Ostfriesische Nachrichten* (*ON*) sided with the old German motherland, and provided information on fallen, missing or injured East Frisian soldiers, reported war news from a German perspective, and openly criticized British viewpoints.¹⁸ Interestingly, even at this time identification with Germany was no longer based on language proficiency as newspapers written in English with a German perspective were advertised in the *ON* for the younger generation:¹⁹

Viele unserer Leser möchten gewiß gern eine englische Zeitschrift haben, die in entschiedener kräftiger Weise die Interessen Deutschland in dieser Kriegszeit vertritt.

¹⁷ Kloss' motivation to study German minority language speakers and his underlying ideologies have since been critically scrutinized due to his involvement in political institutions during the Third Reich. Since his work is well-known, it will be cited here, but the reader may want to refer to Simon (2005) Wiley (1998) and Wilhelm (2002) for more information.

¹⁸ See e.g. *Ostfriesische Nachrichten*, 1915, January 10.

¹⁹ The article suggests "The Fatherland" and the English version of the "Hamburger Fremdenblatt".

Schon um die lieber englisch lesenden jüngeren Angehörigen im Hause wäre eine solche Zeitung von großem Wert.²⁰
(Ostfriesische Nachrichten, Für die deutsche Sache; 1915, February 10, page 3)

This brief passage already reveals the generational divide between older East Frisians who preferred to read High German newspapers and younger East Frisians who often turned to English publications. As the war unfolded, Germans were increasingly affected by new restrictions and negative rhetoric which influenced local and regional policies and institutions. For example, the Dubuque Theological German College and Seminary changed its name to Dubuque College in 1916, and their curriculum shifted away from High German and toward English (Encyclopedia Dubuque 2019). Although the time of the name change and the decrease in HG courses coincides with harsher legislation and anti-German sentiments, it is very well possible that the incoming students also preferred studying in English. Thus, the official statement may have declared the changes “in response to the war” (Encyclopedia Dubuque 2021) but was likely a development already in motion.

The United States’ renunciation of neutrality and declaration of war on Germany in April 1917 was viewed by many German-Americans as a call for caution and a retreat inward. The *Ostfriesische Nachrichten*, which had previously enthusiastically championed the German side in the conflict, now detailed a number of rules and regulations for its readers, cautioning them to beware of accusations of espionage and disloyalty by non-Germans:

Am besten ist es, mit jemanden, der nicht Deutsch versteht, überhaupt nicht über den Krieg zu sprechen, denn es gibt manche Ausdrücke in der englischen Sprache, die

²⁰ “Many of our readers certainly would like to have an English newspaper which strongly advocates for the interests of Germany in this war time. Especially for those younger members of the household who prefer to read in English, such a newspaper would be of much value.” Translated by the author.

verschiedener Auslegung unterliegen, und es mag gerade der Fall sein, daß die schlimmste als beabsichtigt gilt. Also Maulhalten!²¹

(*Ostfriesische Nachrichten, Wichtig für alle Deutsche*; 1917, April 20, page 1)

In Iowa, the public distrust against foreigners led to the so-called *Babel*-Proclamation, in which Governor William Harding declared that only English was allowed “as medium of instruction in all schools, in conversation in public places and over telephones, and in public addresses” (State Historical Society of Iowa). Citizens who lacked English proficiency were advised to arrange for religious services in their mother tongue at home. Interestingly, the two local newspapers in Grundy Center took up very different positions on this issue. Whereas *The Grundy Republican* took a German-critical stance, supporting the proclamation,²² applauding speeches by local Reverends denigrating the German population,²³ and urging German-Americans to denounce their former home country or heritage,²⁴ *The Grundy Democrat* took an impartial approach, simply printing the bill, but also publishing a letter from a Danish church congregation to Governor Harding that requesting for the law to be repealed,²⁵ as well as debunking several claims of German treason.²⁶

Despite the varying reactions of local newspapers, the significance of the East Frisians in Grundy County is probably best reflected in their economic influence, as highlighted by a note in *The Grundy Republican* and *The Grundy Democrat*, in which a local shopkeeper formally denies reports that he no longer welcomed Germans in his store. Regardless of whether such reports

²¹ “It is best not to speak about the war with anyone who does not understand German, as there are many expressions that are open to interpretation and it may be the case that the worst one is taken the one intended. So, shut up!” Translated by the author.

²² *The Grundy Republican*, 1918, May 30, page 2, and 1918, June 06, page 2.

²³ *The Grundy Republican*, 1918, May 01, page 1, and 1918, September 09, page 8.

²⁴ *The Grundy Republican*, 1918, November 14, page 2.

²⁵ *The Grundy Democrat*, 1918, June 06, page 4.

²⁶ *The Grundy Democrat*, 1918, May 30, page 4 (local Democratic County Supervisor was accused of being disloyal; charges were unfounded and he was exonerated) and 1918, June 20, page 2 (rumor was that Germans hid ground glass in groceries they sold; rumor was found to be untrue except for one case of personal revenge).

were accurate or not, this incident shows that the local East Frisian community was far too valuable to be offended and perhaps lost for business. Likewise, although the proclamation specifically stated that religious services in a foreign language were forbidden, the East Friesland Presbyterian church was able to reach an agreement with state legislators to continue preaching in HG, as shown in the church board meeting's minutes (1918, July 21):²⁷

Betreffend der Einstellung der deutschen Sprache: Am 23. Mai hat Governor Harding das Benutzen der deutschen Sprache im Öffentlichen während wir in diesem Kriege sind verboten. Zuerst nahmen wir die Proklamation nicht so sehr Ernst und predigten ruhig weiter in Deutsch – Am 15. Juli 1918 unterhandelten unsere gesamten Kirchenbeamten mit dem State counsel of Defense. Das Resultat war: Es muss alles in Englisch sein, die Predigt darf aber in der Deutschen Sprache gleich nach der englischen wiederholt werden.²⁸ [...]

Following the conclusion of WWI in November 1918 and the consecutive repeal of the Babel Proclamation in December 1918, the use of HG during religious ceremonies and in Sunday schools became a subject of fierce discussion in local congregations, straining intergenerational relations even further (see also Saathoff 1930: 73).²⁹ While the older generations overwhelmingly supported the continued use of HG, younger adults preferred to hold services in English. Some parishes, such as the Wellsburg Reformed Church, chose to revert to entirely HG services, with the hope that increased German instruction in Sunday school would persuade the younger generation of the language's value.³⁰ However, it appears that this did not achieve the desired results, as the congregation split in 1920, and a new, English-only Reformed church was

²⁷ Copies of the church minutes were given to me by a current member of the church, Dena Lindaman.

²⁸ “Regarding the discontinuation of the German language: On May 23rd, Governor Harding banned the use of the German language in the public sphere while we are at war. At first, we did not take the proclamation very seriously and continued to preach in German – On July 15th 1918, our church officials negotiated with the State counsel of defense. The result was: The service must be completely in English, but the sermon may be repeated in the German language right after the English one.” Translated by the author.

²⁹ *The Grundy Republican*, 1921, June 09, page 2.

³⁰ *Wellsburg Herald*, 1920, June 23, page 4.

established to serve the younger people who were dissatisfied with the stringent reintroduction of HG:³¹

This event [the foundation of a new church] will be of considerable importance in the history of our little city. It marks the beginning of a new era hereabouts. Up to this time, the language used in the Sunday Schools and churches has been the German language. This has been necessary because a large majority of our elder and middle ages people were better able to understand German religious services than those in English. Now a generation has been raised that takes more kindly to their own language [English].

(*Wellsburg Herald*; 1920, August 18, page 1)

Other congregations were able to agree on more reasonable measures. Bilingual services were conducted at St. John's church in Ackley, and the German Presbyterian church in Grundy Center started offering separate monolingual German and monolingual English worship ceremonies on the same day. Soon, many congregations in the area embraced this practice.³²

Overall, this period can be described as a pivotal point in the community's sociolinguistic development, as English was introduced instead of or in addition to the community's customary HG in worship services and Sunday schools. Even though the older generation, particularly those who had migrated from Germany, wanted to maintain HG as the language of religion, those who were born in the United States, did not gain sufficient proficiency in HG to follow the services and resisted a return to an entirely German church after the end of WWI. Despite the fact that anti-German attitudes had an undeniable emotional effect on the population, the steady transition to English in the churches was not a direct result of the Babel proclamation but rather this transition seems to reflect an internal, community-implemented shift in linguistic preference and behavior. Remarkably, while the importance of HG faded at this time, LG use in the families was

³¹ *Wellsburg Herald*, 1920, August 18, page 1, and 1920, August 25, page 1.

³² *The Grundy Register*, 1927, September 22, page 4 (Lutheran Church), and 1927, September 22, page 7 (New Presbyterian Church).

largely maintained, and even extended to new domains in the following two decades, as will be shown in the next section.

Table 2-6: Sociolinguistic developments: turning point.
(Columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language use by domain	
Turning point 1915-1925	Onset of verticalization processes: 1918: "Babel Proclamation" After WWI: many churches return to HG services, but American-born generation prefers English over HG in church	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	E/ HG
		Home	LG

2.2.5 The first language shift: From High German to English for religious purposes

The replacement of HG with English as the language of religious service prompted a temporary extension of LG to other domains such as church services, written media, and even the radio during the initial phase of language shift. This corresponds to Fishman's expectation that the second generation will employ the languages irrespective of their conventional domains (1965: 82).

The movement of limiting the number of HG church services or completely switching to English became unavoidable for most congregations in Grundy County in the late 1920s. By the mid-1930s, churches with a German-speaking pastor were regularly offering two different Sunday services,³³ as well as bilingual funeral ceremonies.³⁴ However, all Sunday schools had switched to English by the early 1940s, and HG services had become rare. HG services were only offered on occasion at the Bethel Lutheran Church in Parkersburg, the Christian Reformed

³³ *Wellsburg Herald*, 1931, August 12., page 2, and, 1932, April 13, page 2.

³⁴ *Wellsburg Herald*, 1931, August 12, page 2; 1934, October 24, page 1, and 1935, October 23, page 1.

Church in Parkersburg, and the Wellsburg Reformed Church until at least 1946.³⁵ At this time, the transition from HG to English curricula in the regional theological colleges that were implemented during WWI³⁶ also came into effect, as the local parishes struggled to find pastors trained in HG. Though this may have upset the older generation, the American-born adults felt more confident with English and embraced the reforms (Saathoff 1930: 102).

Although the local church congregations were affected by this language shift, LG was preserved as the family and community language, and was even expanded to other areas such as church services, radio programs, and in writing. In the late 1930s, the German Presbyterian Church in Grundy Center, for example, established an LG service as a New Year's tradition.³⁷ Professor John C. Tjaden hosted a regular LG radio show on the WNAX station in South Dakota, which reached listeners across the Midwest.³⁸ Meanwhile, the second editor of the *Ostfriesische Nachrichten* featured more LG literary works in the publication (e.g., short stories, poetry, jokes), and the language can be found to varying levels in a number of corresponding letters from around the United States (Rocker 2021). Despite the newspaper's steadily declining readership, the editor maintained the paper's linguistic tradition by refusing to run any English-language articles.

Today, those individuals who still speak LG were born between 1925 and 1945, which supports the findings laid out previously. The majority of these speakers report to have grown up

³⁵ *The Parkersburg Eclipse*, 1943, January 27, page 5, and 1946, April 18, page 1; *Wellsburg Herald*, 1946, May 02, page 4.

³⁶ This happened in the German Theological Seminar (later Dubuque Theological Seminar) in Dubuque in 1916.

³⁷ *Ostfriesische Nachrichten*, 1937, December 10, page 3.

³⁸ The exact time period and extent of the program is unclear. Roedder (1932: 135) mentions that the radio program has appeared “for the past three years” and an article in the *Ostfriesische Nachrichten* reports about the monthly radio program in early 1938 (1938, February 01, page 3). Whether the program was consistently aired between 1929 and 1938 cannot be verified. Unfortunately, the WNAX archive burned down in 1983, and attempts to find recordings of this program through WNAX, the University of South Dakota (where Tjaden was head of the German department), and the South Dakota State Historical Society have not been successful.

monolingually LG until entering elementary school, but others assert to have spoken English at home as well, while some point out that they learned LG primarily via their grandparents or by overhearing adults. Although some of the older speakers still recall HG church ceremonies, none of the speakers self-report (heritage) HG-proficiency but some learned it as adult foreign language learners e.g. in college or the military. In the following decades, the community became more outward-looking as urbanization progressed and technical advancements (e.g. radio, TV) made their way into people's homes. As a consequence, the latest generation of LG speakers made a conscious decision to give up the language, as the next section shows.

Table 2-7: Sociolinguistic developments: Language shift (Phase 1).
(Columns 1+2 based on Mattheier 2003:28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language by domain	
1. Phase of language shift <i>1925- 1945</i>	Children no longer learn HG in Sunday school but grow up monolingually LG (or bilingually English/LG); learn English at school, become dominant in English throughout their adult life. However: extension of LG to other domains (newspaper, radio, church).	National	E
		Regional	E
		Media	E (HG/LG)
		Education	E
		Religion	E (LG)
		Home	LG/E

2.2.5 The second language shift: From Low German to English in the home

The second phase of language shift is characterized by a gradual substitution of LG by English on an individual, communal, and institutional level. Even though approximately 50 speakers remain in the area, the linguistic transition has been completed in terms of acquisition, as this section demonstrates.

First, on an institutional level, the *Ostfriesische Nachrichten*, a long-standing cornerstone of the East Frisian-American community, was discontinued after the death of the second editor in 1971. The newspaper had never shifted to English in its nearly ninety years of existence, instead responding to the preferences of its subscribers by using HG and LG content. From the 1950s,

the audience appears to be primarily comprised of first-generation immigrants and few English-dominant Americans. In the late 1950s, a genre arose from reader submissions in which they fittingly use LG-English mixed writings to share experiences from their time learning English or impersonate someone who is not yet entirely fluent in English. However, the writers' word choices, grammatical structure, and use of humor in these texts clearly show that they were fully bilingual. This time period also includes several contributions that the editor translated from English. In addition to his publishing endeavors, the editor also worked as a travel agent, planning private and group trips to East Frisia and Germany, which were extremely well received by the readers. In this way, the newspaper became more than just a written collection of articles, and strengthened the readership's East Frisian-American identity in spite of the communal shift in language use. The newspaper's reach was far greater than a local newspaper might have been because it appealed to a widely scattered (i.e. "non-local") audience. The second editor, who sustained the journal despite declining subscriber numbers until his death in March 1972 at the age of 91, is largely responsible for its long-term viability. Because the editor continued to publish the newspaper despite sinking subscriptions, editorial control was not given to larger publishing companies. This means that the venue was unaffected by verticalization processes, which may have promoted language preservation as well.

Those who grew up using LG eventually became more English-dominant throughout the course of their lives, utilizing LG less regularly and with fewer interlocutors. For example, only 7 of the 24 participants in this my dissertation study have or had LG-speaking spouses. In spite of this, English was described as the primary family language by all interviewees, and those with non-LG partners typically avoided using LG with friends or family in order to be more accommodating of their spouses. It appears that the notion of raising children bilingually never

occurred to those mixed-language couples, and families where both parents spoke LG deliberately chose not to teach the language, as demonstrated in this example:

MHR did you teach them some Platt? ((her two sons))
 Lisa no,
 because ((husband)) said <Q whoa Q>.
 my mother said <Q they have to learn.
 ((son)) has to learn to speak German too Q>.
 and ((husband)) said
 <Q whoa I don't want him to go through in school,
 what I went through Q>.
 he says <Q we'll teach him English first.
 and then they can learn their .. their German. Q>

While some families were concerned that their children would struggle in school if they acquired LG, others stated that they did not believe learning the language would be beneficial to their children, especially given the declining number of speakers. There are no self-reported speakers born after 1950, although some speaker's (now middle-aged) children may still have passive knowledge of the language or know some cultural objects, idioms, or swear words. As a result, the intergenerational shift to English was finalized in the 1950s and 1960s in terms of acquisition, as the language was no longer passed on to the next generation.

Table 2-8: Sociolinguistic developments: Language shift (Phase 2).
 (Columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language by domain	
2. Phase of language shift 1945- current	Remaining LG speakers do not teach LG to their children who grow up monolingually English. LG-speakers become English-dominant throughout their adult lives. <i>Ostfriesische Nachrichten</i> discontinued.	National	E
		Regional	E
		Media	E (HG/LG)
		Education	E
		Religion	E
		Home	E (LG)

2.3 Current speaker community

Current remaining LG speakers in Grundy County generally report that they grew up speaking (only) LG at home and in the community, and that they learned English only upon entering elementary school. Throughout their lives, speakers report using LG in a slowly decreasing number of domains and with fewer interlocutors. None of the speakers taught their children the language, and very few LG-speaking couples use the language regularly with their spouse. Overall, all speakers can nowadays clearly be characterized as English-dominant and LG is used very rarely for a short amount of time, if at all.³⁹

In 1995, the *Ostfriesen History Society* was established with the purpose of revitalizing the LG language in the community and raising awareness of the East Frisian heritage. At the same time, a German LG-theater group visited Grundy Center on their way across the Midwest and was greeted with enthusiasm. In the ensuing years, revitalization initiatives included LG language courses at the Wellsburg library, as well as a community film project in which residents were interviewed about their lives and memories in LG (Webber 1998, 2003). A LG-play performed by local actors in 1999 and 2000 generated a lot of positive feedback, and the group even traveled to East Frisia to present their work. Regular travel group exchanges from Iowa to East Frisia (and vice versa) have revived ties to the former homeland, leading to the German city of Krummhörn becoming Grundy Center's official partner town in 2011. The Ostfriesen Heritage Society (OHS) is still active today, producing a regular newsletter and organizing various activities, the highlight of which is the annual "Ostfriesen Fest," which draws people

³⁹ It is noteworthy that there seems to be a substantial number of receptive bilinguals in the community. I met many middle-aged children of participants who were able to follow the conversations and knew a couple of words and phrases in LG. There might also be some former fluent speakers who may be able to reactivate their knowledge once they get a chance to speak LG more often. My estimate of these receptive bilinguals is around 50-70 individuals, but may be larger.

from all over the Midwest. Despite the fact that the number of active LG speakers is declining, interest in such groups and activities appears to be unaltered. According to anecdotal data, the middle-aged generation is aware of the area's East Frisian history, and may recall cultural rituals, ethnic cuisine, or even certain LG idioms, phrases, or curse words. An online survey presently in progress is exploring to what extent East Frisian customs and identity will be preserved in a postvernacular community.

Table 2-9: Sociolinguistic developments: Conclusion of language shift.
(Columns 1+2 based on Mattheier 2003: 28; column 3 based on Bousquette 2020: 514)

Phase and time	Situation / Events	Language by domain	
Conclusion of language shift <i>Current</i>	1990s: LG revitalization efforts; foundation of Ostfriesen Heritage society; continuation of traditions (mainly food); "postvernacular" community currently evolving?	National	E
		Regional	E
		Media	E
		Education	E
		Religion	E
		Home	E

2.4 Summary

Mattheier's (2003) language island model is an excellent tool to illustrate the complex sociolinguistic history of the East Frisian speech island in Iowa (see Table 2-10). It becomes clear that the community's diglossic traditions and strong identification with their ethnic background, and especially their religious beliefs, impacted language maintenance and shift. The group was culturally unique from other German immigrant communities from the beginning, because of their ethnic identity and Protestant affiliations. Due to of these aforementioned factors, the community avoided interaction with other immigrant groups, including the adjacent Schleswig Holstein LG-speaking population. and thus, evaded koineization or switching to a more HG Standard-like variation (see Litty et al. 2015, Pauwels 1986). Although the community

quickly adopted English as a language of education and media, the traditional diglossia of HG as the language of religious practice and worship and LG as the communal language remained an important part of the group's (religious) practices. However, a lack of HG training (aside from Sunday school and religious instruction) resulted in a generation of American-born individuals who were unsatisfied with the HG language policy in the local churches and advocated for more English inclusion even before 1915 (see Keel 2003: 309) and citations therein for similar findings). This intergenerational shift, combined with changes in pastors' education on a regional level (i.e., the curriculum changes to English during WWI at theological colleges), led to the end of HG services by the mid-1940s. Surprisingly, despite the younger generation's strong promotion of linguistic shift in the churches, LG was retained as the family and communal language (for similar findings see Bousquette & Ehresmann 2010). However, it appears that throughout this phase, the once rigid division of linguistic domains became less clear. While LG had previously only been used in the homes, it was now published in the *Ostfriesische Nachrichten*, aired on a radio show, and even used in church services on special occasions. This domain blurring is reminiscent of Fishman's (1965: 82) Third Stage of immigrant acculturation, when both the number of fluent bilinguals and domain overlap were at their highest. Unfortunately, the second phase of linguistic shift followed, with speakers who grew up with LG significantly reducing their use of LG in favor of English over the course of their lives (Fishman's fourth stage), and deciding to stop teaching LG to their children, often in order to avoid educational or economic disadvantages (see Seeger 2006 for similar findings). Although the remaining speakers have organized a number of revitalization initiatives since the mid-1990s, these efforts have failed to pique the interest of younger generations (see also Ballew 1997). It

remains to be seen whether the community will maintain its connection to its heritage and develop a postvernacular identity.

Table 2-10: Sociolinguistic developments: Overview
(Columns 1+2 based on Mattheier 2003: 28; column 3 based on (Bousquette 2020): 514)

Phase and time	Situation / Events	Language use by domain	
Initial situation ~ 1840-1900s	Low German as an autochthon minority language which became increasingly stigmatized; HG (or Dutch) as literary, formal and church language, LG as spoken community language. Political and economic instability.	National	HG
		Regional	HG (LG)
		Media	HG
		Education	HG
		Religion	HG (Dutch)
		Home	LG
Phase of migration 1840-1900	Ca. 20,000 East Frisians emigrated to the USA, often for economic reasons. Initial settlements in the 1840s in Illinois (small groups in Texas).		
Establishment of settlement 1856	Beginning in the 1850s: large settlements in Iowa; later settlements in Missouri, the Dakotas and Nebraska.		
Phase of consolidation 1856-1890	Development of group identity as East Frisian- American; inclusion of newer immigrants into the group; establishment of institutions (schools, churches, non-local ethnic newspaper: <i>Ostfriesische Nachrichten</i> , local English newspapers).	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	HG
		Home	LG
Phase of stability 1890-1915	No or minimal changes within the community; no language shift or changes in linguistic behavior. 1902: "Compulsory education law" did not seem to affect language of instruction, but verticalization processes imminent	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	HG
		Home	LG
Turning point 1915-1925	Onset of verticalization processes: 1918: "Babel Proclamation" After WWI: many churches return to HG services, but American-born generation prefers English over HG in church	National	E
		Regional	E
		Media	E/ HG
		Education	E
		Religion	E/ HG
		Home	LG
1. Phase of language shift 1925- 1945	Children no longer learn HG in Sunday school but grow up monolingually LG (or bilingually English/LG); learn English at school, become dominant in English throughout their adult life. However: extension of LG to other domains (newspaper, radio, church).	National	E
		Regional	E
		Media	E (HG/LG)
		Education	E
		Religion	E (LG)
		Home	LG/E

Phase and time	Situation / Events	Language use by domain	Phase and time
2. Phase of language shift <i>1945- current</i>	Remaining LG speakers do not teach LG to their children who grow up monolingually English. LG-speakers become English-dominant throughout their adult lives. <i>Ostfriesische Nachrichten</i> discontinued.	National Regional Media Education Religion Home	E E E HG/LG E E E (LG)
Conclusion of language shift <i>Current</i>	1990s: LG revitalization efforts; foundation of Ostfriesen Heritage society; continuation of traditions (mainly food); “postvernacular” community currently evolving?	National Regional Media Education Religion Home	E E E E E E

3

Verb placement variation and its study

In this chapter, I want to point out some of the core assumptions that are underlying this research. In the broadest sense, my dissertation is looking at the longitudinal change in verb placement variation in a Low German heritage community. More precisely, this study aims to find out which (socio-) linguistic factors favor the usage of V3-structures in naturally occurring conversations, using a variationist approach but also factoring in prosodic and information-structural aspects. Therefore, the following sections will provide definitions of the terminology and summarize previous findings, including the occurrences of such variation in different varieties of German, the linguistic properties that may favor V3-structures, as well as a discussion of the sociolinguistic factors that may encourage the use of variation in verb placement. The chapter is organized as follows: Section 3.1 provides an overview of verb placement in declarative main clauses in German, Section 3.2 focuses on verb third structures and introduces some generative interpretations, Section 3.3 introduces prosodic and information-structural approaches and their influence on verb placement, and Section 3.4 summarizes sociolinguistic factors that may influence V3-usage, before section 3.5 summarizes the main findings.

3.1 Introduction: Verb placement in German main clauses

One grammatical feature that has gained researchers' increased interest in a number of German(ic) dialects is verb placement. Most Germanic languages typically place the finite verb in second position in declarative clauses,⁴⁰ which is referred to as verb second (V2) word order

⁴⁰ English is the one major exception to this cross-linguistic syntactic pattern found in Germanic languages.

In addition to these canonical cases, where the *prefield* is only filled with one constituent, different patterns with multiple preverbal constituents have been discussed. The first of the two proposed positions has been referred to as the *pre-prefield* (German *Vor-Vorfeld*; see e.g. Auer 1997; Müller 2003). It seems that the use of multiple constituents before the finite verb may serve different semantic and discourse-pragmatic goals, and has been divided into *left dislocation*, *apparent multiple prefield* (Müller 2003, 2005; Schalowski 2015, 2017) and “*genuine multiple prefields*”, i.e. V3-sentences with sentence-initial adverbials (Bunk 2020, Schalowski 2017).

If “the left-dislocated phrase precedes the XP position, is pre-adjoined to the clause, and is obligatorily associated with a resumptive element (R) that agrees with the left-dislocated constituent” (Haider 2010: 2) we speak of *left dislocation*. In example (3), the resumptive (*den*) is a demonstrative pronoun that occurs in the position directly preceding the finite verb and agrees with the first constituent (*den Käse*).⁴⁵ Similar structures have been described for Norwegian (Eide 2011), English (Rohdenburg 2008), Low German (see example 11; Lindow et al. 1998: 287-288, Rohdenburg 2008), and Wisconsin German (Bousquette 2019).

- (10) (Den Käseⁱ), denⁱ **hat** die Maus gefressen
 (the-ACC cheese) that-ACC have-AUX the mouse eat-PTCP
 ‘The mouse ate the cheese.’

(adapted from Haider 2010: 3)

- (11) Un mien Kopp de **is** ümmer noch goot.
 and my head [it] is-PRE always yet good
 ‘And my head is still good.’

⁴⁵ See Frey 2012 for more information on left dislocation and its syntactic and pragmatic function in German.

(adapted from Lindow et al. 1998: 287)

(12) [XP Die Bäume_k [CP die_k **sind**_i alle hoch [VP t_k t_i ...]]]

‘The trees are all tall.’

(adapted from Bousquette 2019: 29)

Because of the duplicated topicalized element, a superficial V3 word order arises, which retains the structural properties of an underlying V2 (see the schema in (5)). Interestingly, Eide (2011: 207) argues that copy left dislocation structures (such as the ones in examples 10-12) “can be construed as non-V2” following Rizzi's (1997) split-CP theory suggesting that the CP-projection is actually divided into multiple projections, which allows for more than one constituent left of the finite verb. Similarly, Bousquette (2019: 29) argues that in sentences with left dislocated elements, there is an additional XP left of the CP-layer, which allows for two initial constituents. Both authors use a similar argumentation and seem to be cautious as to whether or not these structures should be interpreted as V2 or V3 structures. Since such copy left-dislocated structures are well-described in Low German grammars (see Lindow et al. 1998) and therefore do not constitute an unexpected form of syntactic variation, I will interpret them as canonical (i.e. V2-clauses).⁴⁶

In addition to left-dislocated structures with resumptive constituents, patterns with two pre-verbal constituents which do not stand in resumptive relationship to each other can be found in High German (Bildhauer & Cook 2010, Müller 2003, 2005). These preverbal constituents can occur in a number of different combinations, such as Subject+Adverb (13), Object+Prepositional phrase (14), Object+Adverb (15), or with multiple prepositional phrases (16) to name but a few (for a detailed overview with numerous examples, see Müller 2003, 2005).

⁴⁶ In this data set, 116 out of 2043 tokens (6%) show left-dislocation.

- (13) [*Alle Träume*] [*gleichzeitig*] **lassen** sich nur selten verwirklichen.
all dreams simultaneously let-PRE REFL only seldomly realize-INF
'Rarely can all dreams be realized at the same time.'
(Müller 2003: 3)
- (14) [*Zum zweiten Mal*] [*die Weltmeisterschaft*] **errang** Clark 1965...
for second time the world cup achieve-PST Clark 1965
'Clark won the world cup for the second time in 1965.'
(Müller 2003: 6)
- (15) [*Kurz*] [*die Bestzeit*] **hatte** der Berliner Andreas Klöden (1:17:33) gehalten.
briefly the best time have-AUX the Berliner Andreas Klöden hold-PTCP
'The best time had briefly been held by the Berliner Andreas Klöden.'
(Müller 2003: 7)
- (16) [*Vor drei Wochen*] [*in Memphis*] **hatte** Stich noch in drei Sätzen gegen Connors verloren.
before three weeks in Memphis have-AUX Stich still in three sets against Connors lost-PTCP
'Three weeks ago in Memphis, Stich had lost to Connors in three sets.'
(Müller 2003: 9)

In his analysis, Müller argues that these structures comprise “apparent multiple prefields” (*scheinbar mehrfache Vorfeldbesetzung*; Müller 2005: 13) and suggests that they may be part of a verbal projection with an empty verbal head.⁴⁷ Interestingly, it seems that subjects are much less likely in these multiple prefield positions than non-subject constituents, which leads to an inverted topic-comment structure (Schalowski 2017: 15). As such, these structures are used for two information-structural purposes: either, they introduce a new topic which is the focus of the following sentence, or to assess a statement about the topic. “Both information-structural types of apparent multiple prefields share the property that it is the pragmatic (topical) status of the material remaining in the postverbal domain that licenses the occupation of the prefield by multiple non-topical constituents” (Schalowski 2017: 15). However, since these examples stem

⁴⁷ For a detailed discussion of other analyses and more information on this suggestion, see Müller (2003, 2005).

from newspaper articles or other written sources, they are characteristic of a formal written register (Schalowski 2017: 10, fn 9), which may not be comparable with the data in this study.⁴⁸ Therefore, I will not explore these apparent multiple prefield-structures further at this point.

Finally, we turn to a grammatical construction that used to be ruled “ungrammatical” but has been described in many Germanic languages and German varieties: V3-structures with sentence-initial adverbials (or what Schalowski 2017: 15 calls “genuine multiple prefields”).

- (17) Heute, die Maus **hat** den Käse verschmäht.
 today the mouse has the cheese disdained
 ‘Today, the mouse disdained the cheese.’

(Haider 2010: 3)

- (18) *dann* *die* *sind* *zur* *Ubahn* *gerannt*
 then they be-AUX to the metro run-PART
 ‘Then, they ran to the metro.’

(adapted from Wiese et al. 2008)

These structures show two distinct (i.e. non-resumptive) constituents before the finite verb, as illustrated in (18) for *Kiezdeutsch*, an urban vernacular spoken in some major German cities. In contrast to the previously discussed ‘apparent multiple prefield’-structures, ‘genuine multiple prefield sentences’ typically begin with a (temporal) adverbial and a (pronominal) subject before the finite verb. In addition, they typically occur in spoken interactions (although some evidence has been found in informal written communication) and may serve as frame setters or discourse markers (more about this in Section 3.3.3). Section 3 will provide a detailed overview of these V3-structures, including generative theories, as well as prosodic and information-structural factors.

⁴⁸ In addition, since Low German only has nominative and a non-nominate case marking (Lindow et al. 1998: 144), its word order is more restricted than that of High German. Thus, although objects can occur in sentence-initial position, subjects are much more common (Lindow et al. 1998: 277-278).

3.2 Verb third placement in German(ic) varieties: Generative approaches

As defined in Section 3.1, verb third-structures (V3) or “genuine multiple prefields” are structures in which both an adverbial and a subject precede the finite verb. This particular grammatical pattern has received much attention in recent years, and there is mounting evidence that V3-structures have always been used, not just as slips of the tongue but in systematic and cross-linguistically comparable ways. Thus, V3-structures have been described for monolingual speakers of West Flemish (Greco & Haegemann 2016), in a wide variety of urban Germanic vernaculars, such as Dutch (Freywald et al. 2015), Danish (Quist 2008), Swedish (Ganuza 2010), and Norwegian (Opsahl & Nistov 2010), as well as Heritage Norwegian (Alexiadou & Lohndal 2018). Likewise, the phenomenon is well-studied for varieties of German, including historical data (see Speyer & Weiß (2018) for Middle High German and Petrova (2012) for Middle Low German), the urban vernacular *Kiezdeutsch* (te Velde 2017b, Wiese 2011, Wiese et al. 2009, *inter alia*), contact varieties such as *Cité Duits* (Pecht 2019), *Russlanddeutsch* (Andersen 2016), Wisconsin German (Sewell 2015), heritage Low German in the US (Bender 1980, Wirrer 2009), and in spoken High German (Breitbarth 2021, Bunk 2020, Schalowski 2017).⁴⁹ The following four examples from *Kiezdeutsch*, *Cité Duits*, Wisconsin German and Heritage Low German serve to illustrate these structures:

- (19) *ab JETZT ich krieg immer ZWANzig euro*
 from now I get always twenty euros
 ‘From now on, I get always twenty euros.’

(adapted from Freywald et al. 2015: 89)

- (20) *un EIN tag ich geh gucken*

⁴⁹ These structures can also be found in Texas German (Margo Blevins; p.c.), Australia German (Anna Saller; p.c.) as well as Namibia German (Britta Schulte; p.c.).

and one day I go-PRE look-INF

‘And one day, I take a look.’

(adapted from Pecht 2019: 90)

(21) *jetzt de hund und fritz gucken for des frog in eine großen baum*
 then the dog and fritz look-PRE for the frog tree

‘Now the dog and Fritz look for the frog in a big tree.’

(adapted from Sewell 2015: 242)

(22) *denn he verkopt de*
 then he sell-PRES then

‘Then he sells them.’

(adapted from Bender 1980: 83)

Generally speaking, V3-structures usually occur with a sentence-initial (temporal) adverb (Te Velde 2017a: 301), but initial constituents may also be determiner phrases (DPs), prepositional phrases (PPs), or complementizer phrases (CPs) (Walkden 2017).⁵⁰ The constituent immediately in front of the verb seems to be much more restricted than the sentence-initial constituent and is almost always a (pronominal) subject (Walkden 2017: 55).

Despite the descriptive similarities of these structures across German(ic) varieties within different studies, the syntactic derivation and sociolinguistic motivation of V3-sentences are highly debated. In the generative tradition, a split of the CP-layer as well as loss of V-to-C-movement have been proposed (Opsahl & Nistov 2010, te Velde 2017a). For example, Te Velde (2017a: 332) argues against a general “symmetric V2”-approach, according to which all subject-initial clauses need subject-raising to SpecCP followed by subsequent V-to-C-movement. For V3-structures, this would require an additional SpecCP projection filled with a time adverbial with specific syntactic and prosodic requirements (i.e. pitch accent). Since pitch accent does not necessarily occur on left-edge elements of Kiezdeutsch V3-structures, te Velde sees this as

⁵⁰ Based on V3-sentences extracted from the Kiezdeutsch-Korpus (Rehbein et al. 2014).

evidence against V_{fin} -raising arguing that the time adverbial is not adjacent to V_{fin} , and therefore cannot value its features. Thus, there is “no ad hoc or unmotivated movement” in V3-structures (te Velde 2017a: 332). Following Chomsky (2001), te Velde (2017a: 316) proposes that the time adverbial is “merged late (by EM)⁵¹ as an adverbial of TP after the syntactic cycle is complete”. To put it differently, temporal adverbials in fronted sentence-initial positions are not part of the original D-structure and are only added to the S-structure once all grammatical features are already checked, as illustrated by example (23):

- (23) Derivation of KD (Kiezdeutsch) *Gestern isch war Ku'damm*
- a. EM (from numeration): $[_{VP} \textit{isch Ku'damm war}]$
- b. IM for subj-verb agreement: $[_{TP} \textit{isch war} [_{VP} \textit{isch-war Ku'damm}]]$
- c. late merge of *gestern*: $[_{TP} \textit{gestern} [_{TP} \textit{isch war} [_{VP} \textit{isch-war Ku'damm}]]]$
- (te Velde 2017a: 317)

Although te Velde's (2017) approach seems to account for the presented V3-structures, Walkden (2017: 59) criticizes two of te Velde's underlying assumptions. First, TPs in German main clauses are not head-initial (see e.g., Haider 2010: 54-67), and second, SpecTP is assumed to be a subject position but the preverbal constituent may also be filled with other constituents (Walkden 2017: 55), which would be problematic for the TP approach. Therefore, Walkden (2017) suggests a split-CP approach based on Rizzi's (1997) extension of the C-domain, which was further developed by Benincà & Poletto (2004) and Frascarelli & Hinterhölzl (2007). This approach suggests that Germanic urban vernacular V3-structures show two left-peripheral projections instead of one, as assumed for most other Germanic languages. The lower projection (labeled CP1 here), combines Rizzi's *FinP* (finiteness) with Frascarelli & Hinterhölzl's (2007)

⁵¹ Added note by the author: *EM* = external merger vs. *IM* = internal merger, see Chomsky (2001).

FamP (familiarity), while the higher projection (CP2) links focus and topic projections and is multifunctional (Walkden 2017: 63).

- (24) [CP2 morgen [CP1 ich [C **geh** [TP Arbeitsamt]]]]
 tomorrow I go job center
 ‘Tomorrow I will go to the job center’.

(Walkden 2017: 62)

This proposal would also account for the information-structural properties of the constituents in SpecCP1, which is typically filled by a pronominal (thus familiar) subject, and SpecCP2, which can show a variety of constituents, but often entails a temporal adverbial which is defined as an interpretational frame or scene setter Walkden (2017: 63).

Another approach, based on Giorgi & Pianesi's (1996) feature scattering hypothesis is proposed by Hsu (2017). He opposes stacked head theories, which assume that only one C head containing a hierarchically stacked set of features exists instead of separate heads for each left-peripheral feature (Lahne 2009, Manetta 2011) because they are insufficient to account for both strict V2 systems and “relaxed” V2 systems that allow for V3 and V4 patterns (Hsu 2017: 32). Like Walkden's split-CP hypothesis (2017), Hsu's approach follows Rizzi's (1997) and Benincà & Poletto's (2004) hypothesis that left-edge projections follow a fixed hierarchy of functional projections. However, in contrast to Walkden, this approach does not predict a strict single or split-CP, but suggests instead that there may be “any number of left-peripheral heads between one and the maximum number of left-peripheral features, whatever it turns out to be” (Hsu 2017: 20).

While previous work often implemented a generative approach (e.g., Newmeyer 2009, te Velde 2017a, 2017b, Walkden 2017), Freywald et al. (2015) and Wiese (2009, 2011, 2020) have long argued for an information-structural motivation behind V3-structures, and the role of

prosody has been debated (Breitbarth 2021, Selting & Kern 2009, te Velde 2017b). Therefore, the next section introduces information-structure and prosody and their influences on verb placement variation.

3.3 The influence of prosody and information-structure on verb placement

The data used in this dissertation is based on the usage-based belief that naturalistic spoken language will provide the researcher with more authentic data than elicited narrations, experimentally designed data or examples based on introspection (Bybee & Hopper 2001, Chafe 1994). For this reason, the data will be taken from conversational speech, recorded during fieldwork in the form of semi-guided interviews and conversations (see Chapter 4). The challenge with this approach, however, is that spoken language does not come in a form that is immediately statistically analyzable. For this to happen, the stream of sound has to be transcribed (see Chapter 4), and segmented into cohesive units. Moreover, prosody and intonation combined with word ordering are crucial components to highlight the information that the speaker intends to convey. Therefore, this section seeks to define the units of analysis and provide an introduction into the role of prosody and information structure for word order.

3.3.1 Prosodic boundaries and their meaning

When working with spoken language, it becomes obvious that speakers do not produce one single continuous stream of sounds, but rather short “spurts of vocalization” (Chafe 1994: 1) whose boundaries are prosodically marked. Because of the workings of human cognition, these small units express “discrete segment[s] of information” (Chafe 1994: 53) to allow the

interlocutor to comprehend the content of these utterances more easily. In order to indicate the end of one such speech stream segment, speakers make use of particular intonation patterns, using high and low tones. For German, two tone levels are used to describe intonation patterns, one high tone (H) and one low tone (L).⁵² In combination, these tone levels can be combined into rising (H+L), falling (L+H) or level intonation contours (O'Brien 2020: 175). The segments of speech are referred to as *intonation units (IUs)*, and may vary in length from a single syllable to a complete sentence (Croft 1995, Du Bois et al. 1993).⁵³ Although the meaning of an intonation contour preceding the end of an IU can be inconsistent, generally speaking, falling intonation is used with unmarked statements, categorical assertions, and to signal finality. Slightly rising intonation or level tone is used in incomplete utterances to mark continuation, and sharply rising intonation occurs in requests (O'Brien 2020: 175). The end of an IU is typically signaled by a longer final syllable followed by a pause, while the beginning of a new IU is indicated by pitch resetting (Himmelman et al. 2018).

Importantly, while pauses may help to detect IU boundaries, they are neither a required nor a sufficient category to delimit the end of an IU Croft (2007: 2). This point is especially true for elderly speakers, who may show lexical retrieval problems, tend to make more and longer silent pauses (Gayraud et al. 2011: 4 and citations therein) and show slower speech rates, with an increased amount of hesitations, false starts and repairs (Goral 2004: 44). Pauses, no matter their length, hence will not be considered as delimiting IUs, unless they follow a significant drop or rise in intonation in the preceding utterance. In practice, the transcriptions look like example (25).

⁵² Following Peters (2010), I will assume that Low German follows similar intonation patterns.

⁵³ Note that O'Brien (2020: 167) and others uses the term intonation phrase (IP), which mostly overlaps with Croft's understanding of intonation units.

(25)	95 <i>wenn ... (0.7) uh störm upkommen dee,</i>	when storm up-come-INF do-PAST
	96 <i>... (0.8) in't nacht,</i>	in the night
	97 <i>... (1.0) OH DANN,</i>	oh then
	98 <i>.. mien MÖder was up,</i>	my mother be-PAST up
	99 <i>.. un dann see se,</i>	and then say-PAST she
	100 <i>... (1.7)<Q treckt jo an.</i>	get-dress-IMP you-PL
	101 <i>Ø is- is slim m- mal weer. Q></i>	[it] is very bad weather
	102 <i>... (1.2) un DANN,</i>	and then
	103 <i>.. WI MÜssen antrecken,</i>	we have-to-PAST get-dress-INF
	104 <i>un dann müssen wi bi't .. TAvel sitten,</i>	and then we have-to-PAST at the table sit-INF
	105 <i>.. in in köken.</i>	in [the] kitchen

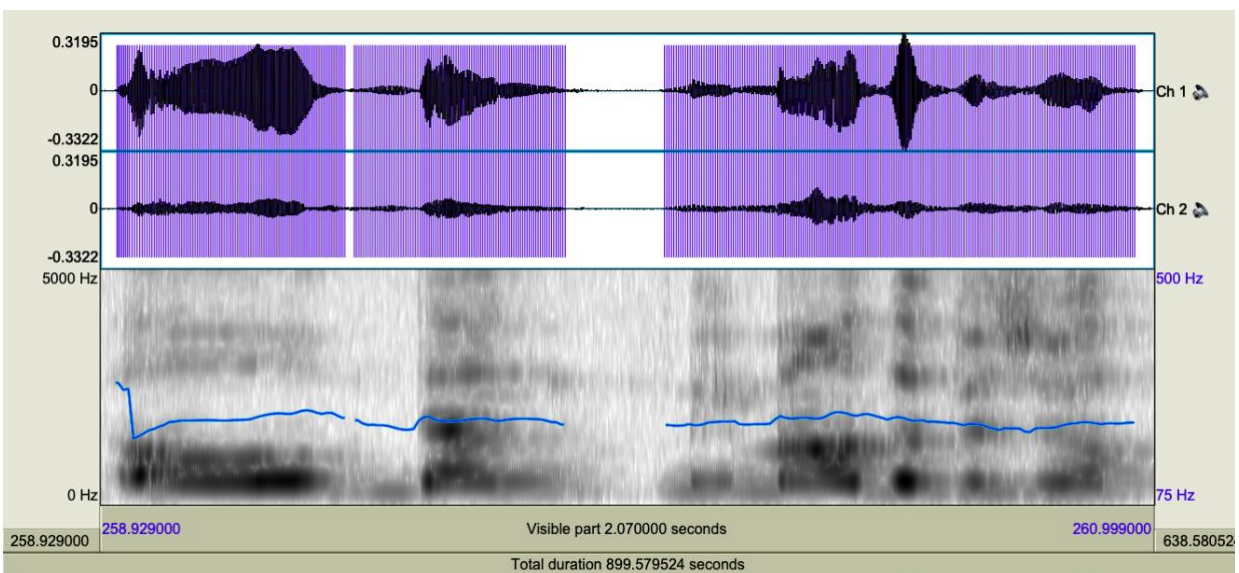
We see that although each IU may only express a single, simple piece of information (e.g. line 103), a string of connected IUs can be used to express an overarching, more complex idea (e.g., lines 102-105). This concept is called a “prosodic sentence” (PS) (Chafe 1994: 142). Parts of the transcript shown in example (25) are represented in Figure 3-1, showing speech waves of the utterance (top tier) and the prosodic contour generated by the f0-formant (bottom tier), created with Praat (Boersma & Weenink 2022). While IUs may end in slightly raised or level intonation, indicating the continuation of the utterance (transcribed with a “,” symbol; e.g. lines 102, 103, 105), speakers indicate that they have expressed the entire idea by using intonation that marks the end of the utterance (i.e., sharply falling in declarative statements; transcribed with a “.” symbol; e.g., line 105). Thus, a prosodic sentence may comprise a single IU (see line 101), or consist of two or multiple IUs (see lines 95-100). These larger “cognitive units” or “centers of interest” are defined as “superfoci of consciousness” which are expressed in “super-intonation units” (Chafe 1994: 140). Importantly, while the beginning and end of IUs often overlap with sentence boundaries (e.g., line 99, 101),⁵⁴ this is not necessarily the case. Constituents (such as

⁵⁴ Croft (1995: 841) finds in his study of oral narratives by English native speakers that 97% of all IUs are also grammatical units (GUs), with only 3% of the IUs consisting of fragmentary parts or false starts. In Croft’s approach, GUs entail phrases (noun phrases, prepositional phrases), complements, and finite and non-finite clauses

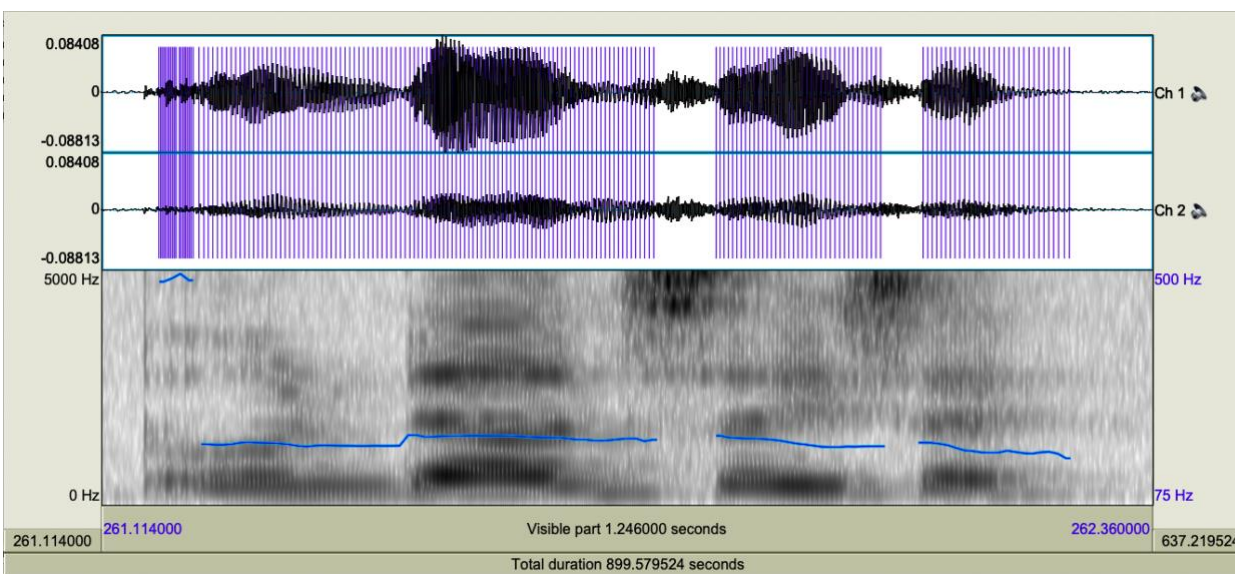
the adverbial *dann*) may be prosodically separated from the remainder of the sentence (line 97-98) or information may be added in a subsequent IU (e.g. *in .. in köken* 105).

Note that the terms *sentence* and *clause* are often used synonymously in studies on V3 and countless definitions of the two concepts exist (see Crystal 2008). However, since the traditional definition of a *clause* entails only a subject and predicate, adverbials would *by definition* be outside of the clause in the narrowest sense. For this reason, and in line with Chafe's terminology, I will refer to larger units as *sentences*, which necessarily include a subject and a predicate (i.e., a finite verb and its arguments) but may also contain additional constituents such as adverbials. Nonetheless, in order to align with most wide-spread notions of different sentence types, I will make use of the terms *main clause*, referring to an independent clause that in Low German would typically show V2 placement, and *subordinate clause*, referring to a clause that depends on a main clause, begins with a subordinating conjunction, and typically shows verb-final word order.

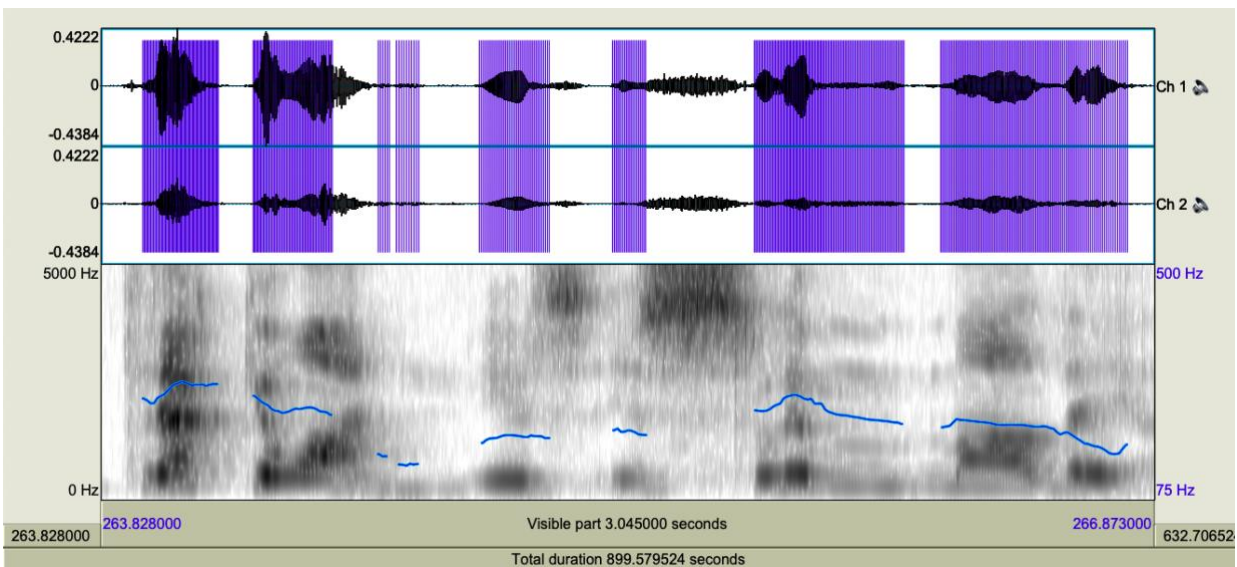
(e.g., relative clauses, adverbial clauses, subjectless clauses, simple clauses). Overall, IUs which entail some sort of clause make up 66.2% of the data, with an additional 3.1% of IUs containing coordinate sentences (Croft 1995: 845).



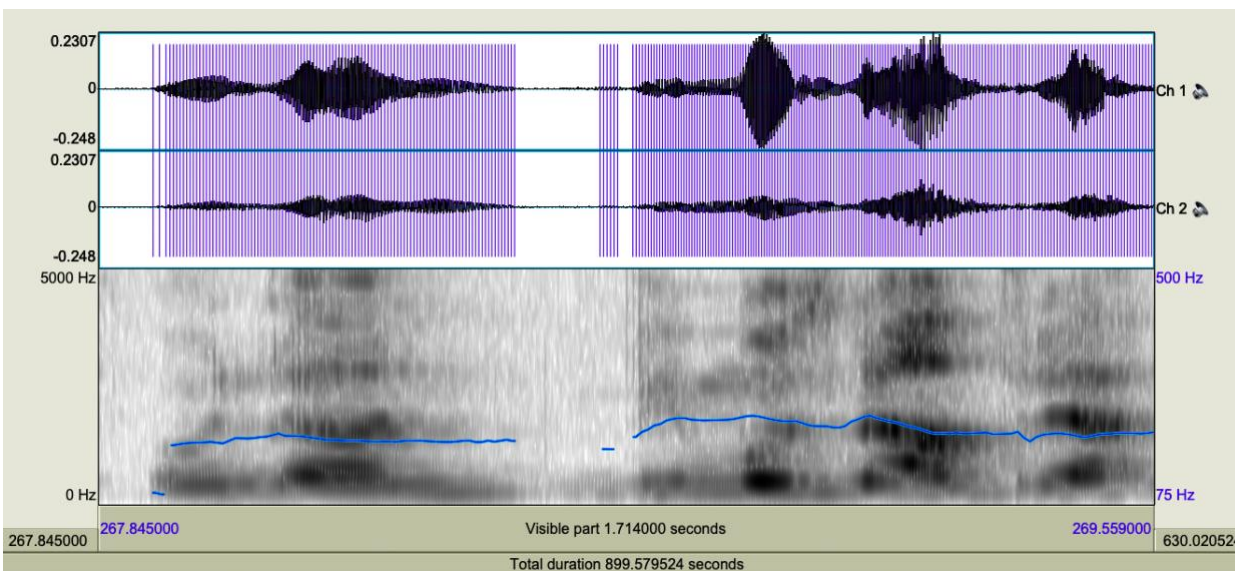
97-98 oh= dann, .. mien moder was up



99 un dann see se,



100-101 treckt jo an. is s- slimm mal weer.



102-103 un dann, .. wi müssen antrecken,

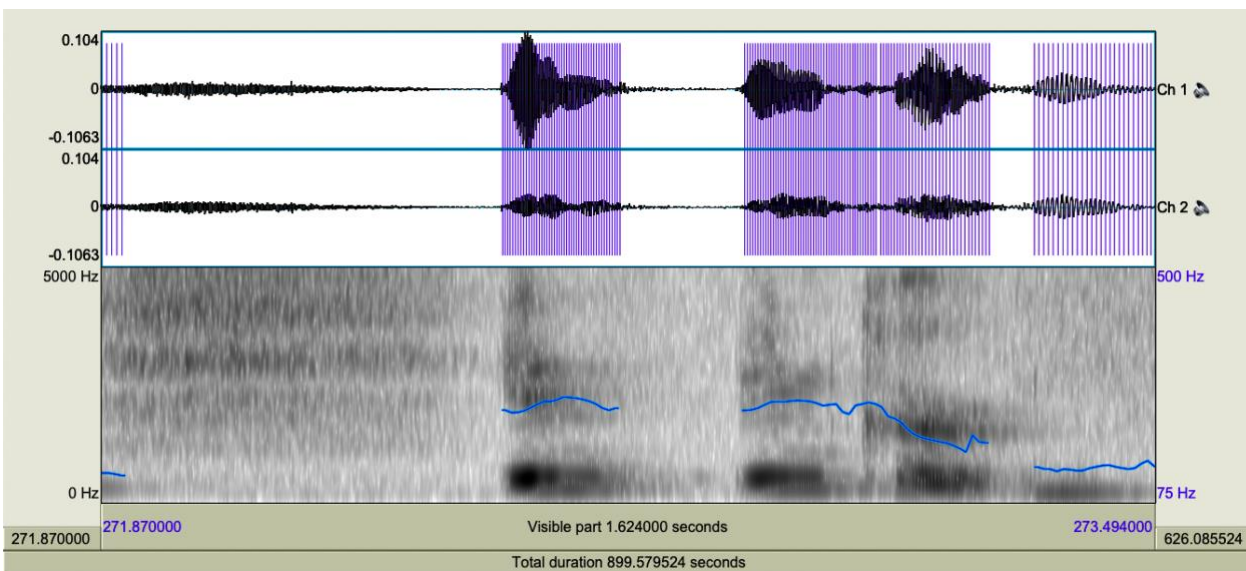
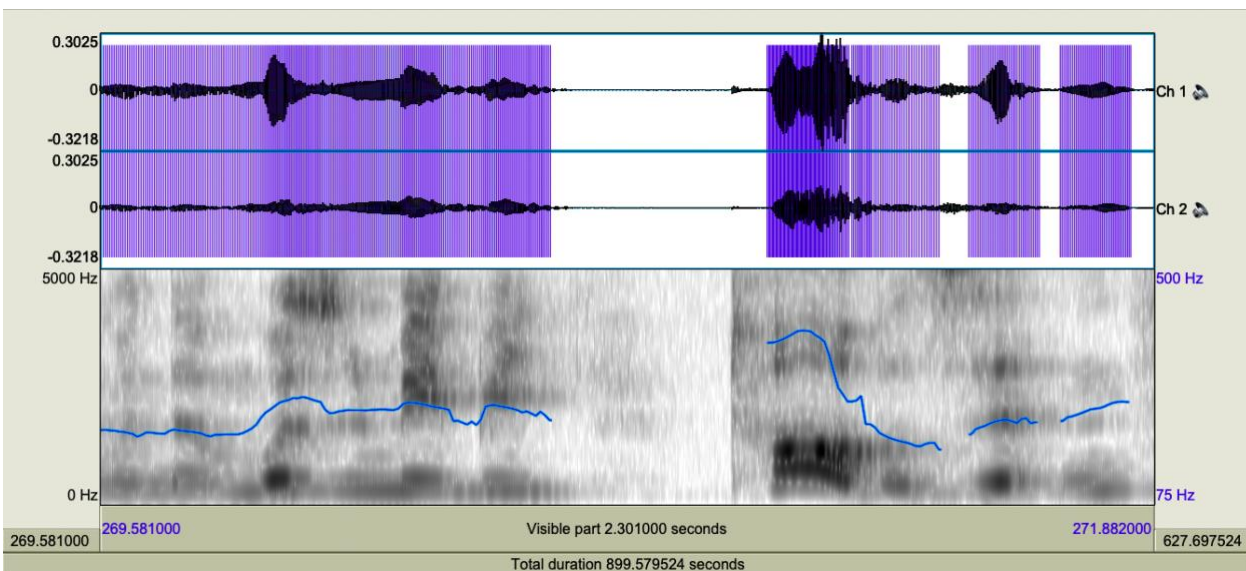


Figure 3-1: Speech waves and f_0 -formant representing prosodic contour.

Selting & Kern (2009: 2502) suggest that “prosodically integrated constituents” in V3-structures serve to present new information, while “non-integrated constituents” emphasize a critical point in the narrative. In Chafe’s IU-based terminology: if all elements of a V3-structure are included in a single IU, it may function as an introduction of new information in the narrative, but if the constituents are distributed across multiple IUs within one prosodic sentence, the V3-structure may serve to indicate a highlight in the narration. The next section will elaborate on the information-structural importance of prosody and discuss potential differences in V3-constructions.

3.3.2 Prosody, information-structure and verb placement

Besides marking the boundaries of units of speech, prosody is a crucial component to organize and highlight information in the speech stream. From an information-structural standpoint, every sentence has three information structural pairs, namely focus-background, given-new, and topic-comment (Féry 2020: 661). One part of these pairs is considered the default, while the other is the complementary element in that “part of the sentence is focused, and the remainder is backgrounded; part of it is given and the remainder is new; part of it is the topic and the remainder is the comment” (Féry 2020: 661). These features have considerable effects on the grammar, as they can influence the use of focus particles and pitch accents, or have an effect on word order. The first of these three pairs is defined as follows:

- (26) **Focus** indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.

(Féry 2020: 663)

As already introduced in Section 3, focus is generally expressed by a prominent pitch accent on

one (sub-sentential) part of the sentence. While the other elements are backgrounded, the focus element is made more prominent by pitch accent, which may potentially change the meaning of the sentence (Féry 2020: 662). Focus is usually marked by a subscripted _F, while pitch accent is indicated by capitalized letters:

- (27) a. John only showed Mary [the PICTures]_F.
 b. John only showed [MAry]_F the pictures.

(Krifka 2008: 244)

By changing the pitch accent and thus the focus, these two sentences receive different sets of truth-conditional content. While (27a) implies the existence of another item to be shown besides a set of pictures (e.g. a video), (27b) implies that there may be another person interested in the pictures besides Mary (e.g. Lisa). Krifka (2008: 250) points out that the use of focus does not *change* the truth conditions conveyed in the sentence, but failing to put the focus on the correct element via pitch accent may lead to miscommunication or incoherencies. In a conversational context, however, the hearer normally knows from context which element is new information, so the addition of pitch accent can be seen as a discourse-pragmatic strategy to draw attention to this element. Thus, accenting the most important information in a sentence while backgrounding the other elements by deaccenting them, may facilitate information processing (Féry 2020: 664) and help to direct the conversation in the preferred direction.

In addition to focus-background, *given* versus *new* information is the second information-structural pair of importance, defined as follows:

- (28) **Givenness:** A referent or part of a sentence is given if it is anaphoric to a

constituent mentioned previously in the discourse, if it is entailed by the previous discourse, or it is salient in the context.

(Féry 2020: 664)

Interestingly, the nature of givenness has been of some debate in previous literature. Some authors state that givenness is entailed in the previous discourse, so information is either given or it is not (Halliday 1967, Schwarzschild 1999). Other authors, however, argue that givenness of referents is gradient, with information being more or less given in the preceding discourse (Baumann & Riester 2013, Prince 1981). Givenness can be expressed by word order, deaccentuation or deletion, or by use of anaphoric items whose lexical properties in and of themselves feature givenness (Krifka 2008: 262). Such lexical specifications to express givenness (e.g., pronouns, demonstratives, clitics, zero forms) are hierarchically ordered in the sense that “simpler anaphoric expressions are used to refer to more salient denotations” (Krifka, 2008: 263).

The last of the three information-structural pairs is topic-comment, which is also commonly known as the *theme-rheme* pair (see Steedman 2000: 656 for a discussion of these terms and their usage in previous literature). Sentences that contain a topic and a comment are considered “categorical”, while those that only entail a comment are described as “thetic” (Féry 2020: 665). In short, topic is defined as:

- (29) A **topic** is a denotation of a referential expression about which the remainder of the sentence expresses a proposition.

(Féry 2020: 666)

The topic hence serves as an entity, about which the comment offers new information. Often, the topic has been introduced in the preceding discourse and connects the utterance to former propositions. Structurally speaking, topics are usually placed as the first constituent in a clause.

to the following sentence. Freywald et al. (2015: 89) suggest that some sentence-initial adverbials in V3-structures have specific discourse pragmatic functions, as exemplified in (24):

- (31) [ab JETZ] [ich] krieg immer ZWANzig euro
 from now I get-PRE always twenty euros
 ‘From now on, I get always twenty euros.’

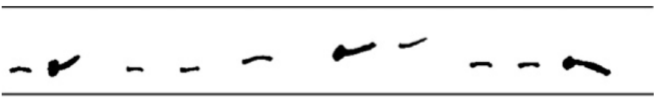
(Freywald et al. 2015: 89)

In cases like (30) or (31), the adverbial points to an important contrast between a time when the statement was invalid versus a time when the statement is true (Freywald et al., 2015). Indeed, discourse markers and frame setters need to be in a fronted position to link the new information to previous discourse, and (familiarity) topics also typically occupy the first position in a clause (Erteschik-Shir 2007: 105). While Germanic V2-languages offer only one slot for a constituent to fulfil these discourse-pragmatic functions before the finite verb, urban vernaculars and contact varieties seem to allow more than one constituent before the finite verb which function to fulfil information-structural needs, thus creating V3-structures (see Wiese et al. 2009, Wiese 2011).

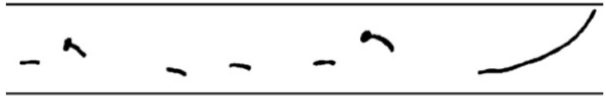
In addition to the pitch accent that may be found on the temporal adverbial, some studies have focused on the prosody of V3-structures, or more specifically, the “prosodic integration” (Selting & Kern's 2009) of the first constituent. In their study on Kiezdeutsch,⁵⁵ Selting & Kern (2009) discuss three spoken examples of V3-sentences and their discourse-pragmatic interpretation. For the structure in example (32), they observe that the temporal adverbial *danNACH* (‘afterwards’) has a primary accent (marked by capitalized letters), and a rising intonation contour, followed by a lower pitch on the next constituent *v: vor* (‘in front of’) which marks resetting before a new prosodic unit. Thus, *danNACH* is prosodically exposed because of

⁵⁵ They refer to it as *Türkendeutsch* (‘Turkish German’) but based on the sociolinguistic description, we can assume that it is the urban vernacular now better known as *Kiezdeutsch*.

its pitch accent and rising intonation, and constitutes an IU of its own (Selting & Kern 2009: 2500). The same is true for the following constituent *v: vor meinem FENSter* ('in front of my window'), which shows a primary accent on *FENSter* and ends in a rising intonation with a resetting on the next constituent *is=so BRIEF* ('is such a letter'), which ends with a falling intonation, ultimately delimiting the entire utterance.

- (32) 
 daNACH, v: vor meinem FENSter, is=so BRIEF;
 after.that, before my. window, is such letter
 'Afterwards, there was a letter in front of my window.'
 (adapted from Selting & Kern 2009: 2500)

In contrast to example (32), the temporal adverbials *danAch;=* ('after that') and *dAnn;* ('then') in examples (33) and (34) are prosodically less clearly separated from the next constituent. In both sentences, primary accent lies on constituents in the adjacent sentence, and both left-peripheral adverbials have a secondary accent, which is weaker than the primary accent on *danNACH* in (32). Although in (33) the "following sentence is latched to the initial adverbial with fast tempo", the falling intonation marks *danAch;=* as prosodically separated from the rest of the utterance (Selting & Kern 2009: 2501). For (34), the temporal adverbial *dAnn;* and its preceding constituent are separated by a slight pause (noted as ()), which again marks it as prosodically non-integrated but less clearly separated than (32).

- (33) 
 danAch;= wir warn auf KLO;= wei:ßt du?
 after.that we be-PAST to the toilet you know?
 'Afterwards, we went to the restroom, you know?'

- (34)
-
- dAnn; (.) wir sind geGANgn,=
 then we be-AUX go-PTCP
 ‘Then, we left.’

(adapted from Selting & Kern 2009: 2502)

According to Selting & Kern (2009: 2502) the prosodically “exposed prepositioning” in (32) is used to put focus on an event or as a “high point in storytelling”, whereas the “prosodically cliticized prepositionings” (33 and 34) are used to “initiate the presentation of new events”. Although these interpretations may be too general, this study was the first to attempt capturing the differences in information-structural characteristics and prosody of V3-structures, which has since been developed further.

3.3.3 Sentence-initial adverbials: discourse marker or frame setter?

Schalowski (2015, 2017) was the first to analyze V3-structures with a discourse-pragmatic approach, focusing on the semantic differences between types of sentence-initial adverbial material. He convincingly argues that there may be two types of AdvXV-structures, namely one frame setter construction (35) and one discourse connective construction (36) (Schalowski 2017: 3):⁵⁶

- (35) [In anderen Städten] [das] **gibt** es nicht
 in other cities that give-PRE it not
 ‘In other cities that doesn’t exist.’
 Schalowski 2017: 2
- (36) [dann] [ich] **sehe** jetzt Don Giovanni von Mozart

⁵⁶ Note that the square brackets do not mark intonation boundaries. They were simply reproduced from Schalowski’s conventions to mark the adverbials and topics more clearly.

then I see-PRE now Giovanni from Mozart
 ‘Then I’ll see Don Giovanni by Mozart now.’

Schalowski 2017: 2

In (35), the adverbial *in anderen Städten* is used as a frame setter for the following utterance and only has scope over this one sentence. The structure was defined as AdvXV_{frame-topic} (Schalowski 2017: 3). Pragmatically speaking, frame setters serve to define the validity of the core statement while acting as the interpretative anchor for the subsequent proposition (Chafe 1976, Jacobs 2001, Krifka 2008, Maienborn 2001, Schalowski 2017: 20). Thus, the adverbials in these cases are semantically relevant to the remainder of the utterance.

In contrast, the adverbial *dann* in (27b) does not semantically encode the order of events in this particular utterance, but rather serves to connect the preceding discourse to the new proposition, thus creating a temporal linkage between the two discursive segments (Schalowski 2017: 3). This structure can be defined as AdvXV_{temporal} (Schalowski 2017: 3). As such, the adverbials in these structures serve as discourse markers, which are used to organize the interaction between speaker and hearer, and to structure the narrative event (Auer 1996, 1997, Auer & Günthner 2003, Schiffrin 1988, Siebold 2021, Schalowski 2017: 27). For a more operational distinction, I will follow Imo's (2012: 79) characterization of “discourse markers” (translated in Bunk (2020: 144), see Table 3-1).

SYNTAX	pre-prefield position, can combine with other discourse markers
MORPHOLOGY	short, often emerged from fixed phrases
SEMANTIC	bleached, does not affect the following contribution
FUNCTION	framing of the utterance and organization of the discourse
SEQUENCE	projects an utterance, which is integrated into the context of the preceding utterance
PROSODY	prosodically marked if the discourse marker has a homonymous counterpart, otherwise prosodically free

However, whether or not an adverbial serves as a discourse marker or a frame setter is not always easy to distinguish. Take examples (37) and (38) for reference.

(37) *Nun, das möchte ich genauer wissen*
 now that want-PRE I more.precisley know-INF

‘Now I want to know this more precisely.’

(adapted from Andersen 2016: 280)

(38) *Nun möchte ich das genauer wissen*
 now want-PRE I this more.precisley know-INF

‘Now I want to know this more precisely.’

(adapted from Andersen 2016: 280)

In example (37), the adverbial *nun* is not used with its original semantic meaning (‘now’) but rather in its discourse pragmatic function as a signal that the speaker intends to start an utterance (Andersen 2016: 279-280). As it is prosodically separated from the rest of the utterance, the remainder of the sentence shows a V2-structure, which would be considered canonical in standardized German. But in (38) *nun* retains its semantic meaning (‘now’) and is prosodically integrated into the sentence, thus invoking verb-inversion and causing a V2-structure (Andersen 2016: 280). Thus, *nun* would be considered a discourse marker in (37) because it is semantically

‘bleached’ and a frame setter in (38).⁵⁷ Based on this definition, Andersen argues that both German-based *nun* and the Russian-based *nu* serve as discourse markers in German varieties in Eastern Siberia. Importantly, it seems that the discourse markers are always prosodically exposed from the rest of the utterance in this data set:

- (39) *nun, das haben se gleich gemerkt.*
 well this have-AUX they immediately notice-PTCP
 ‘Well, they noticed it immediately.’

(adapted from Andersen 2016: 283)

- (40) *nu, er is jez fort*
 well he is-PRE now away notice-PTCP
 ‘Well, he has gone now.’

(adapted from Andersen 2016: 283)

Importantly, however, prosodic separation from the sentence does not only apply to discourse markers. Breitbarth (in press) finds very similar prosodic patterns in a collection of 23 V3-utterances of standardized German collected from radio interviews, but in contrast to the discourse marker *nu/nun* in Russian German varieties, all of these sentence-initial adverbials retain their semantic meaning and can thus be defined as frame setters (Breitbarth in press):

- (41) [...] [*Auch in Afrika*], [*die meisten Menschen*] *sprechen* *Englisch*
 also in Africa the most humans speak-PRE English
 ‘In Africa, most people speak English as well.’

Breitbarth (in press: page 9)

⁵⁷ Note that examples (37) and (38) stem from the *Duden* (a German reference work) and Andersen’s introspection, while examples (39) and (40) are authentic examples from heritage Russian German speakers, extracted from the *Sibirientyska* corpus (‘Siberian German Corpus’) at the University of Gothenburg.

- (44) [vorhin] [ick] **bin** so na= HAUse jelaufen ...
 earlier I be-AUX PTCL to home go-PTCP
 ‘Earlier, I was going home’

[KiDKo, Mo05WD] Wiese & Müller 2017: 212

In contrast to examples (41-42), where the adverbials are prosodically marked and not integrated into the utterance, this is not the case in (43-44). Thus, it seems that prosody is not a sufficient category to distinguish discourse markers from frame setters, as both types can occur in prosodically exposed examples (41-42), as well as integrated into the remainder of the sentence (43-44).

Based on a construction-grammar approach, Bunk (2020: 145-146) suggests two different schemata to capture the linguistic and semantic characteristics of both discourse marker and frame setter patterns (see Figures 3-2 and 3-3 for the translated models, including full descriptors instead of acronyms). For both constructions, the pragmatic use is similar, as they typically occur in spoken informal or semi-informal interactions.⁵⁸ Likewise, the constructions show the same syntactic structures with two constituents, namely the adverbial and subject ($X_1 Y_2$) before the finite verb and the rest of the utterance (Z_3). Regarding prosody, the original models suggested that discourse markers-construction show a prosodic boundary between the first constituent (i.e. the adverbial) and the second constituent (i.e. the subject), as indicated by the “|” symbol in the notation convention / (X_1 | $Y_2 Z_3$) / (Bunk 2020: 145-146). This assumption has since been updated (Bunk 2021), so that both models now suggest that there are no prosodic boundaries after discourse-linking adverbials or after frame-setting boundaries, as indicated by a lack of the boundary symbol: / ($X_1 Y_2 Z_3$) /. However, since there is evidence of both constructions appearing with prosodically exposed adverbials, as well as prosodically integrated material, this

⁵⁸ Note, however, that Bunk has found examples of these patterns in conceptionally oral written texts (e.g., private text messages) as well.

notation may have to be changed in order to allow for both prosodic possibilities. Overall, it seems that prosody is not sufficient to distinguish between the two structures, as only the semantic meaning of the adverbial (i.e. whether it functions as a discourse marker or a frame setter) seems to differentiate the two constructions.

FRAME-SUBJECT-construction	
PHONOLOGY/PROSODY:	/ (X ₁ Y ₂ Z ₃) /
SYNTAX:	[_{CP1} X ₁ [_{CP2} Y ₂ [Z ₃]]]
INFORMATION-STRUCTURE:	[Frame-settingX ₁ [TopicY ₂ commentZ ₃]]
PRAGMATICS:	informal/semi-informal context
Bunk 2021	

Figure 3-2: Construction-grammatical schema of Frame-Subject construction

DISCOURSEMARKER-SUBJECT-construction	
PHONOLOGY/PROSODY:	/ (X ₁ Y ₂ Z ₃) /
SYNTAX:	[_{CP1} X ₁ [_{CP2} Y ₂ [Z ₃]]]
INFORMATION-STRUCTURE:	[DiscourseMarkerX ₁ [TopicY ₂ commentZ ₃]]
PRAGMATICS:	informal/semi-informal context
Bunk 2021	

Figure 3-3: Construction-grammatical schema of DiscourseMarker-Subject construction

Thus far, I have provided detailed accounts of the linguistic, prosodic and information-structural properties of V3-structures. As has become clear by the examples and analyses in the previous sections, German contact-varieties seem to be especially likely to use these patterns. Although these structures are also under investigation in monolingual populations, most previous studies have focused on either urban vernaculars (such as *Kiezdeutsch*) or contact situations (e.g. in heritage communities in the USA). For this reason, the next section will introduce some of the characteristics of contact-varieties and their speakers, and provide some hypotheses on the sociolinguistic factors that may influence the use of V3-structures.

3.4 Contact-varieties and verb placement variation

Language learning and language use are necessarily based on social interactions. Thus, it is unsurprising that speakers' grammars and linguistic output are necessarily influenced by the way a speaker acquires and uses a language. Thus, to allow for a holistic understanding of the factors that may influence the use of V3-structures, it is important to describe the main linguistic characteristics of the target population. For this reason, this section will explore the impact of language acquisition, language use and language change on heritage grammars, and introduce some theories on the underlying sociocultural may influence verb placement variation.

The speech community of interest in this dissertation was established as a settlement of immigrants in Iowa approximately 150 years ago, and has been geographically removed from their base variety ever since (see Chapter 2). Initially, their immigrant language was used not only in the home but also with extended family, neighbors, and shop keepers, which means that linguistic input for children potentially came from a number of different interlocutors. Over time, and because English was the dominant language of the majority society and present in education and media, the importance of the immigrant language declined. Now, we can characterize last remaining speakers as speakers of a *heritage language*, which is defined as a “language spoken at home or otherwise readily available to young children, and crucially [...] not a dominant language of the larger (national) society” (Rothman 2009: 156). This definition implies that the language is naturally acquired and that *heritage speakers* learn the language of the larger society upon entering preschool, kindergarten or elementary school (at the latest) (Valdés 2005). In that sense, heritage speakers grow up as *circumstantial bilinguals*, with adaptive language usage based on communicative needs. Typically, the heritage language remains the spoken variety and heritage speakers are often illiterate in the heritage language, while the majority language is used

in writing and for formal communication. Since heritage speakers do not undergo schooling in their home language, they may not be aware of any normative grammatical rules or standardization processes. This is especially true for varieties which do not have a standard variety or that are usually transmitted orally, which is the case for Low German. Some researchers have suggested that heritage speakers may not fully develop the grammar of their heritage language because of a lack of input, suggesting they suffer from “incomplete acquisition” (see e.g., Montrul 2008; Polinsky 2006).

Because heritage speakers typically show a domain-specific usage of their languages, they eventually use the dominant language in an increasing number of domains (education, writing, work. They also tend to “subsequently switch to another dominant language” (Polinsky & Kagan 2007: 368) or may stop using the heritage language altogether. The reduced use of the heritage language combined with more linguistic interference by the now-dominant L2 may lead to “performance differences in a ‘fully acquired’ mature L1 grammar” (Putnam & Sánchez 2013). This phenomenon, which Rothman (2007) described as “what was acquired and then lost”, is known as ‘attrition’ and refers to (heritage) speakers, who once used to have full command of the language but lost parts of this knowledge due to the lack of usage.⁵⁹ Because speech data of heritage speakers at different points across their lifespan is often unavailable, it is very hard to discern whether any ‘divergent’ outcome is caused by incomplete acquisition due to a lack of input during childhood, or language attrition due to lack of usage in adulthood.

Several studies have proposed attrition or interference effects as the cause of verb placement variations. In his study on Low German heritage speakers in the US, Wirrer (2009:

⁵⁹ The term “language attrition” has seen an enormous amount of definitions, studies, and theoretical approaches. Schmid & Köpcke (2017: 637-38) define attrition as “any phenomena that arise in the native language of a sequential bilingual as the consequence of co-activation of languages, crosslinguistic transfer or disuse, at any stage of L2 development and use”, which would mean that every bilingual is an attriter. I find this definition too broad and will

142) interprets variation in some participants' data (including but not limited to use of V3-structures) as a sign of individual attrition. He suggests that speakers forgot how to use "correct" Low German because they have fewer interlocutors to use their language with and use the heritage language in fewer domains, resulting in them becoming *Sprachvergesser* ('language forgetters'). Likewise, although Bender's (1980: 83) study on Low German heritage speakers in the US does not focus on syntactic variation specifically, he mentions the occasional occurrence of V3-structures which leads him to claim that "English syntax left its mark" on informants' heritage language, indicating individual attrition and cross-linguistic interference as causes of V3-patterns. Likewise, Alexiadou & Lohndal (2018: 259) support a similar approach for V3-structures in the heritage Norwegian of elderly speakers in the USA. They propose that the syntactic representation of V2-structures is intact, and that V3-structures arise due to cross-linguistic influence in highly English-dominant speakers because they fail to suppress their English grammar in such instances (Alexiadou & Lohndal 2018: 259), rejecting the ideas that V3-structures may emerge because of a hybrid system (i.e. English and Norwegian form a new grammar) or a default system (i.e. whenever an sentence-initial adverbial occurs, subject and verb follow).

Interestingly, based on her study on sociolinguistic and syntactic variation in Wisconsin German (WG) speakers' narrations, Sewell (2015: 247) arrives at very similar conclusion although her findings differ markedly from Alexiadou & Lohndal (2018). The study shows that two out of four participants in the group of *frequent* WG-users produce AdvSV-structures (7 and 8 tokens respectively), while only one out of four participants in the group of *infrequent* users produces such structures (and only two overall) (Sewell 2015: 224-25). While no generalizations are made because of the small number of participants and sample size, Sewell employs Putnam

& Sánchez' (2013) model of heritage grammars, proposing that her participants may show “performance harmonization” (Sewell 2015: 247). She argues that since the V3-structure was inherent in the heritage language, its use is accelerated by contact with English but only if the heritage language is frequently used. Since the users of V3-structures also make use of V2-sentences, this suggests a discourse-pragmatic choice for framing certain events in the narration (Sewell 2015: 242), based on the English conventions. Interestingly, the examples do not show pronominal subjects but full noun phrases, which may have to do with the elicitation technique (narration of a picture book):

(45) *Hier de Hund* **däd** *kucken* *for* *die* *Frosch*
 here the dog do-PRE look-INF for the frog
 ‘Here the dog is looking for the frog.’

(adapted from Sewell 2015: 242)

(46) *Jetzt de Hund* *und Fritz* **gucken** *for des* *Frosch in* *eine großen* *Baum*
 now the dog and Fritz look-PRE for the frog in a big tree
 ‘Now the dog and Fritz look for the frog in a big tree.’

(adapted from Sewell 2015: 242)

Recently, the practice of describing heritage speakers’ grammars as “incomplete” (e.g., Montrul 2008, Polinsky 2006), “attriting” (e.g., Johannessen 2015, Polinsky 2011) or “instable” (e.g., Cuza & Frank 2011) has been rightfully challenged (e.g., Cabo & Rothman 2012, Kupisch & Rothman 2018, Putnam & Sánchez 2013), and alternative explanations for the use of variable verb placement have been proposed. That is, while heritage speakers’ linguistic structures may differ from that of baseline speakers, their grammars should not be seen as inadequate, but rather as distinct. Note that a growing corpus of studies suggests that linguistic divergence is not necessarily a developmental stage in the life of a heritage language community. In fact, heritage languages may show intact grammars even in the last generation of fluent speakers (e.g.,

(Bousquette 2014, 2020, Bousquette & Putnam 2021, Dorian 1978, Keel 2015). But since heritage language communities are often historically or geographically removed from their place of origin, linguistic structures that naturally occur in language variation may be reinforced and solidified in small communities, thus changing the proportions of linguistic variants as compared to the baseline dialect. Such processes may be especially likely in groups that are in close contact with other languages, i.e. in bilingual communities.

One such account is that by Pecht (2019: 90), who finds evidence for V3 patterns in a study of *Cité Duits*, a moribund language with elements of Belgian Dutch, German and the Maaslands dialect, such as example (24):

(47)	<i>un</i>	<i>EIN</i>	<i>tag</i>	<i>ich</i>	<i>geh</i>	<i>gucken</i>
	and	one	day	I	go-1SG	look-INF
	‘And one day, I take a look.’					

(adapted from Pecht 2019: 90)

Based on these and other syntactic structures, Pecht suggests that the dialect has undergone “systematic recombination of linguistic features from different source varieties” (2019: 91) with solidified V3 structures as the communal norm, indicating the emergence of a new grammar. Strikingly, although te Velde (2017a, b) and Walkden (2017) argue for different mechanisms behind the emergence of V3 structures (see Section 3.2), they both arrive at the same conclusion, namely that *Kiezdeutsch* has developed its own grammar which allows V3-structures (te Velde 2017a: 301). Walkden (2017: 75) specifically points to sociohistorical circumstances in language acquisition, suggesting that “a high proportion of L2 speakers whose production then serves as the input to a new generation of L1 learners, who then adopt the V3

grammar as their own”.⁶⁰ Wiese et al. (2009: 49-50) agree that *Kiezdeutsch* is a new variety of German with its own linguistic system, but point out that V3-structures are only used for specific information-structural reasons in order to fulfill discourse-pragmatic needs.

Some predictions can be made with regard to the data outcome for each of those potential underlying factors based on the findings and hypotheses outlines above. Incomplete acquisition and language attrition approaches generally view the variable output (in this case the usage of V3) as a grammatical error. In both cases, it would be expected that the occurrence of V3-structures is arbitrary and not predictable based on linguistic factors. For the incomplete acquisition hypothesis, we would assume that younger speakers may use more V3-structures. Since the number of active speakers in the community has been steadily declining, it may be expected that speakers who were born later and grew up with fewer interlocutors would show higher V3-rates than speakers born earlier who may have had the chance to receive more input from different interlocutors. On the other hand, the language attrition hypothesis would predict that speakers’ grammars become more unstable as they age (and presumably use the language less often), so it would be expected that older speakers produce more V3-structures. Thus, if one or both of these mechanisms have an effect on the syntactic variation in the linguistic output, we would expect speakers who grew up with fewer interlocutors (generally those who are born later) to use more V3-structures, and additionally to see an increase in V3-rates in older speakers.

If, however, the use of V3-structures is due to communal language change and has become a syntactic option in the speech community, the predictions look somewhat different. In

⁶⁰ For reasons of scope, I will not go into a longer debate about this specific claim. However, note that although these factors may be true for *Kiezdeutsch*, whose speakers tend to be the German-born descendants of Turkish or Arabic immigrants, this statement would not account for the usage of V3-structures by *Kiezdeutsch* speakers without immigrant parents (as shown in Wiese et al. 2016) and also would not be applicable to heritage speakers of German or Norwegian in English-speaking majority settings (e.g., Alexiadou & Lohndal 2018, Sewell 2015).

this scenario, the usage of V3-patterns may occur only under certain (discursive or linguistic) circumstances, which would be statistically predictable by linguistic factors. Again, younger speakers may show a higher rate of V3-usage (based on the fact that linguistic change is often driven by young individuals), but as the structure solidifies as a syntactic option used in certain environments, the rate of V3-usage would not significantly increase for individual speakers across time, unless the predictive environments are used more in one conversation as compared to another. By using two data sets that were recorded in the same community approximately twenty years apart, including twelve individuals that were interviewed twice, I hope to be able to test these hypotheses. A summary of the hypotheses and predictions is provided in Table 3-2.

Table 3-2: Predictions of V3-usage based on sociolinguistic hypotheses.

	Hypothesis	Who uses V3 (most)?	When does V3 occur?	Are there changes across time?
Incomplete Acquisition	Speakers did not acquire V2-structures correctly because of a lack of input in childhood.	Speakers who grew up with fewer LG interlocutors (presumably those born later).	Anywhere, its use cannot be predicted.	No. Speakers who used the structure in the past will still use it; speakers who did not use it in the past, will still not use it.
Language Attrition	Speakers forgot how to use V2-structures correctly because they do not use the language enough anymore.	Older speakers whose grammars become unstable (especially those with fewer chances to speak LG).	Anywhere, its use cannot be predicted.	Yes. A general increase with age, regardless of the rate of previous usage (but intensified with lack of interlocutors).
Communal Language Change	V3-structures are a syntactic option in the speakers' grammars that may be used to fill a discursive need.	Anyone, but probably more prominently younger speakers (who tend to drive linguistic change).	Under certain circumstances which can be predicted by linguistic factors.	The structure may now be used by speakers who did not formerly use it. Rates of use will remain similar, given comparable linguistic/discursive circumstances.

3.5 Summary

As the previous sections have shown, verb placement variation and V3-structures are a well-researched phenomenon in German(ic) syntax. The following list summarizes the findings laid out in this chapter:

- There are different structures that may show verb third placement, including *left dislocation*, *apparent multiple prefields* and *genuine multiple prefields*
- *Left dislocation* shows a subject and a resumptive pronoun or determiner before the finite verb and can be interpreted as showing an underlying V2-structure. This structure is considered canonical in Low German varieties.
- *Apparent multiple prefields* are usually used in written sources and may show a combination of different constituents before the verb, but importantly they usually place the subject after the verb for stylistic effects. As such, they are unlikely to occur in spoken language.
- *Genuine multiple prefields* are what is typically referred to as V3-structures, where an adverbial and a subject occur before the finite verb.
- Generative interpretations of V3-sentences include split-CP domains or stacked CP-heads.
- Information-structurally speaking, two types of V3-structures have been found: one where the sentence-initial adverbial functions as a discourse marker, connecting the proposition to the previous utterance, and one where the sentence-initial adverbial functions as a frame setter, providing an interpretative anchor for the subsequent statement.
- Since the second constituent is almost always a pronominal subject, a high accessibility of the subject referent is assumed.
- Both discourse marker and frame setter constructions have been found in intonation units that are prosodically exposed and prosodically integrated to the remainder of the utterance.

Prosodic exposition of these constituents may be used to allow the speaker to retain their right to speak, indicate continuation of the utterance, or put special emphasis of the following proposition.

- The use of V3-structures has been shown in monolingual and standardized German, but has gained more attention in contact-varieties. Here, some researchers have proposed that lack of input or lack of usage may lead to divergent linguistic output. Others have proposed that small speech communities may be more prone to linguistic change, which may be accelerated if the structure is inherent in the heritage language and also found in the majority language.

To date, there has been no variationist study that includes information-structural aspects and the role of prosody to describe the rate and use of V3-structures.⁶¹ At the same time, there has been no attempt of capturing the development of V3-structures from a longitudinal perspective in the same speech community. This dissertation aims to close this gap in the literature, aiming to answer questions of the linguistic factors that favor the use of V3-structures, as well as addressing sociolinguistic hypotheses about the aspects that may influence the usage of V3-structures in certain speech communities. The following chapter introduces the participants, data and methodology that are used to address these open questions.

⁶¹ But see Sewell (2015) for a variationist study of word order in Heritage German, albeit with few tokens showing V3-patterns.

4

A speech corpus of Low German heritage speakers in Iowa

4.1 Introduction

This chapter provides a detailed description of the data collection in a Low German heritage community in Iowa and the data transcription methods implemented in order to convert natural speech to written data. Based on the transcribed corpus, the sociolinguistic background of participants in both groups is explored and the LG-speaking community in Iowa is described. Finally, the data extraction of main clauses and the dependent variable (verb placement) are described to define the characteristics of the dataset used for analysis in Chapter 5.

4.2 Data collection

The data used in this dissertation stem from two different sources. First, a community project consisting of three videos titled “Telling what’s on our minds” was recorded under the supervision of Prof. Philip Webber (1998).⁶² The project was conducted in Grundy County, IA, and the surrounding counties. The videos are 2h 46min, 1h 26min, and 1h 48min in length, with varying degrees of LG content, based on speakers’ choices. The videos show group conversations, interviews, anecdotes, and music, with varying length of ‘air time’ per participant. In some parts, two interviewers ask guiding questions in Low German or English, often pertaining to childhood memories or comparing current situations to ‘the old times’. In other parts, the conversation is not guided by the interviewers as much, so that participants react to

⁶² Prof. Webber kindly allowed me to use the videos for my dissertation. I am very thankful for this amazing opportunity and his interest in and support of my work.

each other. Group sizes vary between 2 (i.e. one interviewer and the participant) and up to 14 speakers (i.e. two interviewers and 12 participants). Throughout the videos, both English and Low German are used, often in the same conversation and by the same speakers. From these videos, sections were transcribed for 35 participants speaking Low German. Due to the nature of some settings, some speakers share longer stories or extensively talk about their memories, while others contribute only short anecdotes or individual sentences in group conversations. Since the names of all participants are shown in the videos, personal and language background information was retrieved with the help of obituaries and family histories wherever necessary and available.⁶³

The second data set was recorded by the author in November 2018 and May 2019 in Grundy, Hardin and Butler Counties, IA. A total of 39 participants were interviewed in English about their life and language use across the lifespan, in order to preserve a broad recollection of the community as a whole. In most cases, the author met the participant(s) at their house or in a café, often in the company of their spouses or other family. However, group size was never larger than 9 people present, and there were at most 5 LG-speakers in one group. The 28 LG-speaking participants were asked to answer questions in LG, which concentrated mostly on childhood memories (e.g., growing up on a farm, school, holidays). Based on the length of the answer, the interviewer asked follow-up questions, helped with lexical retrieval or volunteered information in order to make the conversation interactive and create a relaxed atmosphere for the participant. Overall, 25 LG interviews were transcribed,⁶⁴ and importantly, 12 of these 25 participants had also participated in Webber's video-project, allowing for an intra-individual

⁶³ For this purpose, The Iowa Genealogy Web Project (1999), Find a Grave (2021) and Ancestry Library (1997) were used.

⁶⁴ One interview with three LG-speakers could not be transcribed due to the extensive overlap of speech in this recording.

analysis. Since both data sets show free speech samples on similar topics, the data is very comparable in nature.

The following section will provide a description of the data transcription and orthographic conventions used in this data set, before the next section turns to a detailed description of the participants and their language background and language use across the life span.

4.2.1 Data transcription: Orthographic conventions

As outlined in the previous section, the data used for this analysis derives from audio recordings of semi-structured interviews and group conversations. As such, spoken language needs to be transformed into written texts before it can be adequately treated for analysis. Although this concept, known as ‘transcription’ appears straightforward, important decisions need to be made in order to arrive at coherent and comprehensible text output. This is especially so for a language like LG, which is traditionally used in the spoken sphere and has resisted any efforts for standardization, even during its time of most power and furthest geographical reach in the Middle Ages (Langer 2003). To this day, there is no standardized orthography that unifies the different regional varieties (Reershemius 2004, 2017), which has led to a number of different orthographic systems proposed by the state parliaments, as well as linguistic attempts by different researchers. This section will introduce different systems before showing the advantages of using a simple orthographic system. Thereafter, additional transcription conventions that aid the representation of spoken language as text, following discourse analysis guidelines, will be introduced.

Previous studies have used different systems to transcribe LG, including an exact phonological realization, a hybrid system mixing standard orthography and special characters symbolizing phonological features, and the official orthographic system. The following section will explain why the conventionalized orthographical system is preferred over other options. (Bender 1980: 83) made use of a phonological transcription as exemplified in (48-49):

(48) [dɛn hɛɛ fɛkɔopt dɛɛ]
 ‘Then he sells them.’

(49) [vɛn dɔ nɔ taon hɛn vɔs du nɛ:ms rɔot ɔos fɛn hi:ɔ]
 ‘If you want to go to town, you take the road east from here.’

While using the IPA symbols throughout the study captures the phonological idiosyncrasies of Bender’s participants, a phonological transcription makes the transcripts less searchable and may also interfere with the readability of the data in different statistical applications, such as in R studio. Additionally, since the dissertation focuses on syntactic and prosodic issues, the exact phonological realizations of each participant will not be needed to answer the research questions, which is why a phonological transcription will not be used in this study.

Reershemius (2004: 129) makes use of a hybrid system which mostly follows the orthographic conventions of High German, but uses two vowel symbols to mark a long vowel, while using only one consonant to mark short vowels.⁶⁵ She also uses the letter {z} to mark the sound /z/, and the letter {s} marks the sound /s/ in her transcription system.⁶⁶ Additionally, a

⁶⁵ High German typically uses one vowel followed by one consonant to mark a long vowel (*Hase* ‘hare’), but may make use of vowel + h (*Jahr* ‘year’) or two vowels (*Boot* ‘boat’). Short vowels are marked by two consonants preceding the vowel (*Hass* ‘hatred’).

⁶⁶ In High German, the letter {z} marks the sound /ts/, and the letter {s} marks the sounds /z/ or /s/.

schwa symbol is included to mark the sound /ə/, and the symbol å is used for /ɔ/. This system then looks like examples (50-51):⁶⁷

(50) Jäide genøratsioun kumt dæ dan, denk ik mål, äinmål drin, wän dat zou wiidögait.

‘I think each generation will get in there once, if it goes on like this.’

Reershemius (2004: 129)

(51) Wii häm jø eerst äin zåtödach dæbii wäst, un nu wårt dat n biitjæ minæ

‘We’ve only worked on this one Saturday and now it’s getting a little less.’

Reershemius (2004: 143)

Although this system captures phonological features, it is neither practical nor easily accessible as the use of special characters makes the transcript less searchable and less readable. As mentioned above, a close transcription of the phonological realization is not necessary to answer my research questions and including both IPA and additional symbols in transcription tools such as ELAN and R is not practical.

Therefore, I make use of the conventionalized LG orthography as defined by Thies (2018) and adapted to the East Frisian variety by the Ostfriesische Landschaft (n.d.), a publicly sponsored institute for LG education and culture in East Frisia. This orthographic system makes use of the High German alphabet (that is, it includes Umlauts ä, ö, ü), and is often based on the High German orthography. Besides a comprehensive guide to the orthographic rules, the Ostfriesische Landschaft website offers a dictionary that allows for searches from LG into HG and vice versa. Using the standardized East Frisian LG orthography only makes the transcripts searchable, they will also be easily accessible to other scholars and lay people who speak (and read) LG.

⁶⁷ English translations by the present author.

4.2.2 Discourse transcription conventions

In addition to the orthographic system described above, the transcriptions follow Du Bois et al.'s (1993) conventions, in order to represent speech in written form. Not all of the symbols proposed for discourse transcription are needed, but the following symbols are included in the transcriptions (Du Bois et al. 1993: 88-89)

In order to illustrate the use of these symbols in my transcription, selected excerpts of the transcribed texts will be used. All examples are taken from an interview with Lisa, 82 years old, recorded May 15, 2019. The conversation evolves around Lisa's memories of growing up on a farm.

Following Du Bois et al. (1993: 47), each line of transcript represents one intonation unit (IU), which is defined as a "stretch of speech uttered under a single coherent intonation contour".

Intonation in the broadest sense is the rise and fall in tune of an utterance, which can differ in length from a single word to a complete sentence (O'Brien 2020: 167). Importantly, intonation contours can provide information on the sentence mode, such that in Germanic languages declarative utterances and *wh*-questions tend to show falling intonation, while yes/no questions are marked by rising intonation (O'Brien 2020: 169). Additionally, to convey continuation, the utterance is produced with a level or rising contour (O'Brien 2020: 169).⁶⁸

⁶⁸ Peters (2010) compares the intonation contours found in (Northern) High German and Low German as spoken in Germany, and *Nedersaksisch*, a dialect closely related to Low German spoken in the Netherlands. All three varieties show a comparable inventory of intonation contours and a strong preference to express finality with falling intonation ending in a low final tone before the intonation boundary (H*LL%), but differences in use of intonation contours projecting continuation and questions. The Low German speakers used falling (H*LL%), high-level (H*0%), high-rising (H*H%), or falling-level (H*L0%) intonation contours to express continuation, which mostly overlaps with the patterns found for Northern High German but not those for *Nedersaksisch* (Peters 2010: 129). Overall, he concludes that Low German has an intonation inventory comparable to that of British and American English, Dutch, and Frisian, but differs from Alemannic or Franconian varieties. It will therefore be sufficient to use the transcription conventions suggested by Du Bois et al. (1993) to mark finality, continuation, and questions.

Table 4-1: Symbols for discourse transcription. (Adapted from Du Bois et al. 1993: 88-89)		
Units	Truncated intonation unit	--
	Truncated word	-
	Speech overlap	[]
Transitional Continuity	Final	.
	Continuing	,
	Appeal	?
Accent and Lengthening	Lengthening	=
Pause	Long	... (N)
	Short	..
Vocal Noises	Laughter	@
	Quotation quality	<Q Q>
Quality	Laugh quality (words spoken while laughing)	<@ @>
Transcriber's Perspective	Researchers comment	(())
	Uncertain hearing	<X X>
	Indecipherable syllable	X
Specialized Notations	Code switching	<L2 L2>

In the transcription, IUs are marked by written punctuation, as illustrated in Table 4-1. They are usually marked by rising intonation at the beginning, a lengthened syllable at the end, followed by a pause. IUs with markedly falling intonation at the end typically indicate finality, represented by a period (.). IUs that indicate continuity (i.e., it is obvious that another IU will follow) often show slight rising, falling or level intonation at the end, which is represented by a comma (.). In example (52), the slightly falling intonation on *was* ('was') at the end of the first IU (a subordinate clause, line 32) indicates to the interlocutor that another unit will follow. The noticeably falling intonation at the end of the second IU (the main clause, line 33) indicates the end of the entire unit. The pauses of less than 0.7s during both utterances represented by two

periods (..) do not mark the end of either IU because the intonation on the preceding word (e.g. *wenn* ‘when’) is level:

- (52) Lisa 32 wenn .. swinters was,
 33 denn gung mien moder hen .. to .. höhner föden.
 ‘When it was winter, my mother went to feed the chicken.’

Longer pauses (more than 0.7s) are marked by three periods (...) and the duration time (see example 54). IUs that indicate an appeal tend to show a marked rise in intonation, and to represent this, a question mark (?) is used (Du Bois et al. 1993: 53). Overlap in speech is indicated by square brackets [], but for reasons of scope, back-channeling (*hm hm*, *ah*) by the interviewer (MHR) will not be transcribed, unless a full IU by her follows, as is the case in example (53):⁶⁹

- (53) Lisa 10 say that again?
 11 with my [hearing].
 MHR 12 [hm hm].
 13 welke deeren .. harren ji up dien farm?
 ‘Which animals did you have on your farm?’

Truncated words are marked with a single hyphen (-), whenever the end of a word is not fully uttered (see example 54; Du Bois et al. 1993: 48). This may or may not co-occur with truncation of the intonation unit, meaning that the speaker breaks off the utterance without finishing the projected intonation contour. The utterance may be completely stopped at this point or continued with new IU (Du Bois et al. 1993: 47). A truncated IU is indicated by two hyphens (--), as in example (55).

⁶⁹ Since this study is not focused on discourse analysis, back-channeling or turn taking is not relevant to the research questions. Utterances by the interviewer will only be transcribed for reasons of readability of the discourse and for coding purposes but will not be included in the extracted tokens.

(54) Lisa 46 wen- n- wenn d- .. de swien uh water ... (1s) apparatus ... (1.1s) dicht was,
47 k- kwamm keen water.

‘When the pigs’ water fountain was clogged, no water came out.’

(55) Lisa 48 du wusst good wat --
49 uh .. woför dat was.

‘You knew well what that was good for.’

Whenever a segment is unexpectedly lengthened where it is not phonemically motivated, an equal sign (=) is used. Thus, vowels that are realized long because of their phonemic status will not be marked with this symbol unless they appear as *unusually* long. This may happen when the speaker wants to accent the syllable or to mark the end of the intonation unit (Du Bois et al. 1993: 59):

(56) Lisa 53 dann was't ja a=ll ... (0.9) uh dicht.

‘Then it was all clogged.’

Laughter is represented with the @ symbol, specifically, one token is used for each “syllable” of laughter. Speech uttered with a laughing quality is enclosed in angle brackets and @ symbols <@ @>. This may include a single word (see example 57), multiple words, or full IUs (Du Bois et al. 1993: 71).

(57) Lisa 54 dann kunnst du dien hannen nehmen,
55 in dat stinkig <@ water @>,

‘Then you could put your hand into the smelly water.’

In cases where the speaker quotes another person, the quoted speech will be indicated with angle brackets and the letter Q at the beginning and the end of the citation <Q Q>. While Du Bois et al. (1993: 72) specify that the speaker must be imitating “some mannerism of the quoted speaker”, I will extend this notation to all speech that is obviously quoted or recounted. This may be

indicated with phrases such as *un se see* ('and she said') as exemplified in example 58. Although Du Bois et al (1993: 79) suggest using <L2 L2> for instances of code switching, the distinction between L1 and L2 may not be consistent for my research group. Therefore, words or utterances in the non-matrix language of the preceding discourse will be marked as such (<E E> for English if the preceding discourse is in Low German, and <LG LG> for Low German if the preceding discourse is in English). Both notations are exemplified in (58):

- (58) Lisa 36 un se see,
 37 <Q oh= ((Lisa)),
 38 geev mi de teeketel van't ovend of,
 39 mit de heet water drin,
 40 .. mien water <E fountain E> is weer upfrozen. Q>
 'And she said "Oh Lilian, give me the kettle from the oven with the hot water, the water fountain is frozen shut again".'

Additionally, Ø marks null subjects or topic drop, which are phonologically null realizations where a subject or object would be expected. Transcribing these cases may help with coding factors in this dissertation, and could potentially be the foundation for future research on null subjects. Double parentheses (()) are used to mark comments by the transcriber (see example 59), each indecipherable syllable will be marked with one X, and whenever uncertain, the transcriber will mark the perceived utterance with angle brackets and X <X X>.

- (59) Lisa 74 Ø mussen eenmal dags --
 75 ik kunn uh .. de lüttje bulli drieben ((comes from drive?))
 'Once a day [we] had to-- I was allowed to drive the little van.'

All recorded Low German interviews and conversations were transcribed with the use of ELAN. The transcripts are stored as txt.files and excel-files to make searches and changes more accessible. From these files, a certain number of tokens per participant were extracted to an Excel-sheet where (socio-) linguistic factors can easily be coded.

4.2.3 Transcription software and transcript set-up

This section will give a detailed overview of the transcription software ELAN (Max Planck Institute for Psycholinguistics 2021) and set-up of the transcripts in Excel. As shown in Section 4.2.2, the speech stream was segmented into intonation units based on prosody. For data transcription, the free software ELAN was used. Although newer versions were available at the time of transcription (version 6.2), I used version 5.8, as I found it to be more reliable than newer editions. In each recording, a tier was created for each speaker, as illustrated in Figure 4-1. Then, each annotation was created based on the begin and end time of the intonation unit, and the uttered speech was orthographically transcribed as outlined in Section 4.2.1. This included overlapping speech and non-LG utterances, as shown in Figure 4-1.

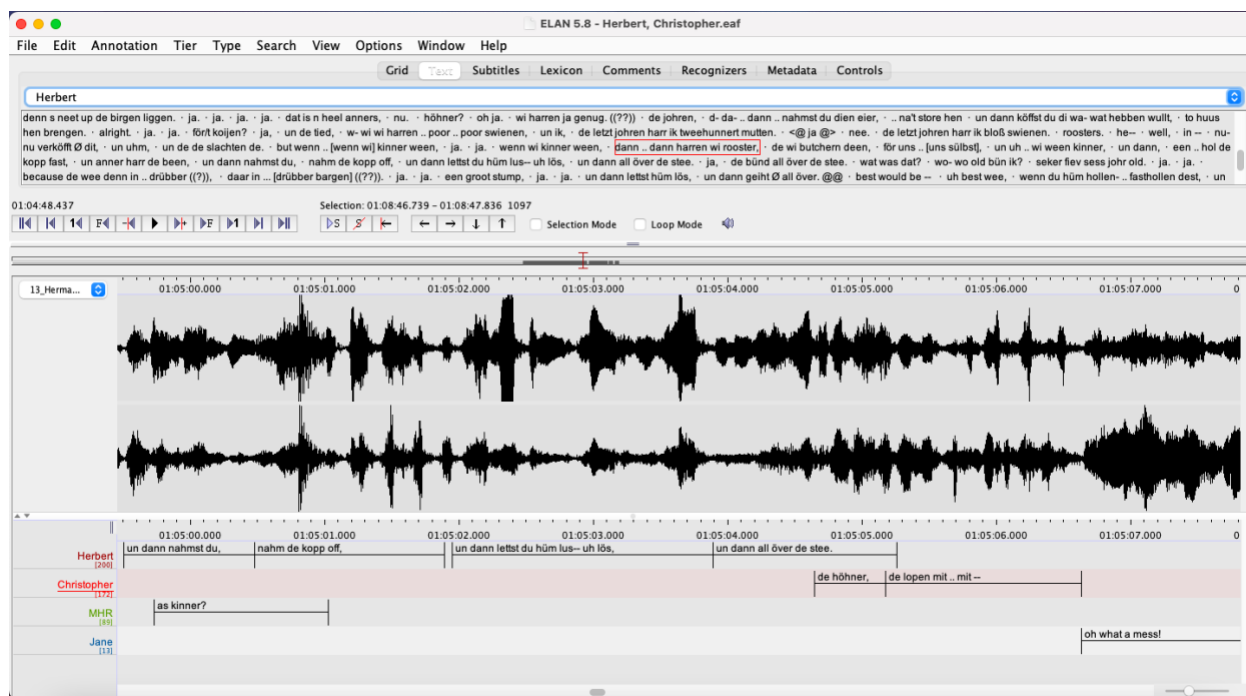


Figure 4-1: Screenshot of ELAN transcript, with speech wave and four speaker tiers.

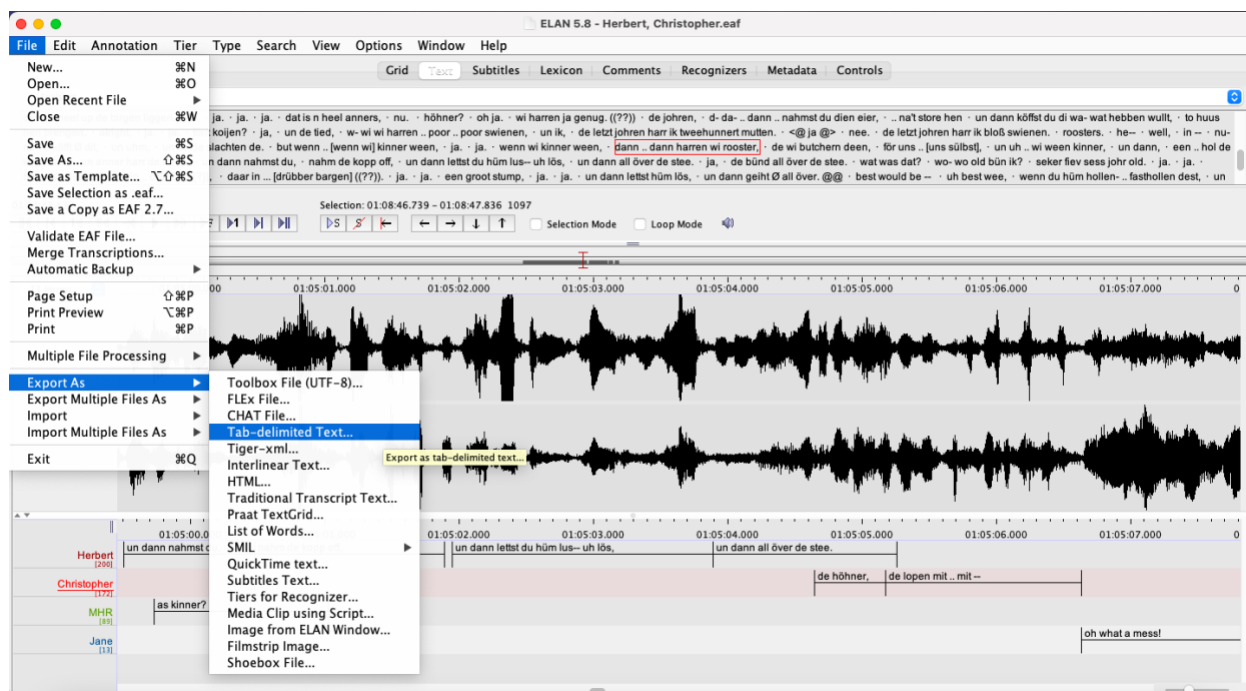


Figure 4-2: Export of transcript from ELAN as tab-delimited text file.

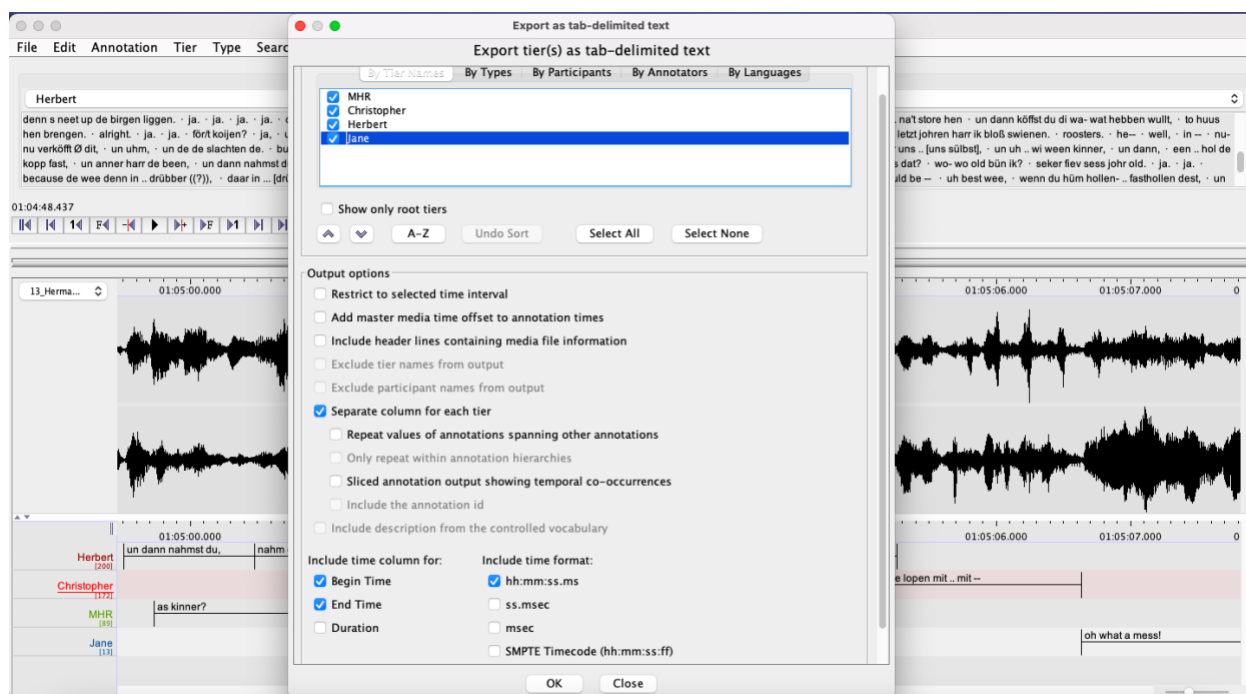


Figure 4-3: Export transcript with speaker columns on separate tiers and time stamps for IUs.

After the transcription in ELAN was finalized, the data was exported as a tab-delimited text file, including all speaker columns on separate tiers (see Figure 4-2) and time stamps for the begin

and end time of each utterance (see Figure 4-3). The data was then imported into an Excel sheet. Since the utterances by each individual speaker are displayed in separate columns, an additional column for “Speaker” was created and each annotation was labeled by speaker name. Finally, all speaker tiers were combined into one column and a column for “Line” with consecutive numbering was added. Finally, each annotation was coded for “Language” (LG=Low German, E=English, M=Mixed, N=Neutral). An example of a finished transcript can be seen in Figure 4-4.

Begin Time - hh:mm:ss.ms	End Time - hh:mm:ss.ms	Speaker	Line	Token	Languages	Notes
00:16.8	00:18.4	MHR	1	[can we try that?]	E	
00:16.9	00:20.1	Grace	2	[wat .. wat ..] wat wult du van proten doon?	LG	
00:20.1	00:21.8	MHR	3	[oh wunnerbor]	LG	
00:20.1	00:21.8	Grace	4	[wat wult du] seggen?	LG	
00:21.8	00:24.7	MHR	5	kannst du mi n bittje wat van dien farm vertellen,	LG	
00:24.7	00:26.3	MHR	6	as du n kind wast?	LG	
00:27.0	00:29.2	Grace	7	oh .. as ik [kind was?]	LG	
00:28.4	00:29.9	MHR	8	[as du] lüttje wasst?	LG	
00:29.8	00:30.2	Grace	9	ja.	N	
00:30.3	00:31.5	Grace	10	we-well,	E	
00:32.4	00:33.9	Grace	11	ik mutt alltid arbieden,	LG	
00:34.6	00:36.3	Grace	12	in hus of in buten,	LG	
00:37.1	00:39.7	Grace	13	denn .. [0.7] melk .. de kolj- --	LG	
00:40.0	00:40.7	Grace	14	koljen melken.	LG	
00:41.3	00:41.7	Grace	15	un,	N	
00:41.7	00:43.1	Grace	16	.. wi harren höhner.	LG	
00:43.1	00:43.7	MHR	17	ah höhner.	LG	
00:43.8	00:45.0	Grace	18	un .. eier.	LG	
00:45.3	00:50.8	Grace	19	du musst .. inhollen .. van de .. ne- .. nest.	M	
00:50.8	00:51.5	Grace	20	how do I say--	E	
00:51.5	00:51.8	Grace	21	nüst.	LG	
00:52.6	00:54.3	Grace	22	dat de .. laid in.	M	
00:54.4	00:54.7	Grace	23	and,	E	
00:56.8	00:57.5	Grace	24	I don't know.	E	
00:57.5	00:58.2	Grace	25	what [etsej?]	E	
00:58.0	01:00.5	MHR	26	[woj] voot koljen harren ji?	LG	
01:00.9	01:01.6	MHR	27	koljen?	LG	
01:01.2	01:03.1	Grace	28	uh= veerteihn.	LG	
01:03.2	01:04.3	MHR	29	veerteihn?	LG	
01:04.0	01:04.4	Grace	30	ja.	N	
01:04.5	01:05.0	Grace	31	[mien] --	LG	
01:04.5	01:06.1	MHR	32	[hest du] hest du de mulken?	LG	
01:06.1	01:06.7	Grace	33	ja.	N	
01:06.1	01:06.7	MHR	34	uh-hoo?	LG	

Figure 4-4: Screenshot of excel sheet showing finalized transcript for data extraction.

4.2.4 Reliability test

Since this dissertation investigates prosody as a potential factor in finite verb placement variation in main clauses, it is important that the transcripts reliably represent the intonation of the spoken interactions. However, since the author was also the transcriber of the audios, it is

critical to check the quality of transcripts in order to avoid any confirmation bias in the data. For this reason, a sample of 4-6 minutes of audio from three different interviews were coded by another researcher who has a PhD in German Linguistics and is familiar with Low German varieties and intonation units. For the purpose of this reliability test, the researcher received finished transcripts that were cleared of any punctuation indicating intonation and the audio files corresponding to the respective transcripts (see Figure 4-5).

The second rater was asked to separate the block of text into intonation units and add the appropriate punctuation following a set of guidelines summarized by the author. After she independently separated the transcript into IUs, the original transcript with the IUs placed by the author and the second researcher's results were combined into one excel file. To code these results for the reliability test, the author's transcripts were taken as the point of reference. Whenever the transcription differed, the IU in the original transcript was coded as "different", whereas all agreed upon IUs were coded as "same". Based on this coding, the following results were attained (see Table 4-2).

The range of coding agreement in these three transcripts was 73%, 81% and 86%. Especially in the transcript of the David's interview, the author and the rater differed substantially. However, the disagreements mostly occurred in instances where the speaker stuttered or started over, as can be seen in Figure 4-6. For example, in lines 27-33, the speaker seems to be searching for a particular word and restarts multiple words and utterances. In this case, the two raters disagreed on where exactly these utterances started and ended, mostly because the entire prosodic sentence is hard to parse. Importantly, however, both raters agree that a new IU begins in line 34, and on the two subsequent units. Therefore, although the agreement on David's interview is below the threshold of 80%, disagreements were mostly caused by those

interrupted utterances. Importantly, it seems that there were no systematic differences in coding but rather slightly varying interpretations of single utterances.

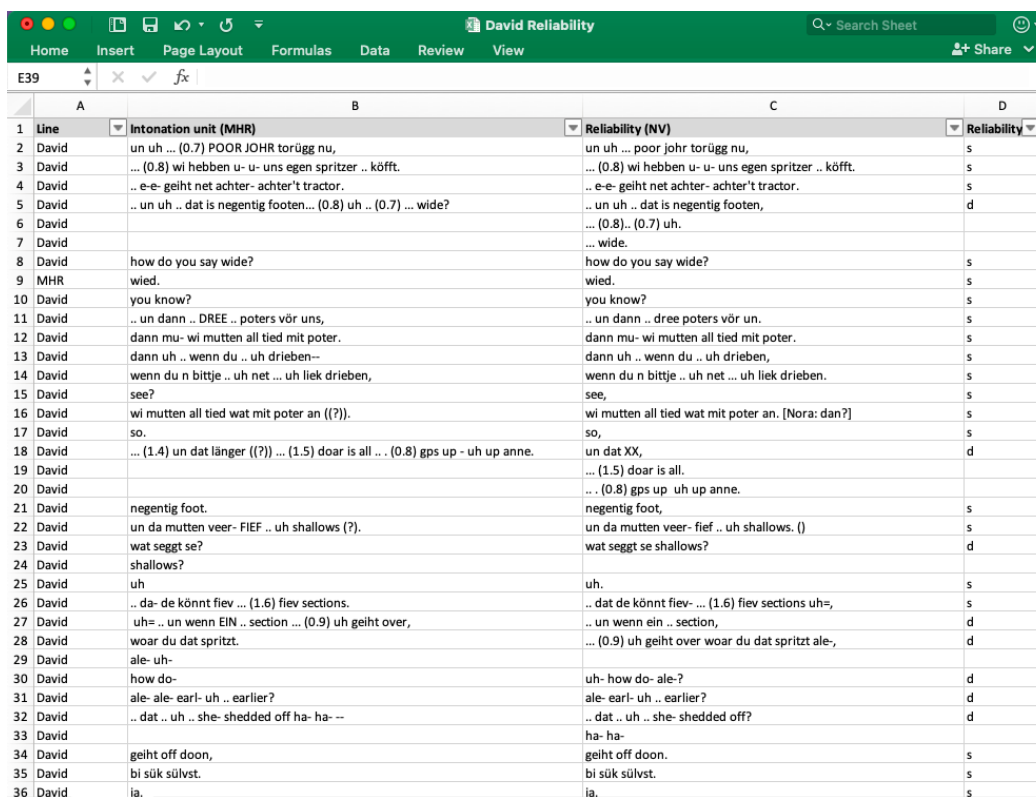
Table 4-2: Results of reliability test of intonation units in three transcripts.

Transcript	“Same”	“Different”
David	63/86 (73%)	23/86 (27%)
Lisa	90/ 111 (81%)	21/111 (19%)
Martha	80/93 (86%)	13/93 (14%)
Total	232/290 (80%)	58/290 (20%)

Lisa (00:45- 06:08)

ja ik bin ik bin upwussen .. up'n farm wi harren mien moder un vader de harren .. alles höhner .. swien .. peer .. koijen ... uh skopen .. puters harren't al un wi mussen mit .. mit fut helpen wi= wi satten net in't hus wi mussen helpen ik weet w- wos- wo to koijen melken bi hand un ok bi't maschien un .. de= höhner foden dat muss doon worden oh= un ik- ik weet noch tzk- wenn .. swinters wast denn gung mien modern hen .. to .. höhner foden un dan kwam se bi hus ik was an .. mörgen- .. eten moken un se segg <Q oh ((name)) geev mi de teeketel van't oven off mit de heet water drin .. mien water fountain is weer upfrozen Q> dann- .. n- n- nahm se de noh .. uh .. hohnerhuck hen .. un geet n bittje van dat uh= .. heet water over de .. uh water fountain un dann fung de good weer an ... (1.4s) un uhm ... (2s) da wassen ((wan?)) de swien= och ja .. wen- n- wenn d- .. de swien uh water ... (1s) apparatus ... (1.1s) dicht was k- kwam keen water du wusst good wat- uh= .. woför dat was de swien harren weer ... uh fuul nösen .. un dann wullen doar drin for sük water .. uh .. drinken un dann wurr dat ja all mudder dann was't ja all= ... (0.9) uh dicht dann kunnst du dien hannen nehmen in dat stinkig <@ water @> un- un Ø kraben dat doar al good ut .. solang as water kommen dee kiek dann harr's Ø dat weer open un .. se harren ok puters un ... (8) net heel groot gebauden se harren .. lüttje gebau kleine gebau dat uh pap .. uh= reed ((ride)) mit ... (0.7) tractor ... (1) na feld hen er harr een uh= .. pasture ((lg phonology)) doar wo he de insetten de un dann dat is wo hör .. uh puters uhm ... upwussen worden mitters ((?)) harren all dat gras doar to .. eten dann mussen eenmal dags ok kunn uh .. de lüttje bulli drieiben ((drive)) un dann nahnahmen wi uh= ... kannen mit water ... darin un ... (1s) emmers full foor ((Futter)) darin un dann mussen wi .. döör de= uh gaten ((E: gates)) do= uh d- ... (1.3) a- a- achter na't feld hen un ... (1.4) elkes mal doar musst Ø de gate open doon döör denn stoppen un dann musst Ø weer kommen döör de gate dicht doon of swien kwammen darut of ... (0.7) of koijen kwammen darut ach dat nahm ja so'n= .. sett ik glöv wenn ik n kind was ik glöv wi harren n heel bült mehr ... (1) slecht weer as ... (0.8) nu @@ wenn ... (0.7) uh störm upkommen dee ... (0.8) in't nacht... (1) oh dann mien moder was up un dann see se <Q treggt jo an Q> Ø is- is slim m- mal weer. ... (1.2) un dann .. wi mussen antrecken un dann mussen wi bi't .. tavel sitten .. in in köken Ø weet net warum un dann segg se tegen pap <Q kumm du musst ok up wi moten andohl na't uh köken hen Q> <Q nee ... (0.6) wenn

Figure 4-5: Example of a transcript free of punctuation used for reliability testing.



Line	Intonation unit (MHR)	Reliability (NV)	Reliability
2	David un uh ... (0.7) POOR JOHR torügg nu,	un uh ... poor johr torügg nu,	s
3	David ... (0.8) wi hebben u- u- uns egen spritzer .. köfft.	... (0.8) wi hebben u- u- uns egen spritzer .. köfft.	s
4	David .. e-e- geiht net achter- achter't tractor.	.. e-e- geiht net achter- achter't tractor.	s
5	David .. un uh .. dat is negentig footen... (0.8) uh .. (0.7) ... wide?	.. un uh .. dat is negentig footen,	d
6	David ... (0.8).. (0.7) uh.	... (0.8).. (0.7) uh.	
7	David ... wide.	... wide.	
8	David how do you say wide?	how do you say wide?	s
9	MHR wied.	wied.	s
10	David you know?	you know?	s
11	David .. un dann .. DREE .. poters vör uns,	.. un dann .. dree poters vör un.	s
12	David dann mu- wi mutten all tied mit poter.	dann mu- wi mutten all tied mit poter.	s
13	David dann uh .. wenn du .. uh driebe-	dann uh .. wenn du .. uh driebe-	s
14	David wenn du n bitlje .. uh net ... uh liek driebe-	wenn du n bitlje .. uh net ... uh liek driebe-	s
15	David see?	see,	s
16	David wi mutten all tied wat mit poter an ((?)).	wi mutten all tied wat mit poter an. [Nora: dan?]	s
17	David so.	so,	s
18	David ... (1.4) un dat länger ((?)) ... (1.5) doar is all .. (0.8) gps up - uh up anne.	un dat XX,	d
19	David ... (1.5) doar is all.	... (1.5) doar is all.	
20	David ... (0.8) gps up uh up anne.	... (0.8) gps up uh up anne.	
21	David negentig foot.	negentig foot,	s
22	David un da mutten veer- FIEF .. uh shallows (?).	un da mutten veer- fief .. uh shallows. ()	s
23	David wat seggt se?	wat seggt se shallows?	d
24	David shallows?		
25	David uh	uh.	s
26	David .. da- de könnt fiev ... (1.6) fiev sections.	.. dat de könnt fiev- ... (1.6) fiev sections uh=,	s
27	David uh= .. un wenn EIN .. section ... (0.9) uh geiht over,	.. un wenn ein .. section,	d
28	David woar du dat spritzt.	... (0.9) uh geiht over woar du dat spritzt ale=,	d
29	David ale- uh-		
30	David how do-	uh- how do- ale-?	d
31	David ale- ale- earl- uh .. earlier?	ale- earl- uh .. earlier?	d
32	David .. dat .. uh .. she- shedded off ha- ha- --	.. dat .. uh .. she- shedded off?	d
33	David ha- ha-	ha- ha-	
34	David geiht off doon,	geiht off doon.	s
35	David bi sük sülvst.	bi sük sülvst.	s
36	David ia.	ia.	s

Figure 4-6: Example of transcript coding for reliability test. (Column A= Speaker; Column B= Original transcript by author; Column C= Intonation units done by independent rater, Column D= Coding for overlap in IUs (s=same, d=different)).

4.3 Participants

The dissertation analyzes the changes in verb placement variation in a longitudinal comparison. For this reason, two data sets are included: one from 1998 and one from 2018/19, both of which were recorded in and around Grundy County, Iowa. This section introduces the participants and their language backgrounds as it may pertain to their language use. Figure 4-7 (repeated from Chapter 1 for the reader's convenience) shows a map of the Franklin, Butler, Hardin and Grundy counties and the towns therein. For a map situating the four counties within the state of Iowa, please refer to Chapter 1.

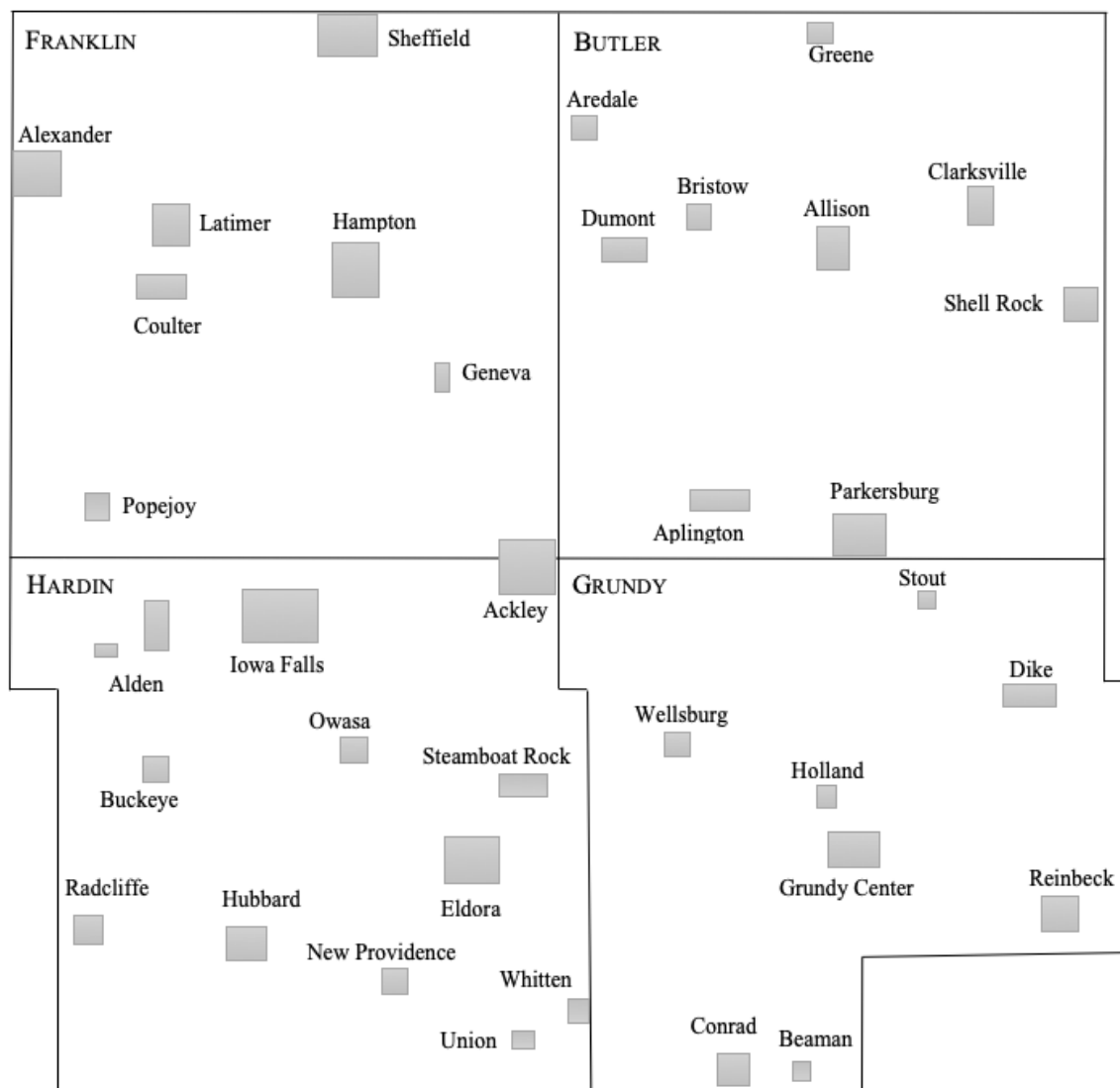


Figure 4-7: Map of Franklin, Butler, Hardin and Grundy counties.

4.3.1 Participants in Group A (1998)

For the first data set, which was recorded in 1998 (henceforth “Group A”), I transcribed the data of 33 participants interviewed in LG. Since the videos do not necessarily cover each person’s background, additional information was gathered from Census data, obituaries and family members’ obituaries (to the extent possible). In this group, there are 12 women and 21

men. The age range lies between 48 and 96 years (average= 70 years), and participants were born between 1902 and 1950. Twenty-two participants grew up in Grundy County, three in Butler County, three in Hardin County, three in other counties in Iowa, one person was born in Minnesota, and one person's place of birth is unknown. However, all participants seem to have grown up in or around Grundy County. At the time of the interviews, all participants lived in Grundy, Butler, Hardin, or Franklin counties. Most men worked as farmers or in businesses related to the agricultural industry, while most women were homemakers and helped on their family farms. Table 4-3 provides an overview of participants' language background.⁷⁰

⁷⁰ Since 12 speakers (3 women, 9 men) were interviewed by the author in 2018/19, their details will be described in the next section. For now, only their short information will be displayed.

Table 4-3: Summary of language background information of participants in 1998 data set. (Participants ordered by year of birth)										
Name	Year of birth	Age	Gender	Immigrant generation	Place of birth (county in Iowa)	L1	Age of L2 acquisition	(Former) Occupation	High German knowledge	Low German partner
Anne	1902	96	f	?	Butler	?	?	Homemaker	yes?	?
	<i>Member of Bethany Presbyterian Church, which was called "German Presbyterian until 1938 and conducted all services in High German until this time."⁷¹ Thus, at least some reading and passive HG knowledge can be assumed.</i>									
Stena	1905	93	f	3 rd	Grundy	LG	5	Maid, Homemaker	yes	?
	<i>Exclusively LG first, learned English in school. Member of the East Friesland Presbyterian Church, learned the catechism and reading the bible in HG.</i>									
Martha	1908	90	f	3 rd	Grundy	?	?	Homemaker	yes?	?
	<i>Member of the Colfax Center Presbyterian Church, which conducted all services in High German until the mid-1930s.⁷² Thus, at least some reading and passive HG knowledge can be assumed. Roger's mother.</i>									
Mary	1910	88	f	3 rd	Grundy	LG/E	0	Teacher, Postmaster	yes	?
	<i>Maternal family LG-speaking, paternal side English. Member of Pleasant Valley Reformed Church, learned to read, understand and speak some HG.</i>									
Tillie	1917	81	f	?	Grundy	LG	5	Homemaker	no	?
	<i>Exclusively LG first, learned English in school. Member of First Reformed Church in Aplington. Learned spelling in HG but no proficiency. Dave's mother (in Group B).</i>									
Lucy	1918	80	f	2 nd	Grundy		?	Teacher, Homemaker	yes?	?
Byron	1919	79	m	3 rd	Hardin		?	Soldier, Farmer	?	yes
	<i>Married to Everdena. Member of East Friesland Presbyterian Church, thus some HG knowledge possible.</i>									
Ernest	1920	78	m	3 rd	Benton, MN	LG	5	Soldier, Farmer	?	?
	<i>Exclusively LG first, learned English in school. Family moved to Grundy County before he reached school age. He was a soldier during WWII. Member of West Friesland Presbyterian Church.</i>									

⁷¹ Grundy County IAGenWeb. Bethany Presbyterian Church (2018) Online available at: <http://iagenweb.org/grundy/churches/churchesgcbethany.html> [accessed 11/27/2021].

⁷² Colfax Center Presbyterian Church. Our History (2021). Online available at: <https://colfaxcenterchurch.org/our-history/> [accessed 11/27/2021].

<i>Name</i>	<i>Year of birth</i>	<i>Age</i>	<i>Gender</i>	<i>Immigrant</i>	<i>Place of birth (county in Iowa)</i>	<i>L1</i>	<i>Age of L2 acquisition</i>	<i>(Former) Occupation</i>	<i>High German knowledge</i>	<i>Low German partner</i>
<i>Albert</i>	1921	77	m	3 rd	Grundy	LG	5	Teacher, Musician	?	?
	<i>Member of Lincoln Center Christian Reformed.</i>									
<i>John</i>	1923	75	m	2 nd	Grundy	LG	?	Soldier Farmer	?	?
	<i>Member of the Ostfriesen Heritage Society.</i>									
<i>Hermann</i>	1923	75	m	3 rd	Grundy	LG	5	Bus driver, Farmer	?	?
	<i>Member of First Presbyterian Church. Spoke only LG with grandparents. Visited LG-speaking family in East Frisia five times.</i>									
<i>Everdena</i>	1924	74	f	4 th	Grundy	LG	?	Homemaker	?	yes
	<i>Member of East Friesland Presbyterian Church. Married to Byron.</i>									
<i>Ethel</i>	1924	74	f	3 rd	Marshall	LG		Homemaker	?	yes
	<i>Member of the Wellsburg Reformed Church. Earl's wife (Group B).</i>									
<i>Tako</i>	1924	74	m	2 nd	Grundy	LG	?	Factory worker, Insurance Agent	?	?
	<i>Member of First Reformed Church in Aplington.</i>									
<i>Mae</i>	1926	72	f	?	Grundy	?	?	?	?	yes?
<i>Ernie</i>	1927	71	m	3 rd	Franklin	?	?	Business Manager	?	?
	<i>Member of St. John's United Church of Christ in Ackley.</i>									
<i>Leroy</i>	1928	69	m	4 th	Grundy	LG	?	Farmer	?	yes
	<i>Married to Elaine.</i>									
<i>Edward</i>	1928	70	m	3 rd	Butler	LG	?	Salesman	?	yes
	<i>Member of Bethany Presbyterian Church. Married to Lisa.</i>									
<i>Carl</i>	1932	66	m	2 nd	Butler	LG	?	Farmer, Custodian	?	?
	<i>Member of Pleasant Valley Reformed Church.</i>									
<i>Harold</i>	1935	63	m	3 rd	Hamilton	?	?	Worked at gas company	?	?
	<i>Member of Ostfriesland Heritage Society, visited LG-speaking relatives in Germany numerous times. Member of First Presbyterian Church in Kamrar, IA.</i>									
<i>Roger</i>	1939	59	m	4 th	Grundy	?	?	Soldier, Farmer	?	?
	<i>Member of Bethany Presbyterian Church. Martha's son.</i>									

<i>Name</i>	<i>Year of birth</i>	<i>Age</i>	<i>Gender</i>	<i>Immigrant generation</i>	<i>Place of birth (county in Iowa)</i>	<i>L1</i>	<i>Age of L2 acquisition (Former) Occupation</i>	<i>High German knowledge</i>	<i>Low German partner</i>
<i>Daniel</i>	1928	70	m	4 th	Hardin	LG	5 Teacher	some	no
<i>Elaine</i>	1930	68	f	3 rd	Hardin	LG	5 Homemaker	no	yes
<i>Walter</i>	1933	65	m	3 rd	Grundy	LG	5 Farmer	no	yes
<i>Harald</i>	1936	62	m	3 rd	Grundy	LG	5 Farmer	no	no
<i>Lisa</i>	1936	62	f	3 rd	Grundy	LG	5 Shopkeeper	no	yes
<i>Doris</i>	1938	60	f	2 nd	Grundy	LG	5 Homemaker	some	yes
<i>Hans</i>	1938	60	m	2 nd	Grundy	LG	5 Farmer	yes	no
<i>Arthur</i>	1940	58	m	2 nd	Grundy	LG	5 Farmer	no	no
<i>Eldred</i>	1941	57	m	3 rd	Grundy	E/LG	0 Farmer	no	no
<i>David</i>	1943	55	m	2 nd	Grundy	E/LG	0 Factory work, Farmer	no	no
<i>Dean</i>	1943	55	m	3 rd	Butler	LG/E	0 Salesman, insurance agent	no	no
<i>Bernard</i>	1950	48	m	4 th	Grundy	E/LG	0 Teacher; Shopkeeper	yes	no

In the interviews, many speakers touch upon their memories of language acquisition, especially in reference to their monolingual LG-upbringing. Some speakers specifically remember having difficulties learning English, as this short excerpt from the interview with Tillie and Stena shows:

- (60) Tillie un ik bin anfangen to 't school,
 un ik kunn kien engelsk proten.
 oh dat was leep stur.
 Stena dat was the hardest.
 ... dat wi dann overturnen müssen to ... to the English language.
 'And I started school and I couldn't speak any English. That was very hard.'
 'That was the hardest, that we had to switch to the English language.'

In addition to LG as the main spoken community language, some of the oldest speakers (Stena, Martha, Mary, Lucy) report that they learned HG through church services and Sunday school. In fact, Stena recites a prayer in HG and Mary states:

- (61) Mary I was really raised in the Lutheran church,
 and uh .. I learned to talk German,
 in the Lutheran church,
 so I can talk a little High German and understand it.
 they can't sell me anyway,
 when they talk German.

In many of the interviews and conversations, differences in lifestyle during participants' childhood and the current lifestyle are discussed, especially in relation to farming, food production and transportation. The participants often emphasize how close-knit the community was, that endogamy was the norm, and that community members rarely left their homestead, as this example illustrates:

- (62) Edward mitnanner up .. up peerd
 un schle,e,
 un buggy na't kark hen,
 un .. w- wieder kwammen .. wi daar gar neet.
 mam gung mitunner van .. twee mal na .. na't dörp hen in't sömmers,
 mit pap,
 un uh .. man all söben na't kark hen,
 ne?
 un de kinner,
 de kwammen daar all mit .. bekannt mitnanner,
 un see,
 dat .. dat hülpt ok mit ... to binanner kommen,
 do .. as wi oller wassen.
 ik weet noch,
 dree markden un dree XXX ween heirat,
 bröer un süsters,
 un dat süchst du vandaag neet heel vööl mehr.

‘[We went] together with the horse and sled and buggy to church, and we didn’t really get much further than that at the time. Mom sometimes went to the village about two times in the summer with dad, but all seven of us went to the church. And the kids all got to know each other there, and see, that really helped with getting together [dating] when we were older. I remember three maids and three XXX got married, brothers and sisters, and you don’t really see that anymore nowadays. [He explains how three brothers from one family married three sisters from the neighboring family].

At the time of the video project, the speakers are already acutely aware of the ongoing changes in their community, both in terms of technological advancements, social changes and the decline of their heritage language. The initiative to establish the *Ostfriesen Heritage Society* in the mid-1990s came with the hope of preserving the LG language. In 1995, a LG theatre group from Germany came to Grundy Center and other towns in the Midwest with a LG-speaking population and initially sparked a lot of hope and enthusiasm for continuing the cultural and linguistic heritage (Webber 2003). Some community members founded their own theater group and organized a play (which even went to Germany and was met with much applause), others began

publishing a newsletter or organized language classes. Certainly, the video project was also a remarkable attempt to document the language and inspire speakers to continue its use.

4.3.2 Participants in Group B (2018 and 2019)

For the 2018/19 data set (henceforth “Group B”), 25 participants (9 women, 16 men) were interviewed in LG. The age range was between 69 and 93 years (average= 81 years), meaning that participants were born between 1926 and 1950. 17 participants grew up in Grundy County, five in Butler County and three in Hardin County, and at the time of the interviews, all participants lived in one of these three counties. Table 4-4 provides a detailed overview of each participants’ language background; all information was gathered from the interviews.

Table 4-4: Summary of language background information of participants in 2018/19 data set. (Participants ordered by year of birth; participants also interviewed in Group A marked with bold letters.)

<i>Name</i>	Year of birth	Age	Gender	Immigrant generation	Place of birth (county in Iowa)	L1	Age of L2 acquisition	(Former) Occupation	High German knowledge	Low German partner
<i>Earl</i>	1926	93	m	2 nd	Grundy	LG	5	Bus driver	no	yes
	<i>Exclusively LG first, learned English in school. Remembers church services in HG but says he did not understand the pastor. Partner spoke LG, but they rarely used it.</i>									
Daniel	1928	91	m	4 th	Hardin	LG	5	Teacher	some	no
	<i>Exclusively LG first, learned English in school. Partner does not speak LG. Involved in the OHS, contributes LG phrases to newsletter. Taught himself to read and write HG, has written several books, including a dictionary (HG-LG-E).</i>									
Elaine	1930	89	f	3 rd	Hardin	LG	5	Homemaker	no	yes
	<i>Exclusively LG first, learned English in school. Partner spoke LG, but they usually did not speak it with each other.</i>									
<i>Olivia</i>	1931	88	f	4 th	Grundy	LG	5	Homemaker	no	?
	<i>Exclusively LG first, learned English in school.</i>									
<i>Derek</i>	1932	86	m	3 rd	Grundy	LG	5	Farmer	some	no
	<i>Exclusively LG first, learned English in school. Spend his military service in Germany, and understands/speaks some HG. Partner understands LG but does not speak it.</i>									
Walter	1932	86	m	3 rd	Grundy	LG	5	Farmer	no	yes
	<i>Exclusively LG first, learned English in school. Partner speaks LG, but they rarely use it with each other. Meets other LG-speaking men for coffee regularly.</i>									
<i>Herbert</i>	1933	86	m	2 nd	Butler	LG	5	Farmer	no	?
	<i>Exclusively LG first, learned English in school. Speaks LG with his neighbor almost daily.</i>									
Harald	1936	83	m	3 rd	Grundy	LG	5	Farmer	no	no
	<i>Exclusively LG first, learned English in school. Partner understands some LG but does not speak it.</i>									
<i>Jolene</i>	1936	83	f	2 nd	Butler	LG/D	5	Musician, Teacher	some	yes
	<i>Exclusively LG and Dutch first, learned English in school. Partner immigrated from East Frisia, the couple speak English and sometimes LG and HG with each other.</i>									
Lisa	1936	82	f	3 rd	Grundy	LG	5	Shopkeeper	no	yes
	<i>Exclusively LG first, learned English in school. Partner spoke LG, but they consciously decided not to use it with their children.</i>									
<i>Margret</i>	1937	82	f	2 nd	Hardin	LG	5	Homemaker	no	yes
	<i>Exclusively LG first, learned English in school. Partner speaks LG as well.</i>									

<i>Name</i>	<i>Year of birth</i>	<i>Age</i>	<i>Gender</i>	<i>Immigrant generation</i>	<i>Place of birth (county in Iowa)</i>	<i>L1</i>	<i>Age of L2 acquisition (Former) Occupation</i>	<i>High German knowledge</i>	<i>Low German partner</i>
Doris	1938	80	f	2 nd	Grundy	LG	5 Homemaker	some	yes
	<i>Exclusively LG first, learned English in school. Partner speaks LG but they rarely use it with each other. Involved in OHS. Did not pass LG on to their children. Has travelled to East Frisia and hosted LG-speaking guests numerous times.</i>								
Hans	1938	80	m	2 nd	Grundy	LG	5 Farmer	yes	no
	<i>Exclusively LG first, learned E in school. Spend his military service in Germany, married to a German partner, the couple speak mostly English but understand each other's dialect. Has travelled to East Frisia and met LG-speaking family numerous times.</i>								
Grace	1939	80	f	3 rd	Grundy	LG/E	0 Homemaker	no	?
	<i>Spoke LG with parents and grandparents, but E with neighbors and siblings.</i>								
Harry	1939	80	m	4 th	Grundy	E/LG	0 Farmer	no	?
	<i>Parents spoke mostly E with him, but learned LG from grandfather.</i>								
Arthur	1940	78	m	2 nd	Grundy	LG	5 Farmer	no	no
	<i>Exclusively LG first, learned E in school. Meets LG-speaking men for coffee regularly. Has travelled to East Frisia and met LG-speaking family multiple times.</i>								
Chris	1941	78	m	3 rd	Butler	LG/E	0 Farmer	no	no
	<i>Family used both languages, but mainly LG with grandparents. Partner does not speak LG. He speaks LG with his neighbor almost daily.</i>								
Dave	1941	78	m	3 rd	Butler	LG/E	0 Farmer	no	no
	<i>Family used both languages but he was LG-dominant until he entered school, younger brother does not know LG. Has travelled to East Frisia and met LG-speaking family.</i>								
Eldred	1941	78	m	3 rd	Grundy	E/LG	0 Farmer	no	?
	<i>Family used E and LG after older sister entered school (and did not know E). He feels more comfortable speaking E.</i>								
Ronald	1942	77	m	3 rd	Grundy	LG	5 Business owner	no	no
	<i>Exclusively LG first, learned English in school.</i>								
David	1943	76	m	2 nd	Grundy	E/LG	0 Factory work, Farmer	no	no
	<i>Family used both languages but were E-dominant; he spoke LG mainly with his grandfather. His younger siblings do not know LG.</i>								
Dean	1943	76	m	3 rd	Butler	LG/E	0 Salesman, insurance agent	no	no
	<i>Family used both languages but switched to entirely E; his younger siblings do not know LG. Partner understands some LG but does not speak it.</i>								
Donna	1943	76	f	3 rd	Grundy	LG	5 Homemaker	no	yes
	<i>Exclusively LG first, learned E in school. Partner speaks LG, but the couple very rarely use it with each other.</i>								

<i>Name</i>	Year of birth	Age	Gender	Immigrant generation	Place of birth (county in Iowa)	L1	Age of L2 acquisition (Former)	Occupation	High German knowledge	Low German partner
<i>Maria</i>	1948	71	f	3 rd	Grundy	LG/E	0	Public servant	no	no
	<i>Family used both languages but was LG-dominant. Involved in the OHS. She has travelled to East Frisia and hosted LG-speaking guests numerous times. She was also involved in LG-theater in the 1990s.</i>									
<i>Bernard</i>	1950	69	m	4 th	Grundy	E/LG	0	Teacher; Shopkeeper	yes	no
	<i>Parents spoke LG among each other but E to him. Grandmother lived with family, she mainly spoke LG. He earned a BA in High German and worked as a language teacher. His partner is from Germany, the couple use E and High German. He has travelled to East Frisia and visited LG-speaking family numerous times.</i>									

Many of the participants recount that LG was their parent's preferred language and that the language was widely spoken within the community, both with the extended family and neighbors as well as in local stores, as illustrated in these interview excerpts:

- (63) MHR when your mom and dad met,
did they speak English or Low German with each other?
Marie I'd say Low German because that was spoken in our home.
MHR they always spoke German with each other?
Marie yeah.
MHR did they speak English?
Marie yeah they did.
MHR but they preferred the Low German?
Marie i think so.
and we would always,
you know,
family was important at that time,
sunday afternoon,
we went to opa und oma on .. on both sides of the family,
and all of the married brothers and sisters and their families would come,
and Low German was spoken there.

- (64) Grace but they [the grandparents] kept up the Low German language.
 when we were kids growing up,
 we didn't --
 like,
 back then you didn't go to the grocery store two three times a week.
 you went on saturday night,
 took in a case of eggs,
 and traded it for groceries.
 but everybody on the street and in that store talked the Low German.
 @ everybody @
 this was Parkersburg Iowa.

Unsurprisingly, first language (L1) acquisition is an important factor in these speakers' lives. Fifteen participants stated that they spoke only LG until entering elementary school, while 10 participants stated they grew up bilingually. There seems to be a correlation between year of birth and language acquisition, as illustrated in Figure 4-7. Thus, all 13 participants born before 1939 report growing up monolingually LG. Among the 12 participants born in or after 1939, only three report growing up monolingually LG, while nine report both LG and E being spoken in their household. Of these nine participants, five report being LG-dominant before entering elementary school, and four report speaking mostly E but being exposed to LG in the household.

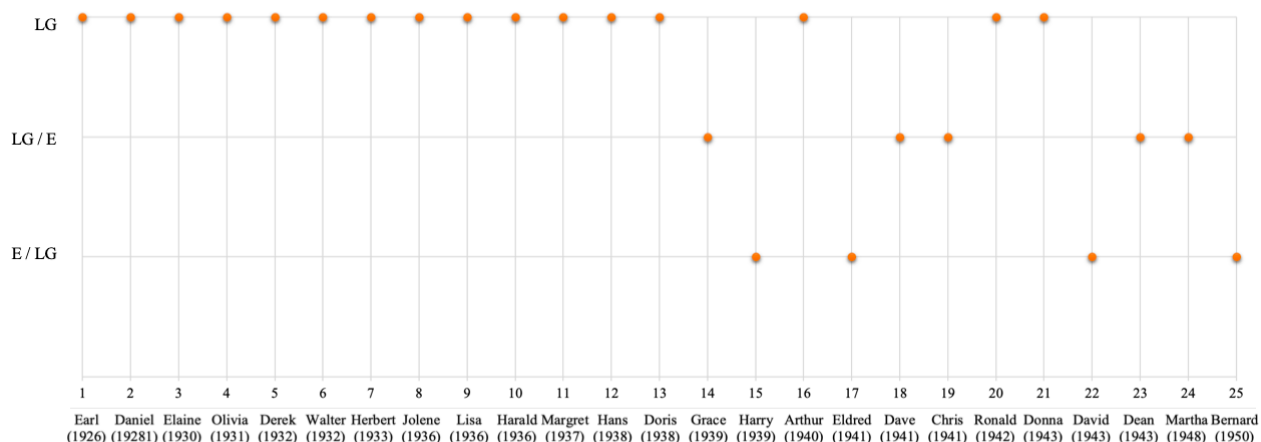


Figure 4-8: First language by year of birth.

Indeed, entering elementary school and being unable to speak English was a common experience among the participants and was often described as difficult or challenging:

- (65) MHR so when you went to school,
was it hard to learn English?
Daniel uh= yeah.
MHR yeah?
Daniel because you still had that accent that growing up was fought.
MHR were there a lot of kids who spoke Platt as well at the school?
Daniel all of them.

At the same time, the role of the teacher seems to have made an impact on the participants' experience. Some report that their teachers also came from the community and the teacher's ability to speak (or understand) LG helped them transition into the new environment.

- (66) Lisa and so I I- stayed with them. ((with her grandparents))
and that's all that we could speak. ((Low German))
by the time they started firing, ((WW2))
and my folks was still talking the Platt,
and I started school,
and Lord and behold,
they speak English there.
that was quite a change for me. [...]
and uhm,
.. it was not such a bad situation in the country school that I went to.
I think every kid there also came from homes that spoke the Plattdeutsch,
and the teacher could speak the Plattdeutsch.

Sadly, many participants seem to have made more negative experiences with the teacher's attitudes towards their first language and the school setting overall. Reports of physical punishments for unruly behavior are common, and in some cases, even the use of LG in the classroom was punished, as evidenced in this excerpt:

- (67) MHR did you have problems learning English when you went to school?
 Olivia well,
 yes I did. [...]
 ((name)) was one of my first teachers,
 and she wasn't very happy with me because --
 I don't .. I don't think I needed discipline.
 but I can remember her putting me behind the door.
 because I couldn't .. I couldn't talk English like that.

Most participants said they tried to overcome the language barrier quickly and never used LG with classmates, even if they knew that others also came from LG families. In some cases, participants were surprised to learn about other participant's knowledge of LG even though they had known each other since childhood days. Because of their own experiences, almost none of the participants passed any LG on to their children. In fact, they oftentimes consciously decided against it, in order to protect their children from having similar negative experiences in school.

- (68) MHR did you teach them some Platt? ((her two sons))
 Lisa no,
 because ((husband)) said <Q whoa Q>.
 my mother said <Q they have to learn.
 ((son)) has to learn to speak German too Q>.
 and ((husband)) said
 <Q whoa I don't want him to go through in school,
 what I went through Q>.
 he says <Q we'll teach him English first.
 and then they can learn their .. their German. Q>

Unfortunately, growing up with LG was often viewed in a negative light, and all participants completely switched to E in their adult lives. Thus, even those couples where both partners speak LG report typically speaking E with each other, and almost all participants say that they rarely make use of their heritage language nowadays. Many participants lament that the community is declining due to the deaths of LG-speaking members, while others state that speaking LG is becoming harder because they do not use it often enough.

(69) MHR is there someone today that you still speak it ((LG)) with?
 Earl most of them are gone.
 uh .. there's two people in Wellsburg that we used to visit,
 and they can talk German. [...]
 oh,
 my neighbor here,
 she was just here,
 that brings me the mail,
 she can talk Platt. [...]
 oh let's see,
 .. I don't think there's anybody else.

(70) David ... (1.1) ik bün neet so good mit de plattdüütsch.
 MHR oh= du kannst wunnerbor plattdüütsch proten.
 David oh= ja= hm.
 MHR ik lern so vööl hier.
 David ja= uh it .. dat word n bittje stuurder alltied.
 David ik proot nich genug,
 un dann,
 ... wat da--
 ... wat tieden,
 .. wenn du mehr proten,
 dann dann kummt ... [kummt bi sük] sülvst,

'I'm not that good with the Low German.'

'Oh, you can speak Low German really well.'

'Oh yeah, hm.' [hesitation]

'I'm learning a lot here.'

'Yeah, it gets a little bit harder every time. I don't speak it enough.

And then, sometimes, when you speak it more, it comes [back] by itself.'

This section shows that those communal changes that were already expressed in 1998 are certainly felt by participants twenty years later. Unfortunately, many of the revival efforts that were started in the mid- to late-1990s did not develop into long-term establishments. The *Ostfriesen Heritage Society* organizes regular presentations and a yearly ethnic meal, and a newsletter including LG phrases and idioms is published four times a year. But the language classes and theater group are no longer active. Nonetheless, my research attracted a lot of interest, and many participants were very happy to speak LG with me.

4.4 Data extraction and coding

4.4.1 Token extraction

As a first step, all transcripts were examined for main clauses with finite verbs. For each speaker, up to the first 50 consecutive main clauses were extracted from the transcripts and collected in a separate Excel sheet. Importantly, tokens were delimited by grammatical units that needed to show at least a finite verb and a (null) subject. These grammatical units (main clauses) are potentially uttered across multiple IUs but were still extracted as one token as long as they occurred within one prosodic sentence. We will consider the following examples (71-73) for illustration:

- | | | |
|------|---|-------------------------------------|
| (71) | 170 wi mussen lopen. | we must-PAST walk-INF |
| | 171 ik harr n .. fohrrad, | I have-PAST a bike, |
| | 172 man ik hebb dat m- mi sülbst .. doon. | but I have-AUX that me self do-PART |
- ‘We had to walk. I had a bike, but I had to get it for myself.’
Jolene–1936–2019–170-172

From example (71), three tokens were extracted. Line 170 entails an entire grammatical clause within one prosodic sentence (marked by the “.”). Line 171 also shows an entire grammatical unit, and although the IU signals continuation of the utterance (marked by “,”), it is extracted as a self-contained token. Line 172, just like line 171 is extracted as one token because it shows one grammatical unit realized within a single IU.

- | | | |
|------|-----------------------------|----------------------|
| (72) | 180 uh uh hunnert .. veer, | and hundred four, |
| | 181 ... (1.4) hebb ik hatt. | have-AUX I have-PART |
- ‘I had one-hundred-and-four (houses to deliver newspapers to).’
Jolene–1936–2019–180-181

Example (72) was extracted as one token. Although the utterance is distributed across two IUs, line 180 (“hunnert .. veer”) can clearly be identified as the object of the grammatical unit which is completed in line 181 (“hebb ik hatt.”) For this reason, the entire prosodic sentence (i.e., lines 180 and 181) were counted as one grammatical unit.

(73)	61	<i>dann,</i>	then
	62	<i>wi wullen hör för't döör doon.</i>	we want-PAST them outside the door put-PART
‘Then we wanted to put them (the chicken) outside the door.’			
Margret–1937– 2019–61-62			

Similarly, Example (73) was extracted as one token. Since line 61 (‘dann’) is an adverbial to the proposition uttered in line 62, both lines are interpreted as one grammatical unit contained within one prosodic sentence. Based on this system, one data set for Group A (1998) and one data set for Group B (2018/19) were compiled (see Table 4-5). Data set A consists of 1029 tokens produced by 33 speakers, with a token range of 2–50 (M=31), and data set B entails 1014 tokens produced by 25 speakers, with a token range of 6–50 (M=40). All tokens were coded based on eight coding factors, as outlined in the next section.

Table 4-5: Summary of main clause extraction data, both groups.

<i>Data set</i>	<i>Number of IUs in the corpora</i>	<i>Number of tokens</i>	<i>Number of speakers</i>	<i>Number of tokens per speaker</i>
Group A	2209	1029	33	2-50 (M=31)
Group B	3480	1014	25	6-50 (M=40)

4.4.2 Coding factors: Dependent variable

At this point, I would like to reiterate some of the key principles of the variationist approach. Since this methodology seeks to analyze all *potential* environments of the outcome variable, it also includes those tokens that do *not* show the target structure, in order to understand

the factors that may favor the outcome structure. Although some previous studies on other Germanic varieties suggest that V3-structures seem to predominantly occur with sentence-initial adverbials, since there has not been any variationist study of this phenomenon (i.e. all previous studies have focused on the cases where V3 *does* occur), I decided to define the variable context as broadly as possible to ensure that no potential circumstances would be missed. Thus, all main clauses with a finite verb were coded for verb placement to determine whether the finite verb (including auxiliaries and modals) occurs in 1st, 2nd or 3rd position in the grammatical sentence.

As mentioned before, the verb position is defined based on the number of (expressed) constituents preceding the finite verb in the grammatical sentence. Therefore, verb-first (V1) sentences are defined as such instances where there are no (expressed) preverbal constituents.⁷³ This may happen in the case of null subjects (examples 74 and 75) and topic drop (examples 76 and 77).⁷⁴

Verb first (sentences with null subjects):

(74) \emptyset {**weet**}₁ neet warum

‘[I] don’t know why.’

| [I] know-PRE not why

(75) \emptyset {**kannst**}₁ kien platt proten.

‘[You] can’t speak Low German.’

| [you] can-PRE no Low German speak-INF

⁷³ Germanic languages may express subjunctive with a verb-first structure (Nordström 2010) and Low German is no exception to that. However, sentences such as *Weer he man to Huus bleven!* (‘If only he had stayed home’) (Lindow et al. 1998: 68) to express wishes or indirect speech with a sentence-initial verb are not found in the corpus. Similarly, tokens showing imperative use (which typically show a verb-first structure) were not extracted in this study.

⁷⁴ Curly brackets are used to indicate the beginning and end of each grammatical constituent. Numbers in subscript (e.g., 0, 1, 2, 3) indicate whether the constituent is considered outside of the grammatical sentence and thus disregarded (i.e., 0), or whether the constituent is considered the first, second or third element of the sentence. The finite verb, which is of main interest here, is highlighted in bold.

Verb first (sentences with object drop):

(76) *_{kann}_1 'k ((ik)) di neet seggen.* | [that] can-PRE I not tell-INF you
 ‘I can’t say.’

(77) *{weet}_1 ik neet.* | [that] know-PRE I not
 ‘I don’t know [that].’

In addition, cases where a subordinate clause is followed directly by the finite verb of the subsequent main clause were also defined as verb-first structures. It could be argued that the subordinate clauses serve as the first constituent of the subsequent main clauses, especially given that this structure with verb inversion is canonically expected.⁷⁵ However, if these examples were defined as V2, they would be conflated with similar structures (examples 104-106), which have an additional constituent before the finite verb in the main clause. Therefore, these sentences are defined as V1, because the finite verb occurs in the first position of the main clause.

Verb first (subordinate clause followed by main clause with verb inversion):

(78) *{wenn wi kinner wassen}_0,* | when we children be-PAST
{deen}_1 wi alltieden na't kark hen. | do-PAST we always to the church there
 ‘When we were children, we went to church all the time.’

(79) *{but wenn wi hier n uh süd van ... (0.7)}* | but when we here in south of
((city)) wohnen deen}_0, | ((city)) live-INF do-PAST
{harren}_1 wi achttiehn stanchions. | have-PAST we eighteen stanchions
 ‘But when we lived here South of ((city)), we had eighteen (milking) stanchions.’

(80) *.. {dat Lü in't butz slopen deen}_0,* | that people in an alcove sleep-INF do-PAST
{kann}_1 ik ja nich verstohn, | can-PRE I not understand-INF
 ‘I can’t understand that people slept in alcoves.’

⁷⁵ For an interesting study showing an increase of V2-structures in subordinate clauses produced by Moundridge Schweitzer German speakers, see Hopp & Putnam (2015).

Similarly, verb-second (V2) structures are defined as such instances where there is exactly one preverbal constituent in the main clause. This may happen when there is a preverbal subject (example 81), a preverbal object (example 82) or a preverbal adverbial (example 83). Sentences are still defined as V2 if the first constituent is (partially) uttered in a different IU than the finite verb (examples 84-86).

Verb second (subject before finite verb):

- | | | |
|------|--|--|
| (81) | <i>{wi}</i> ₁ {harren} ₂ <i>alltied koffie tied in feld mit ... (1.3) koffie.</i> | we have-PAST always coffee time in field with coffee |
| | ‘We always had a coffee break in the field with coffee.’ | |

Verb second (object before finite verb):

- | | | |
|------|---|---------------------------------|
| (82) | <i>{dat}</i> ₁ {kann} ₂ <i>ik neet so genau,</i> | that can-PRE I not so precisely |
| | ‘I can’t say that for sure.’ | |

Verb second (adverbial before finite verb):

- | | | |
|------|--|---------------------------------|
| (83) | <i>{dann}</i> ₁ {verstoh} ₂ <i>ik dat wohl,</i> | then understand-PRE I that well |
| | ‘Then I understand that (well).’ | |

Verb second (sentence may be spread across multiple IUs):

- | | | |
|------|--|---|
| (84) | <i>{un}</i> ₀ <i>{dann}</i> ₁ ,
.. {fung} ₂ <i>de good weer an.</i> | and then
start-PAST it well again PART |
| | ‘And then, it started again without problems.’ | |

- | | | |
|------|--|--|
| (85) | <i>... uh {net to lang her}</i> ₁ ,
{hebb} ₂ <i>ik funnen,</i> | not too long ago
have-AUX I find-PCPT |
| | ‘Not long ago, I found out.’ | |

- | | | |
|------|--|---------------------------------------|
| (86) | <i>{sien mama,</i>
<i>un my mama}</i> ₁ {wassen} ₂ <i>süsters.</i> | his mom
and my mom be-PAST sisters |
| | ‘His mom and my mom were sisters.’ | |

However, there are a number of cases, where there seems to be additional material before the finite verb. It is therefore crucial to define which type of preverbal material is regarded as a

constituent in the grammatical sentence, and which elements are considered outside of the grammatical sentence and thus disregarded. Among these elements are interjections (examples 87-88), conjunctions (89-92) and discourse markers (93-95), since they are not part of the grammatical sentence.

Verb second (interjections are disregarded):

- | | | |
|------|---|--|
| (87) | <i>{ja}</i> ₀ ,
<i>{dann}</i> ₁ {wullen} ₂ <i>se rebbedie hebben,</i> |
yes
then want-PAST they [soup] have-INF |
| | ‘Yes, then they wanted to have milk soup.’ | |
| (88) | <i>{nee}</i> ₀ ,
<i>{dat}</i> ₁ {fodern} ₂ <i>wi all d- .. an de deeren,</i> |
no
that feed-PAST we all to the animals |
| | ‘No, we fed all of that to the animals.’ | |

Verb second (conjunctions are disregarded):

- | | | |
|------|---|------------------------------------|
| (89) | <i>{un}</i> ₀ <i>{ik}</i> ₁ {sull} ₂ <i>neet proten.</i> |
and I shall-PAST not speak-INF |
| | ‘And I was not supposed to speak.’ | |
| (90) | <i>{but}</i> ₀ <i>{wi}</i> ₁ {harren} ₂ <i>ok anners.</i> |
but we have-PAST also other |
| | ‘But we also had other [animals].’ | |
| (91) | <i>{man}</i> ₀ <i>{ik}</i> ₁ {harr} ₂ <i>de .. de eier kiste,</i> |
but I have-PAST the egg box |
| | ‘But I had the box of eggs.’ | |
| (92) | <i>{so}</i> ₀ <i>{he}</i> ₁ {is} ₂ <i>na huus gohn,</i> |
so he be-AUX to house go-PTCP |
| | ‘So he went home.’ | |

Verb second (discourse markers are disregarded):

- | | | |
|------|---|--|
| (93) | <i>{un anyway}</i> ₀ ,
<i>{ik}</i> ₁ {see} ₂ <i>to hüüm,</i> |
and anyway
I say-PAST to him |
| | ‘And anyway, I said to him.’ | |
| (94) | <i>{see}</i> ₀ ,
<i>{but}</i> ₀ <i>{dat}</i> ₁ {was} ₂ <i>ik neet wentt van huus.</i> |
see,
but that be-PAST I not used-to from home |
| | ‘See, but I wasn’t used to that from home.’ | |

- (95) *{well}*₀,
 ... (2.0) *{dat}*₁ *{nimmt}*₂ *to lang*.
 ‘Well, that takes too long.’
- | |
|--------------------------------|
| well
that take-PRE too long |
|--------------------------------|

As laid out in Section 3.1, sentences with left-dislocated elements and resumptives are well-described in Low German grammars (see Lindow et al. 1998). Since the left-dislocated element and its resumptive mark the same referent, they are both considered as ‘element 1’ in the coding, meaning that the finite verb occurs in second position and is interpreted as V2. Such constructions can be found frequently in Low German,⁷⁶ and occur with subjects (examples 96 and 97), prepositional phrases (example 98) and temporal adverbials (example 99).

Verb second (left-dislocated elements with resumptive):

- (96) *{mien pap}*₁ *uh* *{de}*₁ *{much}*₂ *skopen net* | {my dad} {he} like-PAST sheep not
 ‘My dad (he) didn’t like sheep.’
- (97) *{de oll- de oll kopp van de swien}*₁,
*{de}*₁ *{wurr}*₂ *s- schoon mokt*, | {the old head of the pig}
 {it} will-PAST clean make-PTCP
 ‘The ol’ head of the pig (it) was cleaned.’
- (98) *{in school}*₁,
*{daar}*₁ *{satt}*₂ *ik vör mien bröer*, | {in school}
 {there} sit-PAST I before my brother
 ‘In school, (there) I sat in front of my brother.’
- (99) *{de johren}*₁,
*{d- da- .. dann}*₁ .. *{nahmst}*₂ *du dien eier*, | {those years}
 {then} take-PAST you your eggs
 .. *na't store hen*, | to the store there
 ‘In those years, (then) you took the eggs to the store.’

⁷⁶ Tokens with left dislocation: Group A (n= 67; 6%), Group B (n=48 tokens; 5%).

Interestingly, there appear to be some cases that resemble left-dislocated structures, but instead of single grammatical units, the first element is a subordinate clause (which often refers to a conditional or temporal circumstance), and the resumptive referring to the subordinate clause is a temporal adverbial. Although these structures are certainly interesting, since there seems to be only one element preceding the finite verb in the main clause, they are nonetheless considered as V2.

Verb second (subordinate clause as left-dislocated element with resumptive in main clause):

- (100) *{wenn dann geburtstag was}*₁,
*{dann}*₁ .. *{kwammen}*₂ all nahbers
binanner, | {when then birthday was}
 {then} come-PAST all neighbors together
 ‘When there was a birthday, (then) all neighbors got together.’
- (101) *{smörgens}*₁,
*{wenn wi upkwammen}*₁,
*{dann}*₁ *{harr}*₂ wi meest tieden koppke tee
mitnanner, | {mornings}
 {when we up-come-PAST}
 {then} have-PAST we most times cup tea
 with-each-other
 ‘In the mornings, when we got up, (then) most times we had a cup of tea together.’
- (102) *{wenn wi weer hier ween}*₁,
*{dann}*₁ *{hebben}*₂ 's ((sie)) henföhren,
 | {when we again here be-PAST}
 {then} have-AUX they there-drive-INF
 ‘When we were back again, (then) they drove there.’
- (103) *{as ((name)) hör papa un mama noch
 schlachten deen up farm}*₁,
*{do}*₁ *{kwamm}*₂ opa ((name)),
 | {as ((name)) her dad and mom still
 butcher-INF do-PAST}
 {then} come-PAST grandpa ((name))
 ‘When ((name’s)) mom and did still butchered on the farm, (then) grandpa ((name))
 came.’

Finally, one additional structure was defined as V2, even though these tokens slightly differ from canonical structures. As explained for examples (78-80) above, subordinate clauses are typically followed by the main clause with verb inversion, meaning that the finite verb is the first element in the main clause (for the purposes of this dissertation defined as V1, although the subordinate

clause could be viewed as the first element). Interestingly, there are also cases in this data set where a subordinate clause is followed by a main clause showing an additional element before the finite verb as in examples (104-106). Thus, if the subordinate clause were defined as the first constituent, the finite verb in the main clause would have to be counted as the third element. However, this procedure would unnecessarily inflate the number of V3-tokens and combine substantially different structures into one category. For this reason, only the constituents which are part of the main clause are considered, which means that these structures are still defined as V2.

Verb second (subordinate clause followed by main clause with V2-order):

- | | | |
|-------|--|--|
| (104) | <i>{wenn de jung was}</i> ₀ ,
<i>{de}</i> ₁ {hett} ₂ <i>n heel bült .. arbied in feld doon .. mit peer.</i> | when he young are-PAST
he have-AUX a whole lot work in field
do-PTCP with horses |
| | ‘When he was young, he did a whole lot of work in the field with horses.’ | |
| (105) | <i>{as ik n bittje oller worden dee}</i> ₀ ,
<i>ik}</i> ₁ {bliew} ₂ <i>bült bi hus v- .. van school.</i> | as I a little older get-INF do-PAST
I stay-PAST lot at home from school |
| | ‘When I got a little older, I often stayed home from school.’ | |
| (106) | <i>{wenn ik n kind was}</i> ₀ ,
<i>{een uh .. sönndag}</i> ₁ {was} ₂ <i>ik bi mien oma un opa,</i> | when I a child be-PAST
one Sunday be-PAST I with my
grandma and grandpa |
| | ‘When I was a child, one Sunday I was with my grandma and grandpa.’ | |

Based on the definitions outlined above, only tokens that have two distinct (i.e. non-resumptive) preverbal elements within the same main clause are classified as V3. These elements can occur within one or multiple IUs, as long as the first IU is intonationally marked as continuing (transcribed with a “,”). Combinations of multiple preverbal elements include object + subject, prepositional phrase + object, subject + adverbial, and adverbial + subject.

Verb third (two distinct pre-verbal constituents; within one IU):

- (107) *{dat}*₁ *uh* *{ik}*₂ **{verget}**₃ *uh alltied* | that I forget-PRE all-the-time
 ‘I forget that all the time.’
- (108) *{dann}*₁ *{ik}*₂ **{kunn}**₃ *dat .. beter inhollen,* | then I can-PST that better understand-INF
 ‘Then I was able to understand that better.’
- (109) *{un}*₀ *{dann}*₁ *{wi}*₂ *he- ..* **{hebbt}**₃ *n veer rieg* | and then we have-AUX a four rows
kregen. | get-PTCT
 ‘And then we got a four-row (planter).’
- (110) *{dann}*₁ *mu- {wi}*₂ **{mudden}**₃ *alltied mit poter.* | then we must-PAST always with planter
 ‘Then we always had to (do it) with the planter.’
- (111) ... (1.5) *{de}*₁ *{now}*₂ **{farmen}**₃ *neet m- mit* | they now farm-PRE not with horses
peer.
 ‘They don’t farm with horses now.’
- (112) *{now}*₁ *{wi}*₂ **{mudden}**₃ *n bittje farmen proten.* | now we must-PRE a bit farm-INF talk-INF
 ‘Now we have to talk about farming a bit.’

Verb third (two distinct pre-verbal constituents; sentence spread across multiple IUs):

- (113) *{so}*₀ *uh {an sien siet}*₁, | so on his side
*uh {mien oma un opa}*₂ **{hebb}**₃ *ik seen,* | my grandma and grandpa have-AUX I
 | see-PTCP
 ‘So, on his side, I didn’t meet my grandma and grandpa.’
- (114) *{un}*₀ *{för arbeit}*₁, | and for work
*{in de winterzeit}*₂ .. **{hett}**₃ *he .. kohle* | in the winter-time have-AUX he coal
ofscheppt. | off-shovel-PTCP
 ‘And for work, in the winter time, he shoveled coal.’
- (115) *{un}*₀ *{de tied}*₁, | and that time
*{w- wi wi}*₂ **{harren}**₃ .. *poor .. poor swienen,* | we have-PAST some pigs
 ‘And in those times, we had a few pigs.’

- | | | | |
|-------|--|--|--|
| (116) | <i>{in dreeuntwintig}</i> ₁ ,
<i>{he}</i> ₂ <i>{was}</i> ₃ <i>hier</i> . | | in twenty-three (1923)
he be-PST here |
| | ‘In (nineteen-) twenty-three, he was here.’ | | |
| | | | |
| (117) | <i>{nu vanDAAG}</i> ₁ ,
... (0.8) <i>{de}</i> ₂ <i>{hebben}</i> ₃ <i>DUsend .. dused un</i>
<i>dusends .. van swienen</i> . | | now today
they have-PRE thousand and thousands
of pigs |
| | ‘Nowadays, they have thousands of pigs.’ | | |
| | | | |
| (118) | <i>uh .. {in harvst}</i> ₁ ,
... (0.7) <i>{all de ollen}</i> ₂ .. <i>{gingen}</i> ₃ <i>in ... (0.7)</i>
<i>een .. g- gebau</i> . | | in fall
all the old go-PAST in one building |
| | ‘In fall, all the old ones went into one building.’ | | |

After the variable context and the coding of the dependent variable has now been defined in detail, we turn to the independent variables, to consider the factors that may influence the use of V3-structures, and to define the categories within these factor groups.

4.5 Summary

This chapter described the data collection, transcription and extraction. The data stem from interviews and conversations with heritage LG speakers in Grundy County, IA, which were recorded in 1998 and 2018/19. The audios were transcribed by the author, using intonation units to mark prosodic boundaries and the orthography proposed by the *Ostfriesische Landschaft* to guarantee searchability and accessibility to other researchers. On the basis of the transcripts, the participants’ sociolinguistic backgrounds were described and the details of the data extraction process compiling a data-set of main clauses were laid out. Chapter 5 explores the verb placement variation found in this data-set.

5 Circumscribing V3-variability

5.1 Introduction

This chapter analyzes a data-set of 2043 main clauses extracted from transcripts of spoken heritage Low German and explores the factors contributing to verb placement variation, with a particular focus on V3-placement. First, the independent variables coded are detailed, before the statistical data analysis is presented. Even though the overall rate of V3-structures notably increased from 5% in 1998 to 10% in 2018/19, a generalized linear mixed model clearly shows that V3-structures are highly circumscribed to a sentence-initial adverbial in both groups. Therefore, all other linguistic and sociolinguistic variables are carefully examined for trends and patterns favoring the use of V3-structures, but final conclusions can only be made after analysis of a more narrowly defined data set including only tokens with sentence-initial adverbials (see Chapter 6).

5.2 Coding factors: Independent variables

The independent variables are used to describe the potential factors that may influence the use of the dependent variable (here, usage of V3-structures). These factors may be social characteristics (e.g. gender, age, age of onset of L2-acquisition, HG-knowledge) or linguistic in nature (e.g., grammatical person and number, subject type, presence of sentence-initial adverbial). By coding for these factors, it can be determined in a statistical model under which circumstances the occurrence of a V3-structure is most likely. To allow for replicability, all independent factors and their levels are defined below.

5.2.1 Gender

Previous sociolinguistic research on phonological change suggests that young women are the ones who tend to show more instances of emerging structures (Labov 1990), but the effect of gender on syntactic and discourse-pragmatic change is still under debate (see e.g., Cheshire et al. 2005, Sneller & Fisher 2015, Tagliamonte & D’Arcy 2009). For this reason, gender is considered as a possible factor influencing linguistic outcomes. In this dissertation, all participants identified either as women or men, in accordance to their biological sex. Thus, the factor is considered binary (female vs. male).

5.2.2 Age

As pointed out in Section 3.4, research on language attrition would suggest that *older* speakers may be more likely to show more V3-structures, and that the rate of V3 usage increases as speakers age (due to their grammars becoming unstable). Studies on incomplete acquisition, however, suggest that *younger* speakers would show higher rates of V3 as they have not attained the language sufficiently because of a lack of interlocutors. If either one of these hypotheses is borne out, age would be shown as a significant factor. For the purposes of this dissertation, age is considered in years as a continuous number.

5.2.3 Year of birth

While it seems to be redundant to control for age (see Section 4.4.3.2 above) and year of birth separately, it is worthwhile to do so given the two different data sets in this dissertation. Since Group A was recorded in 1998 and Group B was recorded in 2018, there is a twenty-year

difference between the data samples. While participants (logically) are twenty years older in 2018 than they were in 1998, their year of birth is still the same. For example, a person interviewed in 1998 at the age of 90 years (born 1908) may show different linguistic usage than a person interviewed in 2018 at the age of 90 years (born 1928) due to the communal changes that may have occurred between 1908 and 1928. Thus, year of birth is considered as an additional, continuous factor.

5.2.4 Verb complexity, tense, person and number

Verb complexity is differentiated into “complex” (including instances with auxiliaries + lexical verb, and modals + lexical verb) versus “simple” (simple conjugated verb phrases, including those with separable prefix verbs). Tense is coded as a binary factor, namely “Past” including both Simple Past and Perfect tokens and “Present” including only Present tense tokens. Finite verbs were initially coded according to person (1st, 2nd, 3rd Singular; 1st, 2nd, 3rd Plural) but later person distinctions were collapsed to Singular versus Plural.

5.2.5 Presence of sentence-initial adverbial

Previous studies (e.g., Freywald et al. 2015, te Velde 2017a) have found that V3-structures predominantly occur with temporal adverbials as the sentence-initial constituent. In order to test whether this factor is true for the data at hand, and to analyze whether temporal adverbials always trigger V3-structures, the presence of a sentence-initial adverbial was coded for (i.e. “yes” vs. “no”).

5.2.6 Prosodic integration of preverbal material

As discussed in Section 2.3, a prosodic sentence may be comprised of a single IU or multiple IUs. Here, the binary coding factor is used to analyze whether preverbal material that is part of the same prosodic sentence occurs in the same IU as the finite verb or not. In the case that all preverbal material occurs in the same IU as the finite verb, following Selting & Kern (2009), this is defined as “prosodically integrated”, while tokens that show preverbal material in IUs other than the IU including finite verb are defined as “prosodically separated”.

5.3 Results: Verb placement variation in all main clauses

5.3.1 Overview and statistical analysis

Following the aforementioned extraction and coding method, 2043 main clauses from 46 participants were extracted and coded.⁷⁷ To gain a first overview of the data and potential differences between the two groups, descriptive results for verb placement were generated (see Figure 5-1).

⁷⁷ 12 speakers were interviewed both in 1998 and in 2018. Thus, the data set includes a total of 58 interviews recorded with 46 individual speakers.

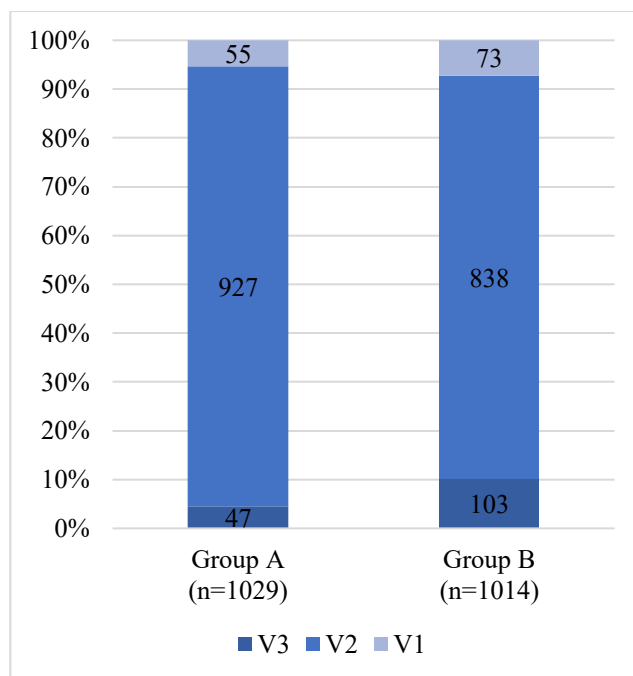


Figure 5-1: Number and rate of sentences by verb placement per group.

In Group A, 927 tokens (90%) show V2, 55 tokens show V1 (5%), and 47 tokens show V3 (5%).

In comparison, Group B shows only 838 V2 tokens (83%), which is a notable decrease compared to Group A. Instead, Group B has more V1 tokens (73 tokens; 7%) and V3 tokens (103 tokens; 10%). This notable increase of V3 cases from 1998 to 2018 seems an interesting development that is explored in more depth in the following sections.

First, the token counts and V3-rates for each factor group were compiled (see Table 5-1). Column “N” provides the number of tokens for each factor, while the % V3-column shows the proportion of V3-structures within this factor. For example, of the 525 tokens coded with the tag “sentence-initial adverbial”, 140 tokens or 27% show V3-structures. The last column (% data) provides the proportional distribution for each coding factor compared to the total number of tokens.

Table 5-1: Token counts and V3-rates per factor for all factor groups.
(N= 150/2043)

	<i>N</i>	% V3	% data
Summary of data set	2043	7	100
Sentence-initial adverbial			
Sentence-initial adverbial	525	27	26
no sentence-initial adverbial	1518	1	74
Prosodic marking			
Prosodic separation	251	31	12
Prosodic integration	1792	4	88
Gender			
male	1345	10	66
female	698	4	34
Tense			
Past	1357	8	66
Present	686	9	34
Person/Number			
Singular	1338	7	65
Plural	705	12	35
Verb complexity			
Simple verb	1443	8	71
Complex verb	600	10	29

After all tokens were coded, the *lme4* and *lmerTest* R packages (Bates et al 2015, Kuznetsova et al. 2017, R Core Team 2021) were used to fit a generalized linear mixed model integrating all variables onto the data in order to describe the linguistic factors that may condition the use of V3 structures. In this model, the outcome variable was defined as “canonical” (V1 and V2; coded as 0) vs. “non-canonical” (V3; coded as 1) and eight factor groups were coded for: gender; age; year of birth, singular (yes/no); past (yes/no); complex verb phrases (yes/no); sentence-initial adverbial (yes/no); prosodic integration of preverbal material (yes/no). A random intercept for speaker as well as interactions between sentence-initial adverbial and prosodic integration, and year of birth with all other factors were also included in both models. To assess collinearity of the factors, the *car* R package *vif()* function was used (Fox

& Weisberg 2019). Since all simple factors showed variance inflation factors <2 , the factors were interpreted as showing no signs of collinearity. Table 5-2 shows the results of the generalized linear mixed model.

The column “estimate” (β) signifies whether V3-structures are favored (positive value) or disfavored (negative value) with a certain variable. Overall, V3 placement is clearly disfavored in the data set (see Intercept: -8.04). Probability values in the column “p-value” indicate how significant the result is: values below .05 can be interpreted as significant predictors; the closer they are to 0, the more significant.

Table 5-2: Generalized linear mixed model of factors contributing to V3-placement.

	β	<i>SE</i>	<i>z</i>	<i>p</i>	
(Intercept)	-8.04	0.91	-8.81	<0.001	***
Sentence-initial adverbial (yes)	5.09	0.64	8.00	<0.001	***
Prosodic separation (yes)	3.03	1.01	3.00	<0.01	**
Gender (male)	1.38	0.55	2.50	0.01	*
scaled_Age	0.44	0.28	1.58	0.11	
scaled_BirthYear	1.25	0.81	1.54	0.12	
Past (yes)	-0.44	0.35	-1.29	0.20	
Singular (yes)	-0.34	0.28	-1.22	0.22	
Complex (yes)	0.03	0.33	0.10	0.92	
scaled_BirthYear:Singularyes	-0.52	0.34	-1.55	0.12	
scaled_BirthYear:Pastyes	-0.67	0.43	-1.53	0.13	
scaled_BirthYear:Complexyes	0.56	0.40	1.38	0.17	
scaled_Age:scaled_BirthYear	-0.33	0.31	-1.04	0.30	
Sent.-InitialAdverbialyes:ProsodicSeparation	-0.59	0.99	-0.60	0.55	
scaled_BirthYear:Sent.-InitialAdverbialyes	0.20	0.50	0.41	0.68	
scaled_BirthYear:ProsodicSeparation	-0.06	0.37	-0.17	0.87	
scaled_BirthYear:Gendermale	0.00	0.60	0.01	0.99	

Significance codes: 0 ‘***’, 0.001 ‘**’, 0.01 ‘*’, 0.05 ‘.’, 0.1 ‘ ’.
 $\alpha = 0.05$ throughout the dissertation

Three factors were selected as significant in the model (in this order): sentence-initial adverbial, prosody and gender. This means that these three factors have a statistical influence on the

occurrence of V3-structures, while the other factors do not. Importantly, the interactions between “year of birth” and all other factors do not reach significance, indicating that there are no systematic differences in the patterns of V3-usage based on speakers’ year of birth. In other words, while speakers who are born later may use V3-structures more frequently, the linguistic circumstances constraining its use have not changed over time. In order to understand the influence of these factors on the outcome variable in more detail, the following sections explore each factor (including the ones that are not statistically significant) individually.

5.3.2 Sentence-initial adverbials

The regression model showed that the factor “sentence-initial adverbial” is the strongest predictor for the occurrence of a V3-structure in the data set ($p < .001$). As illustrated in Figure 5-2, the proportion of V3-structures with a sentence-initial argument (i.e. subject or object) or verb is only 0.3% (or 2 tokens) in Group A and 1% (or 8 tokens) in Group B, whereas the proportion of V3-structures with sentence-initial adverbials comes to 18% in Group A and 35% in Group B. Compared to the overall V3-rate in both data sets (5% for Group A and 10% for Group B), it can clearly be shown that the presence of a sentence-initial adverbial highly constrains the occurrence of V3-structures. In addition, the increase in V3-rate from Group A to Group B can also be detected in this particular factor.

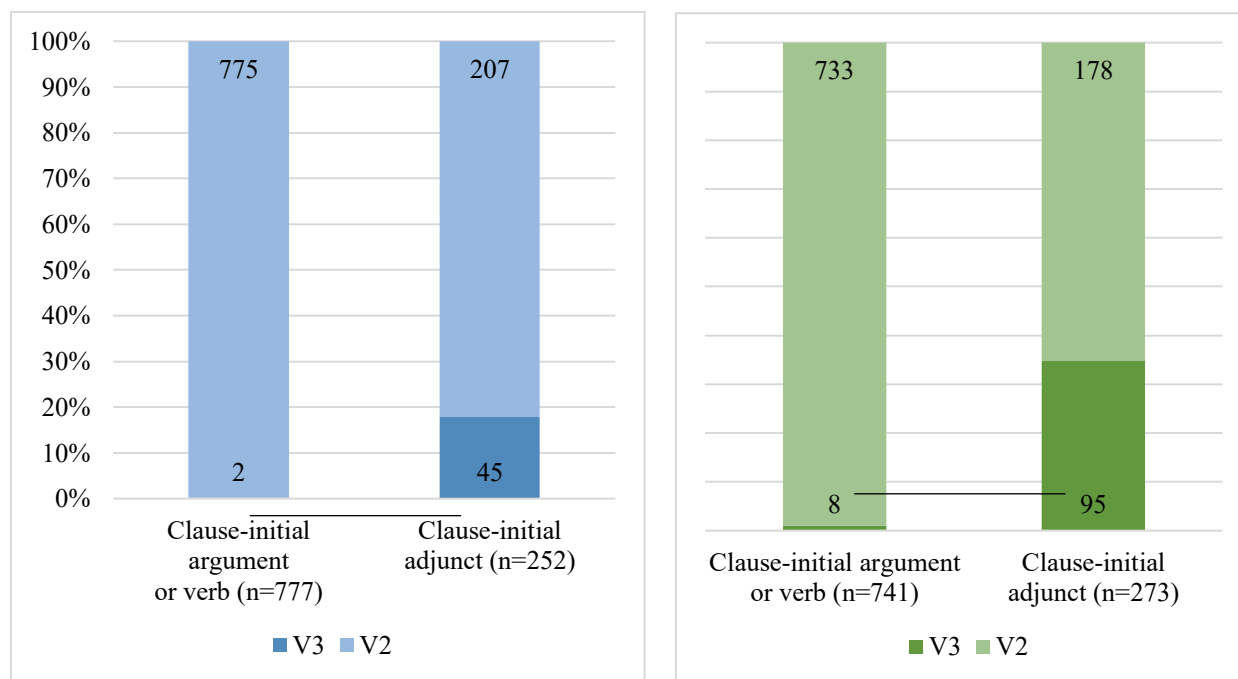


Figure 5-2: Token counts and V3-rates by sentence-initial constituent.⁷⁸

The fact that tokens with sentence-initial arguments and verbs show an overwhelming majority of V2-cases (i.e., 99.7% in Group A and 98.9% in Group B). The presence of a sentence-initial argument seems to be such a highly constraining factor that V3-structures virtually never occur without it. Those 10 tokens (2 in Group A, 8 in Group B) with a sentence-initial argument and V3 word order interestingly show similar patterns: Three tokens show a pronominal subject followed by an adverbial (see example 119), while seven tokens show a direct object followed by a pronominal subject (see example 120).

- (119) *un.. un de ok **moken** achtunveertig rieg.* | and they also make-PRE forty-eight rows
 ‘And they also do forty-eight rows [of planting corn].’

David–1943–2019–110

⁷⁸ Throughout this Chapter, Group A will be shown in blue on the left and Group B in green on the right; the black line marks the overall V3 rate in each data set.

- (120) *un anners uh wat wi eten,*
uh dat ... (1.0) mien mam uh .. kunn ... (0.9)
süübst uh moken. | and others what we eat-PAST
 that my mom can-PAST self make-INF

‘And the other things that we ate, my mom could make [that] herself.’

Daniel–1928–2018–173-174

But, as pointed out above, such cases are rare compared to V3-cases with sentence-initial adverbials. In most cases, these sentence-initial adverbials are temporal adverbials which are often followed by the subject (example 121), but may also occur with an object (example 122).

- (121) *jede dag ik harr twee* | every day I have-PAST two
 ‘Every day I had two [cows to milk].’

Grace–1939–2019–45

- (122) *un dann,*
uns swienen fodern wi dann .. öhr corn. | and then
 our pigs feed-PAST we then ears corn

‘And then we fed our pigs ears of corn.’

Earl–1926–2019–70-71

Since this factor accounts for the overwhelming majority of V3-cases, it seems that the variable context indeed needs to be redefined: V3-cases do not randomly occur in all main clauses, but almost exclusively in cases with a sentence-initial adverbial. For this reason, Chapter 5 dives deeper into this specific context to account for the social and linguistic factors that condition the emergence of V3 structures.

5.3.3 Prosody

The second significant factor selected by the regression model is “prosody” ($p < .01$). In both groups, tokens with prosodically integrated preverbal material (i.e. tokens that occur in only one IU) clearly disfavor the use of V3. In Group A, only 18 prosodically integrated tokens show V3 (2%), and the same is true for 51 tokens (6%) in Group B. On the other hand, those tokens with prosodically separated material (i.e. tokens that are spread over two or more IUs), strongly favor the occurrence of V3. In fact, for Group A, 23% of tokens with prosodic separation show V3, while in Group B 40% of tokens with prosodic separation show V3. Compared to the overall V3-rates in both data sets (Group A= 5%, Group B=10%), this factor clearly favors V3.

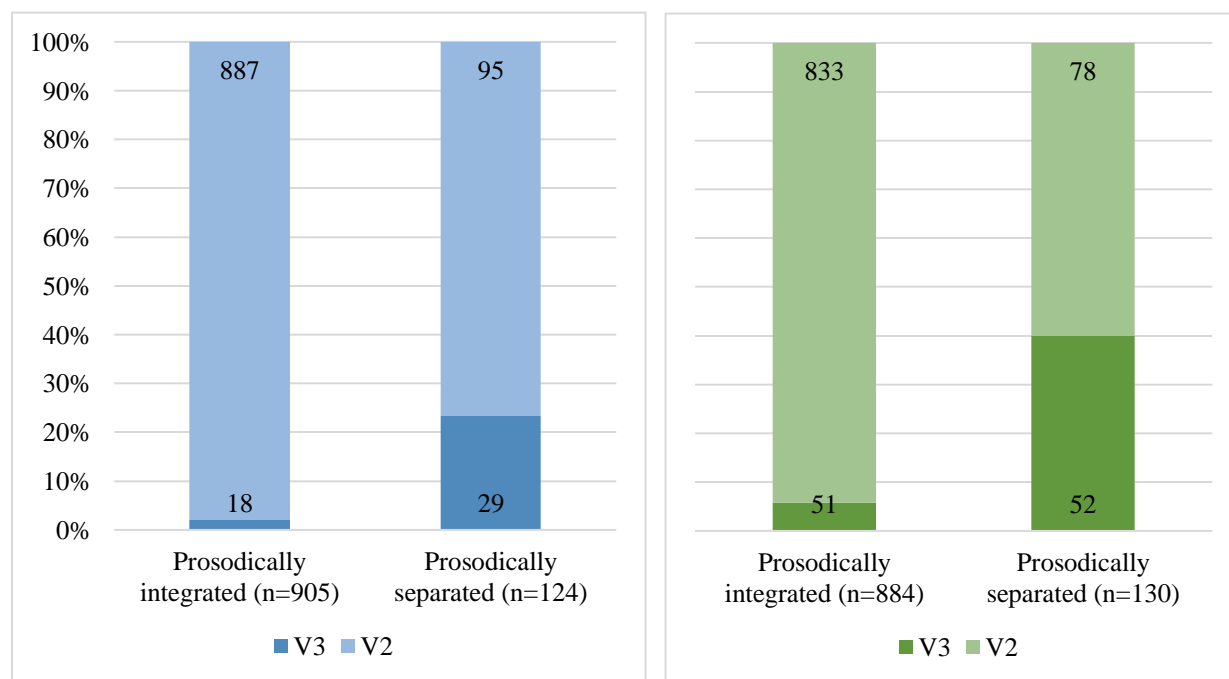


Figure 5-3: Token counts and V3-rates by prosodic integration of preverbal material.

Thus, cases such as example 123 and 124, where the entire utterance occurs within one IU can be found in both data sets, and they comprise almost half of the V3-cases in Group B (51 out of 103 V3-tokens):

(123) *un dann wi verKOpen dat ... (0.7) flesk.* | and then we sell-PAST that meat
 ‘And then we sold the meat.’
 Chris–1941–2019–262

(124) *un up uns HOchtiedsreis wi hebben na* | and on our wedding-travel we have-AUX
DÜÜtsland hen west, | to Germany there be-PTCP
 ‘And for our honeymoon we travelled to Germany.’
 Darrell–1943–1998–40

However, as laid out above, cases with prosodically separated preverbal material (examples 125 and 126) highly favor the occurrence of V3-structures.

(125) *Jede s- saterdag Avend,* | every Saturday evening
.. wi gohn to Town, | we go-PRE to town
 ‘Every Saturday evening, we went to town.’
 Dean–1943–2018–62-63

(126) *... (1.2) un DANN,* | and then
.. wi Mussen antrecken, | we must-PAST put-on-INF
 ‘And then, we had to put [clothes] on.’
 Lilian–1936–2019–101-102

5.3.4 Gender

Many previous studies suggest that (young) women are often the drivers of linguistic change. Interestingly, this trend does not seem to be true for this group and grammatical phenomenon (assuming that change in progress is in fact involved). In fact, this factor was selected as significant in this model, however, it seems that men in both groups produce a higher

proportion of V3-cases than women. Thus, while the V3-rate is 2% for women in Group A and 5% for women in Group B, men in Group A produce a V3-rate of 6% and men in Group B show a proportion of 12% V3 structures (see Figure 5-4).

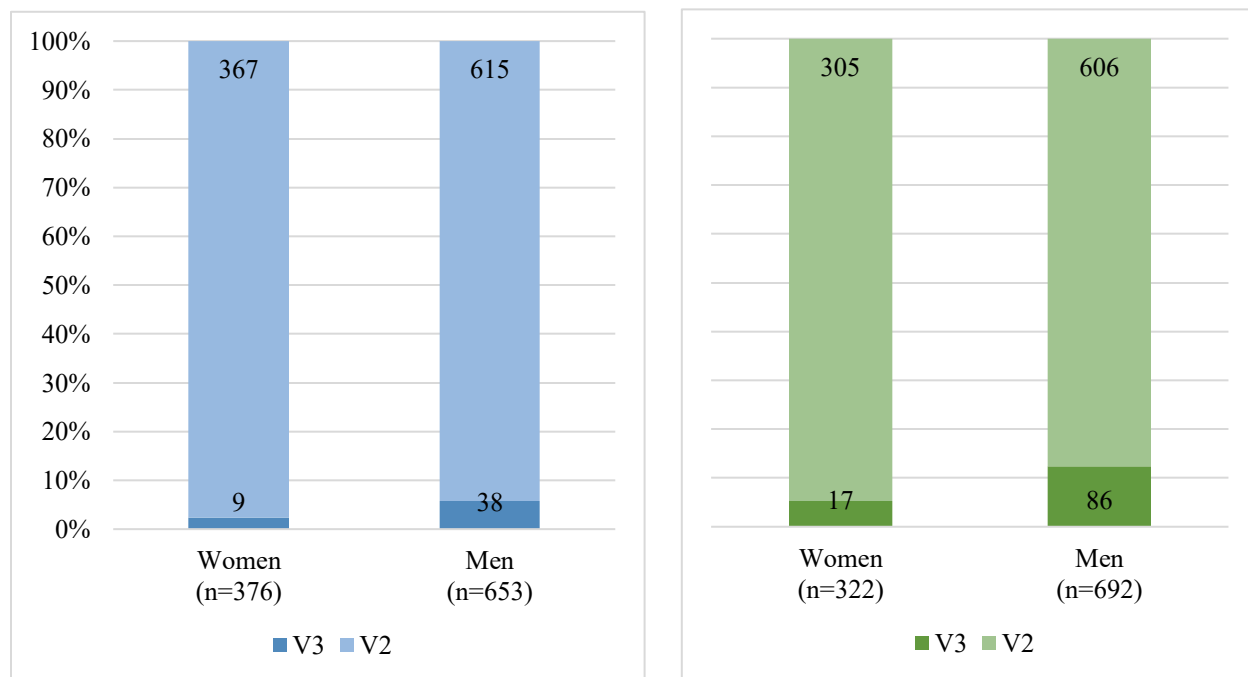


Figure 5-4: Token counts and V3-rates by gender.

Interestingly, women in both groups produce notably fewer sentences than men: in Group A only 37% of all tokens are produced by women, and only 32% of all tokens in Group B come from women. Given that there are fewer female speakers in both groups, however, an average token count is somewhat more informative. The average in Group A is 31 tokens for both men and women, while it is 36 tokens for women and slightly higher at 43 tokens for men in Group B. But in Group B there is a stark difference between those women who were part of larger groups and those women who were interviewed by themselves or with only one other person. From the interviews with Lisa, Martha, Elaine, Jolene, Margret and Grace (who were interviewed by themselves or in small groups), 50 tokens were extracted for each interview. On

the other hand, from the interviews with Donna, Olivia, and Doris (who were interviewed in groups of 5+ people), only 6-14 tokens could be extracted. This may indicate that these women did not feel as comfortable sharing longer stories or intervene in the conversation very frequently, which may have influenced their opportunities to make use of V3-structures: since these overwhelmingly occur with sentence-initial adverbials, participants would have to speak about a certain memory or anecdote and anchor this event in time by an adverbial. It can be hypothesized that these rhetorical devices are only used in longer utterances that entail some kind of narration. But if the participant does not share a longer story or anecdote that requires the event to be framed or anchored in terms of time and place, there may be no need (or opportunity) to make use of V3-structures.

At the same time, it should be noted that there is considerable variation in the use of V3-sentences in male speakers. It seems that the higher overall rate could be influenced by few individual speakers in each data set. In fact, while most men in Group A use V3 between 0-3 times, two speakers (Harold and David) make use of the structure 11 times, thus considerably exceeding (and raising) the average of 1.8 V3-cases per speaker. Similarly, while most men in Group B use V3 between 1-7 times, Dean and David use V3-structures 18 and 20 times respectively, again far exceeding the average of 5.3 cases of V3 per speaker.⁷⁹ Therefore, while the factor gender can potentially reveal some discourse-pragmatic or behavioral differences between male and female speakers, individual variation may actually account for the differences in V3-rate more reliably.

⁷⁹ In comparison, average V3-use is 0.75 token per speaker for women in Group A (range 0-3) and 1.9 tokens per speaker for women in Group B (range 0-6).

5.3.5 Age and year of birth

Based on previous studies suggesting that a higher rate of linguistic variation (in this case: more V3-occurrences) may be due to linguistic attrition caused by ageing processes, age was coded as a factor in the statistical model. Importantly, this factor was not significant, showing that V3-use does not occur at higher rates based on the speakers' age. To inspect this factor more closely, the rate of V3-structures produced by each speaker was plotted by their age at the time of the interview (see Figure 5-5). We can see that the youngest speaker (48 years) and the oldest speaker (96 years) both have a V3-rate of 0%, and that 16 other speakers of various ages in between also make no use of V3-structures. The two speakers with the highest V3-rates (40% and 36%) were both 76 years old at the time of the interview, but most observations fall within the range of 0% to 20% independent of speakers' age. In fact, the dotted trendline is almost horizontal, indicating no distinct effect of age on V3-rate.

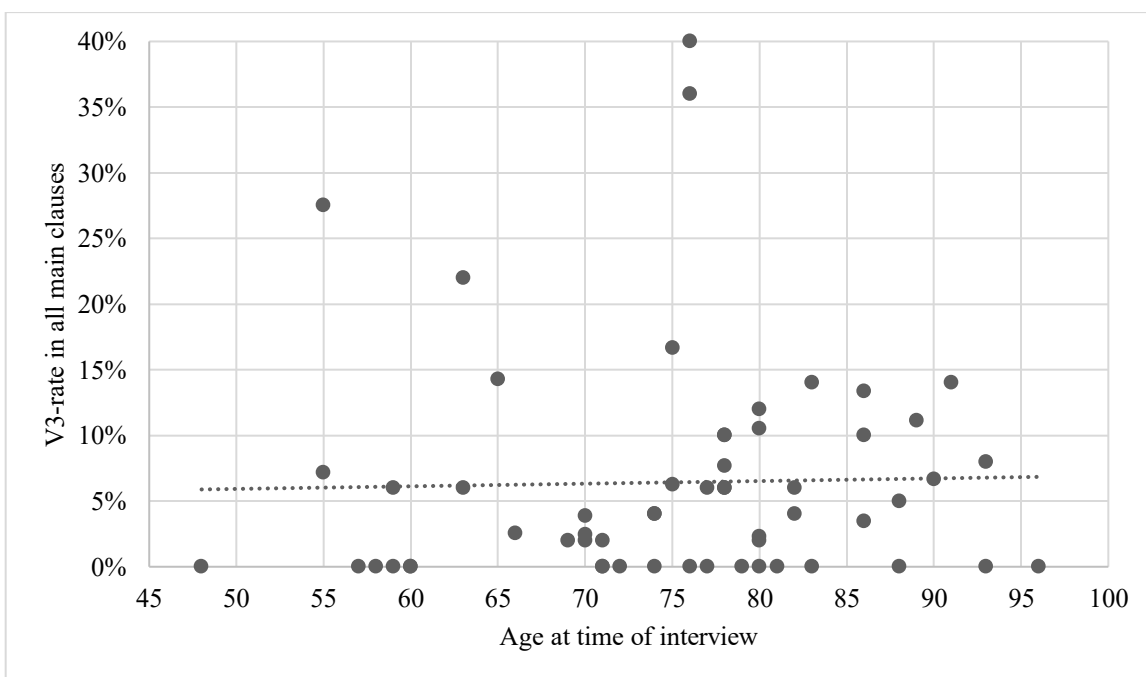


Figure 5-5: Proportional use of V3 by speakers' age. (All speakers from Group A and Group B included).

Since Figure 5-5 shows all speakers from both groups, this finding does not provide any information on V3-rate according to year of birth. For example, the oldest speaker in Group A (Annie), was born in 1902 and interviewed at 96 years of age in 1998. In comparison, the oldest speaker in Group B is Earl, who was born in 1926 and interviewed at the age of 93 in 2019. Thus, although these two speakers are very close in age, they actually show a difference of 24 years for their years of birth. On the other hand, a person who was interviewed both in 1998 and in 2019 (e.g. Lisa) has aged more than 20 years but of course would have the same year of birth in both data sets.

Although not statistically significant, “Year of birth” is ranked as the fourth factor in this model ($p = .06$). To explore this trend further, observations from all speakers were plotted based on their year of birth and their V3-rate (see Figure 5-6).⁸⁰ This scatterplot shows a clearly discernible direction of effect between year of birth and V3-rate: although there is a lot of inter-speaker variance, speakers born earlier tend to use V3 less than speakers born later. Most speakers born before or in 1927 use V3 at a rate of less than 10% (the one exception is John, born 1923, whose use of V3 is 1 out of 6 tokens = 17%). Even though there are many speakers born after 1927 who also use V3 at a rate of less than 10%, the number of speakers exceeding this rate is considerably higher than in speakers born earlier. Thus, the dotted trendline indicates that the V3-rate tends to be higher in speakers born later.

⁸⁰ This means that observations from speakers who were interviewed in 1998 and 2018/19 occur as two separate points in the scatter plot.

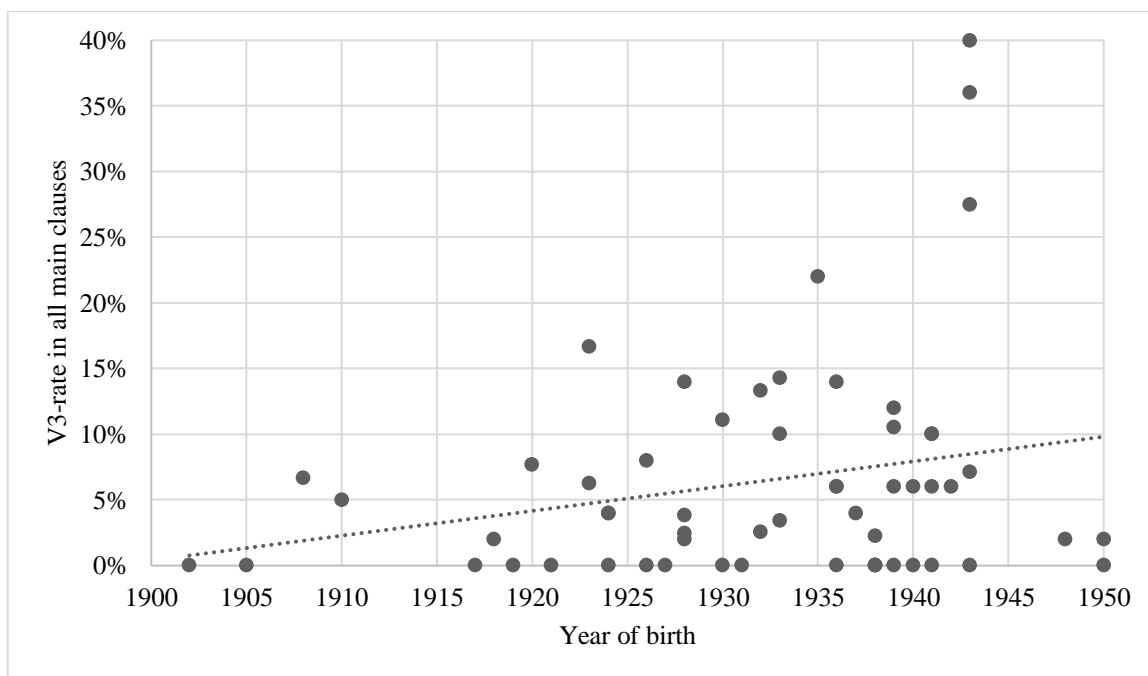


Figure 5-6: Proportional V3 by speakers' year of birth.
(All speakers from Group A and Group B included)

Again, this finding is not statistically significant and does not apply to each individual speaker. Nevertheless, the overall direction of effect could indicate a generational language change within this group. While the older generation (and in some cases, this generation is literally the parent generation) makes very little use of V3-structures, the younger generation overall has a higher rate of V3-use. This, combined with the previous findings that V3-structures is only used under very specific linguistic and discourse-pragmatic circumstances, may be interpreted as a communal stabilization in the use of this syntactic option.

The question remains, however, why these linguistic changes occur in the last generation of active LG speakers in this community. As far as the language background survey of speakers in Group A could verify, they were all born and raised in the USA and were often of the 3rd or 4th immigrant generation as well. Unfortunately, information on their language acquisition prior to entering elementary school, their knowledge of High German and their partners' language is

rarely included in the interview data. For this reason, these additional sociolinguistic factors could only be explored for Group B. The results are outlined in Section 4.5.9.

5.3.6 Tense

The factor “tense” was coded as two binary categories, namely “Past” (including Perfect and Preterit) and “Present” (including Present). It was coded strictly based on the verb conjugation and not based on the intended meaning of the utterance, which may have influenced the outcome of Group B. From a strictly numerical perspective, Group A and Group B show different factors slightly favoring the use of V3 although neither result is significant. In Group A, V3 seems to occur in similar rates with Present (4%) and Past tense verbs (5%), whereas Group B seems to slightly favor the use of V3 with Present tense verbs (12%) as compared to Past tense verbs (9%)

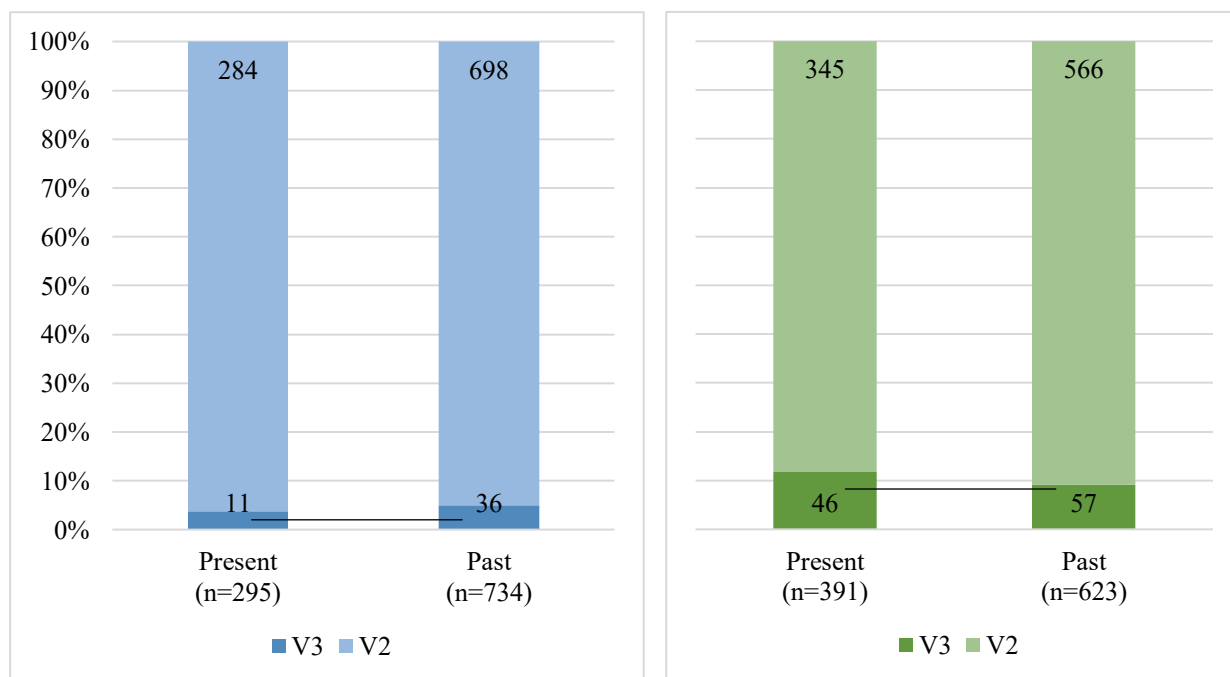


Figure 5-7: Token counts and V3-rates by tense (preterit and perfect vs. present).

However, many verbs that are coded as “Present” based on their conjugation refer to past events. Example (127) illustrates this use of the narrative present. In this conversation, Grace recounts the process of milk and cream production during her childhood, but narrates the sequence of events in the present tense (lines 74-77), making use of two V3-structures with the sentence-initial *un denn* (‘and then’). She switches to the Past tense in the last two IUs to end her narration (lines 78-79).

(127)	MHR	73	un wat hebben ji mit de melk maakt?		and what have-AUX you with the milk make-PTCP
	Grace	74	uhm de geiht n .. döör n maschien,		it go-PRE through a machine
	Grace	75	un denn .. dat rohm kummt daarut.		and then the cream come-PRE out
	Grace	76	un denn,		and then
	Grace	77	de melk .. is in de anner,		the milk be-PRE in the other
	Grace	78	un denn ... (0.7) brochen wi de na huus hen.		and then bring-PAST we it to house there
	Grace	79	un ... (0.9) moken ... (0.8) kolds.		and make-PAST cold

‘And what did you do with the milk?’

‘It goes through a machine and then the cream comes out of it. And then, the milk is in the other [bucket] and then we brought it home and cooled it.’

It seems that the use of narrative present is very popular in this group. Thus, 8 out of 11 Present-tense V3-tokens in Group A and 21 out of 46 Present-tense V3 tokens in Group B refer to past events. It can be extrapolated from this close examination that the occurrence of V3-structures may not be favored *because* of a tense, but rather in conjunction with the narration of longer events - which tend to happen in the past tense, unless a narrative present is used.

5.3.7 Person/Number

The factor “Person/Number” was not selected as significant in the regression model.

With V3-rates of 4% for all verbs conjugated in Singular (i.e., 1st, 2nd, 3rd person Singular) and 5% for all verbs conjugated in Plural (i.e., 1st, 2nd, 3rd person Plural) compared to the overall V3-rate of 5%, neither option clearly favors or disfavors V3-structures in Group A. In Group B, however, V3 is disfavored with Singular (7%) and favored with Plural (16%).

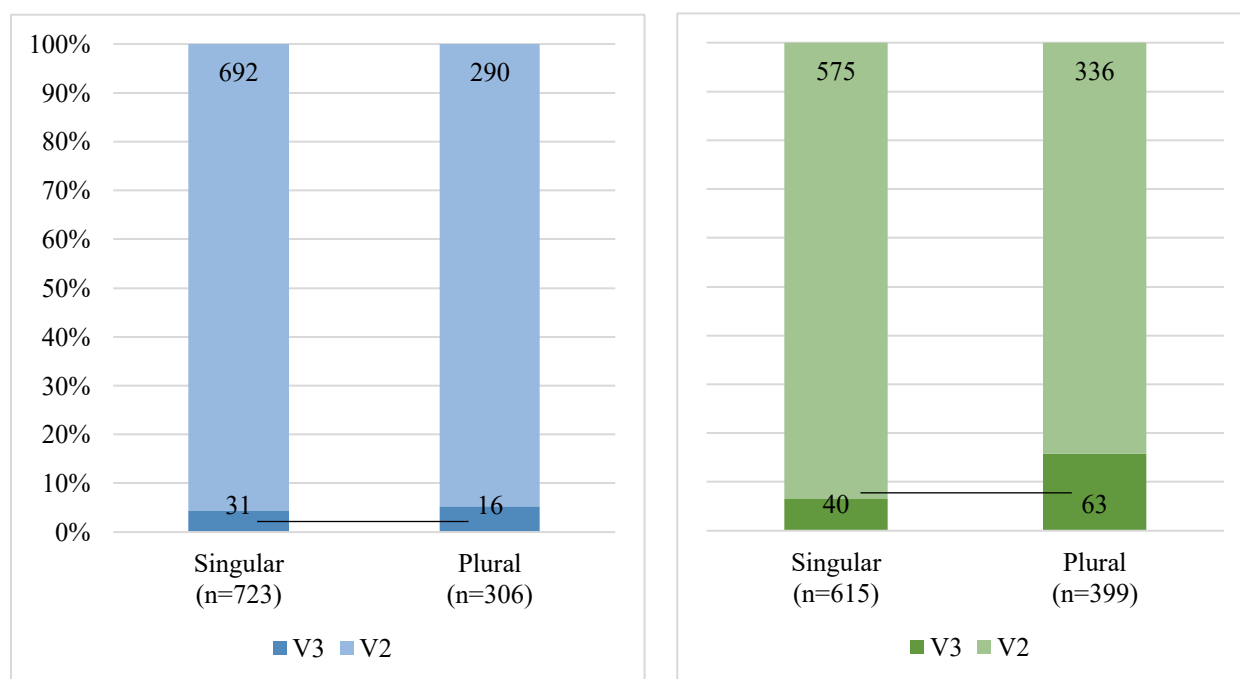


Figure 5-8: Token counts and V3-rates with finite verb conjugated in singular vs. plural.

Interestingly, there seems to be a descriptive difference between the Singular and Plural V3-cases in Group B. Here, most Singular V3-cases occur either with a full NP (lexical) subject (see example 128) or pronominal 2nd person (*du* ‘you’, used as a generic marker similar to ‘one’) and rarely with pronominal 1st (*ik*, ‘I’) or 3rd person (*he, se, dat*, ‘he, she, it’).

- (128) *dann uh,* | then
 .. *koh kunn di ok good schüppen.* | cow can-PAST you also good kick-INF
 ‘Then the cow could also kick you pretty badly.’
 Earl–1926–2019–46-47
- (129) *un dann,* | and then
 ... (0.9) *du bringst ... (2.6) groceries home.* | you bring-PAST groceries home
 ‘And then you brought groceries home.’
 Harry–1939–2019–41-42

Interestingly, although some V3-cases with Plural verbs and full subject-NPs can be found, most cases show 1st (*wi* ‘we’) or 3rd (*se* ‘they’ or *de* ‘they’)⁸¹ person Plural.

- (130) ... (1.6) *un NU,* | and now
 .. *bült lüü hebben uh twenty-veer riegen,* | many people have-PRE twenty-four rows
 ‘And now, many people have a twenty-four row [planter].’
 David–1943–2019–108-109
- (131) *un de tied,* | and that time
w- wi wi harren .. poor .. poor swienen, | we have-PAST some pigs
 ‘And in those times, we had a few pigs.’
 Herbert–1933–2019–245-246

Although this finding is only significant for Group B, it may reveal something about the narrative circumstances in which V3-sentences occur. Since most of the interviews centered on childhood memories, many participants spoke more about their families and parents (making use of the pronouns ‘we’ and ‘they’) instead of focusing on themselves. Combined with the need to express that these events happened in the past, participants used sentence-initial temporal adverbials, which have been the most significant factor in favoring V3-structures. Thus, the significance of plurals in favoring V3-structures may be due to the discourse-pragmatic needs. Based on this hypothesis, this factor is analyzed in more detail in Chapter 5.

⁸¹ The word *de* is a demonstrative article but often used instead of the 3rd person Plural pronoun *se*.

5.3.8 Verb complexity

The factor “verb complexity” was introduced to test whether V3-structures are favored with simple verbs (including all finite verbs with only one part, separable and inseparable prefix-verbs) or complex verbs (including all verbs with two parts, such as modal + infinitive or auxiliary + participle). In both groups, complex verbs seem to slightly favor the use of V3, although this factor is not significant.

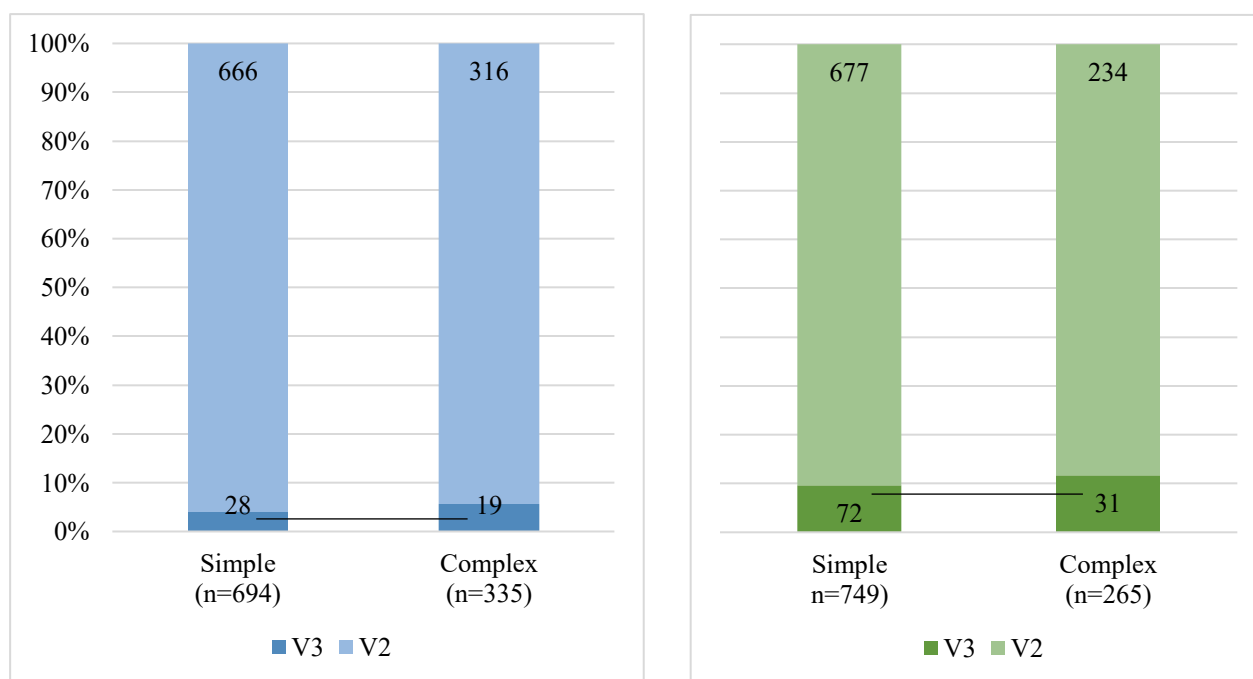


Figure 5-9: Token counts and V3 rates with simple verbs vs. complex verbs.

Upon closer inspection, it is interesting to note that most complex verbs with V3-cases consist of an auxiliary and a participle, meaning they denote the perfect tense. For Group A this is true for 12 out of 19 complex verbs with V3 (63%), and for 17 out of 31 complex verbs with V3 in Group B.

- (132) *un uh ... (0.7) POOR JOHR torügg nu,* | and couple years back now
... (0.8) wi hebben u- u- uns egen spritzer .. | we have-AUX our own sprayer buy-
köfft. | PTCP

‘And a couple of years ago now, we bought our own sprayer [farming machine].’

David–1943–2019–117-118

- (133) *un denn mien bröern,* | and then my brothers
de .. moten dat ok doon. | they must-PAST that also do-INF

‘And then my brothers (they) had to do that as well.’

Grace–1939–2019–46-47

It can be hypothesized that V3 does not occur to alleviate a potentially higher cognitive load due to the complex verb, but rather that the slightly higher use of V3 with complex verbs is due to its formation of the past tense. Although tense is also not a significant predictor, the narration of longer anecdotes provides the environment for sentence-initial adverbials that anchor an event in time, and these stories often focus on past events (see Section 4.5.7).

5.4 Summary

This Chapter provides a detailed description of the methods of data collection, transcription and extraction, showing how recordings of a usually spoken heritage language can be transcribed and prepared for different forms of data extraction. First, the interviews recorded in two projects (Group A, 1998 and Group B 2018/19) were used to provide a detailed description of participants’ language background and allowed for an informed characterization of the speech community as a whole. Then, the transcribed interviews were used for data extraction and statistical analysis of verb placement variation in main clauses. For Group A, 1029 main clauses were extracted, and the data set for Group B includes 1014 main clauses. Importantly, at 94% (Group A) and 90% (Group B) the use of ‘canonical’ structures, including cases with V1

and V2, presents the overwhelming majority of all tokens. Thus, the grammar of Iowa East Frisian LG heritage speakers appears to be highly robust. And although the percentage of V3-structures increases from 5% in Group A to 10% in Group B, the model selected two factors as most significant: sentence-initial adverbial and prosody. In fact, the factor sentence-initial favors V3 so overwhelmingly that the variable context needs to be redefined and narrowed down to such instances.

It seems that V3-structures are mostly used with sentence-initial adverbials that anchor the utterance in time (and place) and connect the subsequent sentence to previous discourse. As such, these structures only occur when the speaker narrates a longer anecdote or story. In Group B, participants often use the narrative Present tense for such narrations, which makes it appear as if present tense favors V3 although many instances of V3-use with verbs conjugated in the present tense actually refer to past events. Similarly, it seems that men make proportionally more use of V3-sentences than women, which may or may not be due to the fact that some women engaged in fewer long narrations than most men, thus having fewer chances to use V3-structures. And although descriptive observations from Group B suggest that participants with HG-knowledge or LG-speaking partners use V3-structures at lower rates, while participants who were raised bilingually may use V3-structures at higher rates, these tentative patterns would still need to be tested in more comparable circumstances. Therefore, while these findings have certainly laid important groundwork for analyzing verb placement variation in heritage LG speakers in Iowa, Chapter 5 focuses on all main clause tokens with a sentence-initial adverbial.

6

V3-variability: prosodic and syntactic constraints

6.1 Introduction

Based on the finding that V3-structures overwhelmingly occur with sentence-initial adverbials, this chapter explores a data set of 664 main clauses with sentence-initial adverbials. Compared to the larger data set in Chapter 4 containing 2043 main clauses (with and without sentence-initial adverbials) the V3-rate increased from 7% to 27% percent in this more narrowly defined variable context. The tokens were coded for nine independent variables and the model selected prosodic weight, prosodic marking, tense, verb complexity and gender as significant predictors. The following sections explore the (socio-)linguistic factors favoring the use of V3-structures and add important insights into the prosodic and information-structural conditions of this phenomenon. After a brief introduction into the data, participants and data coding, the results will be explored from a statistical, descriptive and close-reading perspective.

6.2 Data coding

In this data set, only tokens with a sentence-initial adverbial and an overtly expressed subject are included.⁸² By narrowing down the variable context to these specific circumstances, I zero in on the linguistic and sociolinguistic factors that may correlate with the use of V3-structures. As shown in the previous chapter, prosody and discourse-pragmatic choices (e.g., the use of tense) as well as sociolinguistic factors (e.g., year of birth, gender) may play a vital role in

⁸² Since all tokens with sentence-initial adverbials and null subject showed V2-placement, there was no variation to be expected. Hence, these tokens were excluded from the data extraction.

the linguistic outcome. For this data set, all 58 transcripts were manually searched for main clauses with a finite verb that have a sentence-initial adverbial. Whenever a token with a sentence-initial adverbial was found, it was extracted into a separate excel file and coded for the dependent and independent variables. Thus, the data in this sub-set stem from 52 transcripts, and 40 individual speakers (i.e. 10 speakers who were interviewed both in 1998 and 2018/19). The distribution between the two groups is relatively equal, as 305 tokens from 29 transcripts are taken from Group A (11 women, 18 men), and 359 tokens from 23 transcripts are taken from Group B (7 women, 16 men). Given the difference in length of interviews, the token range per speaker varies from 2 to 64 (M=13). All tokens were combined into one data set, making for a total of 664 tokens.

6.2.1 Verb placement

The outcome, or dependent variable, is *verb placement*, which was binarily categorized into verb second (V2) or verb third (V3). Since only tokens with sentence-initial adverbials and overtly expressed subjects were extracted, no verb first (V1) sentences are included in this data set. In order to define the two categories clearly, some guidelines were established. Basically, all sentences in which the sentence-initial adverbial is directly followed by the finite verb were defined as V2. This was independent of whether the sentence occurred in one IU (example 134) or was spread across multiple IUs (135 and 136).

Verb second (adverbial before finite verb):

(134) *{dann}*₁ *{verstoh}*₂ *ik dat wohl,*

| then understand-PRE I that well

‘Then I understand that (well).’

Verb second (clause may be spread across multiple IUs):

(135) *{un}*₀ *{dann}*₁,
 .. *{fung}*₂ *de good weer an.* | and then
 start-PAST it well again PART
 ‘And then, it started again without problems.’

(136) ... *uh* *{net to lang her}*₁,
*{hebb}*₂ *ik funnen,* | not too long ago
 have-AUX I find-PCPT
 ‘Not long ago, I found out.’

Importantly, interjections (137), conjunctions (138-140) and discourse markers (141) were considered extra-sentential material, meaning that these tokens are still V2-cases although they have additional preverbal material.

Verb second (interjections are disregarded):

(137) *{ja}*₀,
*{dann}*₁ *{wullen}*₂ *se rebbedie hebben,* | yes
 then want-PAST they [soup] have-INF
 ‘Yes, then they wanted to have milk soup.’

Verb second (conjunctions are disregarded):

(138) *{un}*₀ *{daar}*₁ *{kummt}*₂ *de rooster an.* | and there come-PRE the rooster on
 ‘And there the rooster came [running].’

(139) *{but}*₀ *{daar}*₁ *{wassen}*₂ *heel hörn van de farmers do.* | but there be-PAST whole bunch of the farmers then
 ‘But there were a lot of farmers then.’

(140) *{man}*₀ *{nu}*₁ *{is}*₂ *dat all anners,* | but now be-PRE it all different
 ‘But now this is all different.’

Verb second (discourse markers are disregarded):

(141) *{well}*₀,
 ... (2.0) *{in eerst johr}*₁ *{weet}*₂ *ik.* | well
 in the first yeah know-PRE I
 ‘Well, in the first year I know [...].’

The same logic applies to sentences with left-dislocated elements that are repeated as resumptives. These may be the sentence-initial adverbials resumed by another adverbial (142-143), or a subordinate clause resumed by the sentence-initial adverbial (144-145). Again, these tokens would be considered V2 because both preverbal elements refer to the same entities.

Verb second (left-dislocated elements with resumptive):

- | | | |
|-------|---|---|
| (142) | <i>{up böhn}</i> ₁ ,
<i>{daar}</i> ₁ {was} ₂ <i>kien hitz,</i> |
{on the attic}
{there} be-PAST no heat |
| | ‘On the attic, (there) was no heat.’ | |

- | | | |
|-------|---|--|
| (143) | <i>{un denn up saterdag avend}</i> ₁ ,
<i>{dann}</i> ₁ {goh} ₂ <i>ik na't store hen,</i> |
{and then on Saturday evening}
{then} go-PRE I to the store |
| | ‘And then on Saturday evening, (then) I go to the store.’ | |

Verb second (subordinate clause as left-dislocated element with resumptive in main clause):

- | | | |
|-------|--|---|
| (144) | <i>{wenn dann geburtstag was}</i> ₁ ,
<i>{dann}</i> ₁ .. {kwammen} ₂ <i>all nahbers</i>
<i>binanner,</i> |
{when then birthday be-PAST}
{then} come-PAST all neighbors together |
| | ‘When there was a birthday, (then) all neighbors got together.’ | |

- | | | |
|-------|---|---|
| (145) | <i>{smörgens}</i> ₁ ,
<i>{wenn wi upkwammen}</i> ₁ ,
<i>{dann}</i> ₁ {harr} ₂ <i>wi meest tieden koppke tee</i>
<i>mitnanner,</i> |
{mornings}
{when we up-come-PAST}
{then} have-PAST we most times cup tea
with-each-other |
| | ‘In the mornings, when we got up, (then) most times we had a cup of tea together.’ | |

Therefore, only tokens with at least one distinct preverbal element in addition to the sentence-initial adverbial are classified as V3, such as subjects (146-147), objects (148-149; 152-153) or additional adverbials (150). Such V3-cases can occur within one IU (146-149) or be spread across multiple IUs (150-155).

Verb third (two distinct pre-verbal constituents; within one IU):

(146) *{dann}*₁ *{ik}*₂ **{kunn}**₃ *dat .. beter inhollen,* | then I can-PST that better understand-
INF

‘Then I was able to understand that better.’

(147) *{un}*₀ *{dann}*₁ *{wi}*₂ *he- ..* **{hebbt}**₃ *n veer rieg* | and then we have-AUX a four rows
kregen. | get-PTCT

‘And then we got a four-row (planter).’

(148) *{een mal}*₁ *{dat}*₂ **{was}**₃ *in platt* | one time that be-PAST in platt

‘One time, it [the church service] was in platt.’

(149) *{dann}*₁ *{de swienen}*₂ *{van lüttjet}*₃ **{hebb}**₄ *wi* | then the pig from small have-PRE we

‘Then we had the pigs [from the time they were] little.’

Verb third (two distinct pre-verbal constituents; sentence spread across multiple IUs):

(150) *uh .. {up farm}*₁, | on farm
*{in de johren}*₂ **{was}**₃ *dat stuur arbeit,* | in these years be-PAST that hard work

‘In those years, it was hard work on the farm.’

(151) *{un}*₀ *{för arbeit}*₁, | and for work
*{in de winterzeit}*₂ *..* **{hett}**₃ *he .. kohle* | in the winter-time have-AUX he coal
ofscheppt. | off-shovel-PTCP

‘And for work, in the winter time, he shoveled coal.’

(152) *{un}*₀ *{dann}*₁, *{de paket}*₂, | and then the packet
*{dat}*₂ **{hebben}**₃ *de mitbrocht,* | that have-AUX they with-bring-PTCP

‘And then the package, they brought that along.’

(153) *{un dann}*₁, | and then
*{uns swienen}*₂ **{fodern}**₃ *wi dann öhr corn.* | our pigs feed-PAST we then ears corn

‘And then, we fed our pigs ears of corn.’

- (154) *{nu vanDAAG}*₁,
 ... (0.8) *{de}*₂ **{hebben}**₃ *DUsend .. dusend un*
dusends .. van swienen. | now today
 they have-PRE thousand and thousands
 of pigs
 ‘Today, they have thousands of pigs.’
- (155) *uh .. {in harvst}*₁,
 ... (0.7) *{all de ollen}*₂ .. **{gingen}**₃ *in ... (0.7)*
een .. g- gebau. | in fall
 all the old go-PAST in one building
 ‘In fall, all the old ones went into one building.’

6.2.2 Previous mention, switch reference and subject type

Freywald et al. (2015: 84) found that the subjects in Kiezdeutsch V3-structures are mostly pronominal with “little phonetic material and are virtually always unaccented”. According to Féry's (2020: 664) information-structural definition, this indicates a high *givenness* of the referent, which must have been salient in the previous discourse. Therefore, it is possible that “accessibility” (Givón 1983: 17) of the subject referent is an important factor. To measure the accessibility of the subject referent, many studies measure the distance between the subject and its previous mention (Travis & Torres Cacoullos 2012: 720-723). To operationalize the factor more efficiently, the ten previous IUs are considered and the response was defined as binary: no previous mention or previous mention (by same speaker or other speaker).

In addition to the accessibility of the subject referent in the previous discourse, coreferentiality with the subject in the preceding sentence may account for a high level of “givenness”, which in turn may favor the use of a pronominal subject or demonstrative pronoun. Thus, a second binary factor called “switch reference” was introduced, which was coded as “same subject referent as previous clause vs. different subject referent as previous clause”.

Since most studies on V3-structures have found that *pronominal* subjects tend to favor V3-structures (Walkden 2017, Wiese 2011; but see Sewell 2015 for different findings), it is worthwhile to code for subject type. However, since the accessibility of the subject is already accounted for by the factors “previous mention” and “switch reference”, this factor will not be included in the model but is only explored descriptively. Potential subject types include: noun phrases, personal pronouns, and other (including demonstrative pronouns).

6.2.3 Prosodic weight

While temporal adverbials and pronominal subjects have been found to be the most frequently occurring constituents at the beginning of V3-structures, some researchers have suggested that V3-structures can only show little prosodic weight (te Velde 2017a: 329). To test this claim, the number of syllables before the finite verb were counted and used as a measurement of prosodic weight. The factor is continuous. However, counting starts with a combined category of “2 or fewer syllables”, order to avoid setting up a factor group that can only be filled by V2-tokens. This group may contain one mono- or bisyllabic preverbal constituent in V2-sentences (e.g., *dann .. **kwammen** all nahbers binanner*) or two monosyllabic preverbal constituents in V3-sentences (e.g., *dann ik **kunn** dat .. **beter** inhollen*). Extra-sentential material (hesitation markers, interjections, discourse markers, subordinate clauses, conjunctions) were not counted towards the prosodic weight. Thus, examples (156 and 157) were coded as “2”, while example (158) was coded as “6”.

(156) *{dann}*₁ *{ik}*₂ *{**kunn**}*₃ *dat .. **beter** inhollen,* then I can-PST that better understand-INF

‘Then I was able to understand that better.’

- (157) *{dann}*₁ *{verstoh}*₂ *ik dat wohl,* then understand-PRE I that well
 ‘Then I understand that (well).’
- (158) *uh .. {in harvst}*₁, in fall
*... (0.7) {all de ollen}*₂ .. *{gingen}*₃ *in ...* all the old go-PAST in one building
(0.7) een .. g- gebau.
 ‘In fall, all the old ones went into one building.’

6.2.4 Prosodic integration and pauses

As established in Section 3.3, a prosodic sentence may be comprised of a single IU or multiple IUs. Here, the binary coding factor will be used to analyze whether preverbal material occurs in the same IU as the finite verb or not. In the case that all preverbal material occurs in the same IU as the finite verb, following Selting & Kern (2009), this will be defined as “prosodically integrated”, while tokens that show preverbal material in IUs other than the IU including the finite verb will be defined as “prosodically separated”.

In addition to prosodic integration, utterance may also be structured by pauses, albeit less intentionally. However, since pauses seem to be a frequent characteristic in the preverbal string of sounds in these tokens, ignoring this feature altogether may lead to a loss of information that may help in identifying the use of V3-structures. Since pauses may occur in addition to a prosodic contour marking the continuation of the utterance, or independent of it, it is worthwhile to treat this as an additional factor. The factor was defined as “yes” if the pause occurred directly after the sentence-initial adverbial, and as “no” if there was no pause or if the pause occurred at any other position in the utterance.

To allow for a more robust statistical analysis, both groups were combined into one in the regression model. If the token occurred within one IU and showed no pause after the sentence-initial adverbial, it was defined as prosodically “unmarked”. If the token was either spread across two or more IUs (prosodically separated), showed a pause after the sentence-initial adverbial, or both, it was classified as prosodically “marked”.

6.2.5 Verb complexity, tense, person and number

Verb complexity is coded as “complex” (including instances with auxiliaries + lexical verb, and modals + lexical verb) versus “simple” (simple conjugated verb phrases, including those with separable prefix verbs). Tense is defined as a binary factor, namely “Past” (Past and Perfect) and “Present”. Additionally, all finite verbs are coded according to person (1st, 2nd, 3rd Singular; 1st, 2nd 3rd Plural), which are later collapsed to Singular versus Plural. However, since this factor was not significant in the analysis for all main clauses in Chapter 5, it is not included in the statistical regression model.

6.3 Results: Verb placement variation in sentences with initial adverbials

6.3.1 Overview and statistical analysis

The extraction and coding method yielded a total of 664 tokens with sentence-initial adverbials from 52 transcripts. In this data set, 180 tokens showed a V3 structure (27%), while 484 tokens showed V2 (73%), as shown in Figure 6-1. Table 6-2 shows all token counts for each factor, as well as their V3-rates and overall proportion of the data.

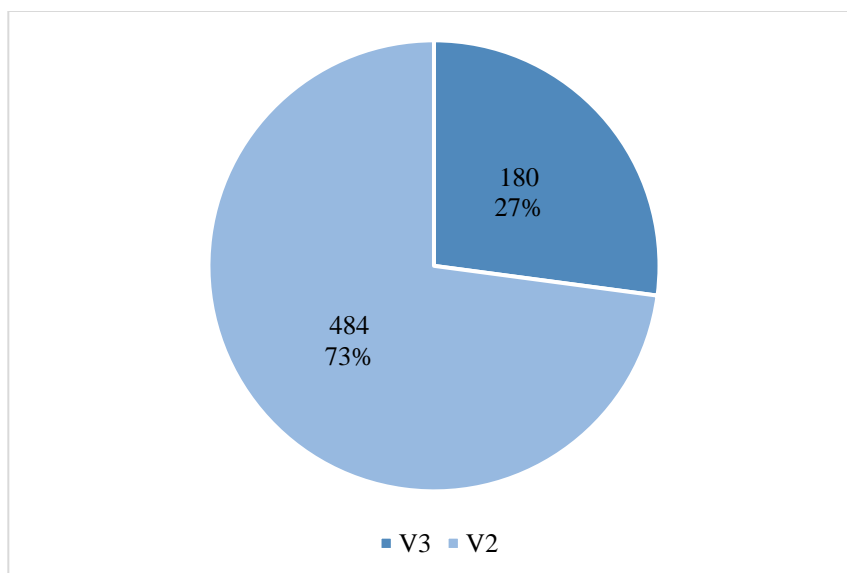


Figure 6-1: Token counts and V3-rate among tokens with sentence-initial adverbial.

Table 6-1: Generalized linear mixed model of all tokens with sentence-initial adverbial.
(N= 180/664; Overall rate: 27%)

	β	<i>SE</i>	<i>z</i>	<i>p</i>
(Intercept)	-0.46	0.57	-0.82	.41
1. scaled_Prosodic weight	1.16	0.16	7.26	<.001 ***
2. Prosody (unmarked)	-1.91	0.31	-6.19	<.001 ***
3. Tense (Past)	-1.44	0.33	-4.33	<.001 ***
4. Complex verb (yes)	0.82	0.32	2.59	.001 **
5. Gender (male)	1.16	0.55	2.12	.03 *
6. scaled_Year of birth	0.37	0.25	1.44	.05
7. Previous Mention (yes)	0.47	0.35	1.34	.18
8. Same Referent (yes)	-0.34	0.37	-0.91	.36
9. scaled_Age	0.18	0.27	0.67	.51

Significance codes: <.001 '***', .001 '**', .01 '*'

$\alpha = 0.05$ throughout the dissertation

Table 6-2: Token counts and V3-rates per factor for all factor groups.
(N= 180/664)

	<i>N</i>	% V3	% data
Overall data set	664	27	100
Prosodic integration			
Exposed	161	60	24
Integrated	503	17	76
Tense			
Past	524	20	79
Present	140	52	21
Pauses			
Pause after adverbial	93	22	14
No pause after adverbial	571	56	86
Verb complexity			
Complex	192	29	29
Simple	472	27	71
Gender			
Male	396	37	60
Female	268	12	40
Previous Mention			
Mentioned	368	31	55
Not mentioned	296	23	45
Switch Reference			
Same	199	25	30
Different	465	28	70
Subject Type			
NPs	197	28	30
Pronouns	380	23	57
Demonstrative	87	41	13
Person/Number			
Singular	353	24	53
Plural	311	31	47

The column “estimate” in Table 6-1 indicates whether the selected factor in the dependent variable favors (positive value) or disfavors (negative value) the use of V3. The column “p-value” shows whether the result is statistically significant (i.e., not due to chance): if the value is .05 or lower, it is considered significant. Column “N” shows the token count for each factor group, and the column “% V3” shows the rate of V3-tokens among the particular factor group. Overall, the use of V3 is disfavored in the data set (Intercept: -2.18), a finding that is

significant ($p < .01$). There is a total of 664 tokens in this data set of which 27% (or 180 tokens) show V3. This result will be used as a base line of comparison in the analysis; factors with V3-rates below 27% are interpreted as disfavoring V3, while factors with V3-rates above 27% are defined as favoring V3.

Six factors were selected as significant in this generalized linear model (in this order): prosodic weight, prosodic integration, tense, pauses, verb complexity, and gender. In order to understand the influence of these factors on the outcome variable in more detail, the following sections explore each factor (including the ones that are not statistically significant) in more detail.

6.3.2 Prosody

As shown in Table 6-1, two out of five significant factors are related to prosodic properties of the token. In order to rule out that these factors were selected based on collinearity, a variance inflation factor model was run in R. All three factors show a VIF of < 2 , which means that they are not correlated.⁸³ Based on this result, it seems that prosody may have a major effect on V3-structure, however, the effects may be caused by different causes. Since prosodic weight is selected as most significant in the model, we will explore this factor first.

6.3.2.1 Prosodic weight

The data suggest that higher prosodic weight (i.e., more preverbal syllables) favor the use of V3-structures as compared to lower prosodic weight. Specifically, those instances with only a monosyllabic sentence-initial adverbial (and a monosyllabic subject in the case of V3) disfavor

⁸³ VIF-values for Prosodic Weight = 1.17; Pauses = 1.12; Prosodic Integration = 1.08.

the use of V3 at only 15% (as compared to 27% V3 in the data set). Although this factor group shows the highest *number* of tokens (73 V3-sentences with two preverbal syllables, see Table 6.3), the *V3-rate* in tokens with more than 2 preverbal syllables is between 53% and 100% and thus highly favors V3-structures. In fact, when the results are combined into two groups (2 or less syllables vs. 3 or more syllables), it is very obvious that tokens with higher prosodic weight favor the use of V3 (60%; see Figure 6-2).

Tokens with 3 or more preverbal syllables often show a left-dislocated element with a resumptive (example 159), longer sentence-initial adverbial (examples 160 and 161) or a longer subject noun-phrase in the case of V3-structures (162).

- (159) .. *un denn smittags,* | and then middays
daar satten wi all bi uns lüttje desk, | then sit-PAST we all at our little desk
 ‘And then for lunch, (then) we all sat at our little desks.’
 Lisa–1936–2019–262-263
- (160) .. *dree avends in't week wassen wi up weg of* | three evenings in the week be-PAST we
wi harren visiet. | on way or we have-PAST visit
 ‘Three nights per week, we went out or we had visitors.’
 Arnold–1940–1998–164
- (161) *jede s- satordag avend,* | every saturday evening
.. wi gohn to town, | we go-PRE to town
 ‘Every Saturday evening, we go to town’
 Dean–1943–2019–62-63
- (162) ... (0.7) *so denn mien vader's .. bröers un* | so then my father's brothers and sister
süsters hebben dat .. uhm verköfft. | have-AUX that sell-PTCP
 ‘And then my father's brothers and sisters sold it [the farm].’
 Marie-*1948-Interview 2018-line 228

Overall, the data set shows that prosodic weight is the most important predictor of V3-structures, but not in the way it was predicted based on the findings and assumptions in other studies. Thus, the V3 sentences can only have minimal preverbal prosodic weight is clearly not borne out when

compared in a variable analysis. Admittedly, if only the instances of V3-structures had been considered, this proposal would be true, as cases with only two preverbal syllables make up 42% of all V3-tokens. But in comparison with V2-tokens, it can be shown that the use of V3-structures are proportionally less frequent with little preverbal prosodic weight and proportionally more frequent with more preverbal prosodic weight.

It should be acknowledged that V3-structures have a higher potential for more prosodic weight as they show two constituents which each can have multiple syllables. One possible solution would be to subtract one syllable from all V3-tokens to account for the extra constituent (given that most sentences have a pronominal/demonstrative subject, which are generally monosyllabic) or to subtract the subject's number of syllables in V3-sentences. However, this would either make results arbitrary or leave only the prosodic weight of the sentence-initial adverbial, which would defeat the purpose of addressing this feature. So instead of interpreting this factor as *predictive* of V3-use, the results confront the idea that V3-structures tend to occur with light preverbal material, which stems from approaches that study V3 in the absence of V2 comparisons (e.g., te Velde 2017a, b).

Table 6-3: Token counts and rates of V3 usage by preverbal syllable count.

<i>Number of syllables</i>	V2	V3	<i>Total</i>	<i>V3-rate</i>
2	414	73	487	15%
3	27	36	63	57%
4	23	26	49	53%
5	8	16	24	67%
6	2	11	13	84%
7	1	4	5	80%
8	3	4	7	57%
9	3	6	9	67%
10	2	0	2	0%
11	1	2	3	67%
18	0	2	2	100%

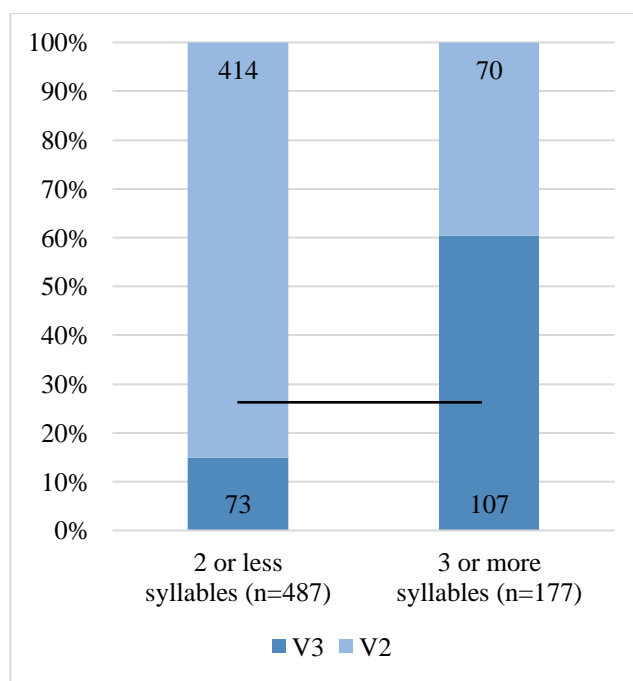


Figure 6-2: Token counts and V3-rate by prosodic weight.

(As defined by number of preverbal syllables; all observations combined into two binary groups.)

6.3.2.2 Prosodic integration

“Prosodic integration” was selected as the second-most significant factor in the model, with prosodically “separated” sentence-initial adverbials highly favoring the occurrence of V3-structures (i.e., preverbal material occurs in a different IU than the finite verb). In fact, the V3-rate is 61% for tokens with a prosodically separated sentence-initial adverbial, compared to only 16% for tokens with an “integrated” sentence-initial adverbial (i.e. all preverbal material occurs in the same IU as the finite verb).

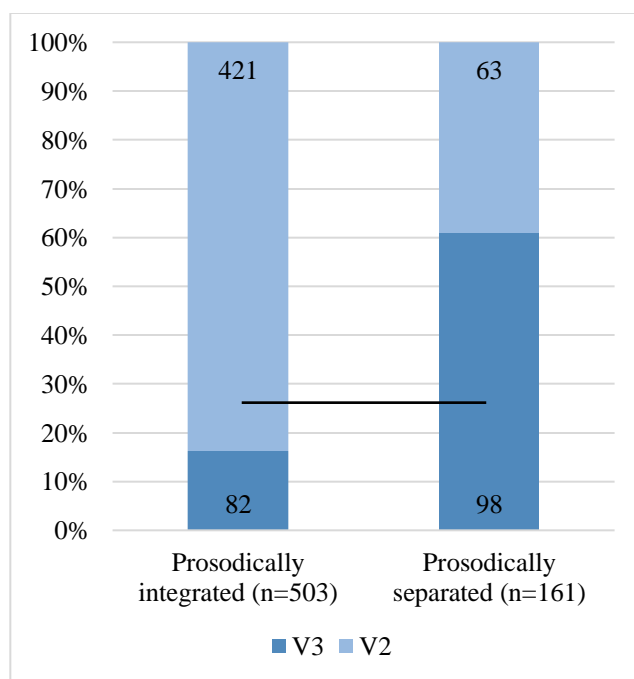


Figure 6-3: Token counts and V3-rate by prosodic integration.

To examine this pattern in more detail, I would like to present two longer excerpts that nicely illustrate the patterns found in the statistical model. The first excerpt was presented previously as example (25), but is repeated here for the reader’s convenience:

(163)	95 <i>wenn ... (0.7) uh störm upkommen dee,</i>	when storm up-come-INF do-PAST
	96 <i>... (0.8) in't nacht,</i>	in the night
	97 <i>... (1.0) OH DANN,</i>	oh then
	98 <i>.. mien MOder was up,</i>	my mother be-PAST up
	99 <i>.. un dann see se,</i>	and then say-PAST she
	100 <i>... (1.7) <Q treckt jo an.</i>	get-dress-IMP you-PL
	101 <i>Ø is- is slim m- mal weer. Q></i>	[it] is very bad weather
	102 <i>... (1.2) un DANN,</i>	and then
	103 <i>.. wi MUssen antrecken,</i>	we have-to-PAST get-dress-INF
	104 <i>un dann müssen wi bi't .. TAvel sitten,</i>	and then we have-to-PAST at the table sit-INF
	105 <i>.. in in köken.</i>	in [the] kitchen

‘When a storm came up at night, oh then, my mother was up, and then she said: “Get dressed. It’s very bad weather.” And then, we had to get dressed, and then we had to sit at the table in the kitchen.’

In this excerpt, Lisa recounts a specific childhood memory related to her mother’s reaction to storms. Within 10 IUs, she uses the sentence-initial temporal adverbial *dann* (‘then’) four times: twice in a V3-construction, and twice in a V2-construction.⁸⁴ It is noteworthy that Lisa prosodically marks the temporal adverbial in both V3-tokens (lines 97-98) and (102-103), both in terms of pitch accent (here shown in capitalized letters), and with a prosodic boundary marking continuation (lines 97 and 102, marked by “,”). Interestingly, both V3-structures are immediately followed by another sentence with the same sentence-initial temporal adverbial, this time integrated in V2-structures without prosodic marking (lines 99 and 104). In both cases, these sentences have the same subject referent as the immediately preceding sentence (‘my mother’ - ‘she’; ‘we’ - ‘we’), a factor that slightly favors the use of V2-structures (see Section 5.4.4). More telling, from a semantic point of view, is the meaning of the temporal adverbial *dann* in these four cases. In lines 99 and 104, *dann* seems to order the events in the narration:

⁸⁴ For comparison, Lisa produces a total of 46 tokens in this interview, only 6 of which (13%) show V3. Thus, she seems to use these structures sparingly and only in very specific circumstances.

first, the mother got up, and then she told the children to get dressed; first the children had to get dressed, and afterwards they had to sit around the kitchen table. In contrast, *dann* in lines 97 and 102 does not seem to be used to place narrative events in order, rather, the first *dann* (l. 97) seems to be a resumptive of the immediately preceding subordinate clause ‘when a storm came up at night’. Thus, it could be interpreted as meaning ‘at those times’, but not in terms of ‘first X, then Y’. With its pitch accent and prosodic marking, the repetition of this information evokes a dramatic effect, which may be intended in terms of story building. Similarly, line 102 seems to serve the same purpose, as the intensity of the mother’s command (*wi MUssen antrecken*) is reiterated by the pitch accent on ‘must’.

Some interesting results can be extrapolated from the close-reading of this excerpt. First, it seems that Lisa intentionally makes use of pitch accent and prosodic marking in her narration (indeed, she is a very engaging story teller). Moreover, she uses both V2 and V3-structures, sometimes in close proximity, and seems to employ them with different semantic meaning and for narrative effect. From my impressions across the data set, prosodic marking of the temporal adverbial, as seen in example (163) is often used by the speakers to accentuate the information in the narration. One such case can be found in (164), which we will again explore in more detail:

- | | |
|---|---|
| (164) 62 <i>JEde s- saterdag avend,</i>
63 .. <i>wi gahn to TOWN,</i>
64 <i>and denn wi hebben ALL de .. Eier and KEesen,</i>

65 <i>and wi hebben dat ALL= to de ((grocery)) store</i>
... (1.0) <i>brocht.</i>
66 <i>and denn wi hebben dat ALL uh ((tradet)) for --</i>

67 <i>for .. uh FOOD?</i> | every saturday evening
we go-PRE to town
and then we have-PRE all the
eggs and cheeses
and we have-AUX that all to
the grocery store bring-PTCP
and then we have-AUX that
all trade-PAST for
for food |
|---|---|

‘Every Saturday evening, we went to town and then we had all those eggs and cheese, and we brought it all to the grocery store and then traded it for .. for food.’

Dean–1943–2019–62-67

In this short excerpt, Dean recounts his childhood memory of trading eggs and cheese at the local store for other groceries. There are three cases of sentence-initial temporal adverbials with V3 in this example, one of which is prosodically exposed (lines⁸⁵ 62-63), while two are prosodically integrated (lines 64 and 66). The narration begins with a temporal adverbial ('every Saturday evening'), placing pitch accent (and thus emphasis) on the word *JEde* to mark that this was a recurrent event. By prosodically exposing this constituent from the remainder of the sentence, the IU is accentuated and seems to frame the entire narrative event. The other two temporal adverbials are both *dann* ('then') and prosodically integrated into the IU. In line 64, *dann* may be seen as referring back to the first sentence ('every Saturday evening, we went to town'), with a resumptive function, since a sequential reading ("first we go to town, afterwards we have eggs and cheese") is not intended. In contrast, *and dann* is used to suggest a sequence of events in line 66, as the groceries were first brought to the store and thereafter traded for other goods. Importantly, in both cases (line 64 and 66), the adverbial is used to organize the narrative events, once anchoring the utterance in relation to the narrative frame (l. 64) and once connecting the utterance to the previous discourse (l. 66) but the adverbial is not emphasized in either of these utterances, as the main pitch accent lies on *ALL* ('all') which seems to imply the large quantity of the traded goods.

Although Lisa's and Dean's use quantitative use of V3-tokens vastly differs (Lisa: 13% V3 vs. Dean: 86% V3), it seems that prosodic exposition of temporal adverbials serves to put emphasis on the information and thus highlights the narrative anchor of the subsequent utterance.

⁸⁵ Dean produces a total of 28 tokens, 24 of which (86%) show V3.

6.3.2.3 Pauses

The third factor that describes prosodic properties was called “pauses”. In V2-tokens, the pause occurs between the adverbial and the finite verb (see example (165)), while in V3-cases, it occurs between the adverbial and the second constituent (usually the subject). As shown in Figure 6-4, the occurrence of a pause after the adverbial highly favors the use of V3 (54%), as compared to sentences with no pause after the adverbial, where V3-structures are disfavored (23%).

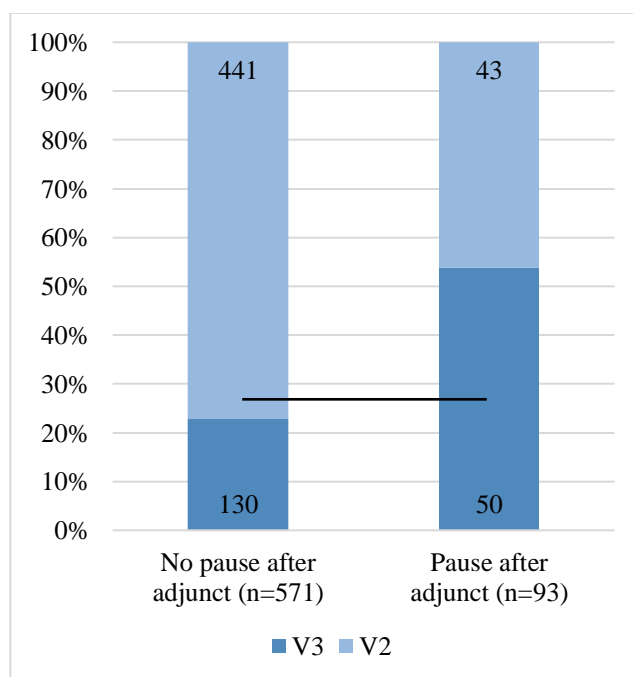


Figure 6-4: Token counts and V3-rate by pause after sentence-initial adverbial.

Upon closer inspection, two aspects stand out in this factor group. First, as 63 out of 93 tokens (67%) tokens with pauses occur with the temporal adverbial *dann/denn* (‘then’), its proportional use is noticeably higher than in cases without a pause (at 273 out of 571 tokens or 48%). Second, many of the sentences with pauses show additional hesitation markers, such as

filled pauses (165, 166), repetitions and retractions (167). It seems that the sentence-initial *dann* (or *denn*) is used to indicate that the speaker is planning to continue his/her speaking turn but has not fully planned out the subsequent utterance yet. Uttering a sentence-initial adverbial, especially if its meaning has been somewhat bleached and may be rather unspecific (as is arguably the case with *dann*), could be interpreted as a strategy to retain the speaking turn.

- | | | |
|-------|--|---|
| (165) | <i>dann uh .. wull ik mehr--</i>

'Then, I wanted more --' | then .. want-PAST I more --

Don-1928-2018-19 |
| (166) | <i>un dann .. heel .. bült uh.. brungen se all för annern ok.</i>

'And then they brought a lot [of coal] for the others as well.' | and then whole lot bring-PAST they all for others too

Elaine-1930-2019-162 |
| (167) | <i>.. un DANN,</i>
<i>... (1.1) uh ik moot- .. uh i- ik .. ik moot uh hümm ..</i>
<i>NAgahn,</i>

'And then, I have to- I have to follow him.' | and then
I must-PRE him after.go-INF

David-1943-2019-208-209 |

Overall, prosody appears to play an important role in the occurrence of V3-structures, in terms of the prosodic weight and prosodic exposition of the preverbal material, as well as the use of pauses after the sentence-initial adverbial. After the results of the statistical analysis, descriptive findings and selected examples and excerpts were discussed for each of the three factors, we will now turn to potential interactions and explore reasons why these effects may occur.

6.3.2.4 Interaction of prosodic features

To date, very few studies have focused on the prosodic features of this phenomenon (but see Selting & Kern 2009, Te Velde 2017a, b, Bunk 2016, Breitbarth 2021). In the previous

sections, it was shown that higher prosodic weight, prosodic separation of preverbal material, and pauses after the sentence-initial adverbial all favor V3. Although the *vif*-model showed no collinearity between these three factors, some interaction between them with regards to the occurrence of V3 is expected. Thus, this section explores the three prosodic factor groups in combination.

First, the factor “prosodic weight” (again split into binary groups: 2 or less vs. 3 or more syllables) was cross-tabulated with the factor “pause after sentence-initial adverbial” (see Table 6-4). The proportion of tokens with pauses after the adverbial is notably higher in items with 3 or more syllables (24%) than in items with 2 or less syllables (10%), meaning that more prosodic weight of the preverbal constituents may co-occur to more pauses. At the same time, tokens with 2 or less syllables and pauses show notably higher rates of V3 (40%) compared to tokens with 2 or less syllables and no pauses (12% V3). The same pattern is found for items with 3 or more syllables, but with even higher V3-rates: tokens without pauses show a proportion of 57% V3-structures, while tokens with pauses show 70% V3. In combination, the effect of these factors seems to be twofold: tokens with two or fewer syllables of preverbal material show proportionally less V3-structures than tokens with 3 or more syllables. At the same time, the occurrence of pauses seems to favor V3-structures. Since tokens with more preverbal material seem to show a higher rate of pauses, it is unsurprising that tokens with 3 or more syllables *and* a pause would show the highest rate of V3-structures.

Table 6-4: Token count and V3-rate according to prosodic weight and pauses.

	No pause after adverbial			Pause after adverbial		
	<i>N</i> (total)	<i>N</i> (V3)	% V3	<i>N</i> (total)	<i>N</i> (V3)	% V3
2 or less syllables	437	53	12	50	20	40
3 or more syllables	134	77	57	43	30	70

Similar effects are found with the factor groups “prosodic weight” and “prosodic integration” (see Table 6-5). The proportion of tokens with 2 or less syllables that occurs with a prosodically separated IU is much lower (13%) than the proportion of tokens with 3 or more syllables with a prosodically separated IU (54%). This means that more prosodic weight may lead to higher rates of prosodically separated IUs. Again, the rate of V3-structures seems to be affected by prosodic weight and prosodic integration. Tokens with 2 or less syllables and prosodically integrated preverbal material only show a rate of 10% V3, but the V3-rate increases to 49% for tokens with prosodically separated preverbal material. For tokens with 3 or more preverbal syllables, this effect is even stronger: if the preverbal constituents are prosodically integrated, they show a V3-rate of 51%, whereas tokens with prosodically separated preverbal constituents show a proportion of 69% V3.

Table 6-5: Token count and V3-rate according to prosodic weight and integration.

	Prosodically integrated			Prosodically separated		
	<i>N (total)</i>	<i>N (V3)</i>	% V3	<i>N (total)</i>	<i>N (V3)</i>	% V3
2 or less syllables	422	41	10	65	32	49
3 or more syllables	81	41	51	96	66	69

Both of these findings are interesting in light of the cognitive restrictions of human interactions. One of the most central concepts of this dissertation is the use of *Intonation Units* (IUs; see Section 3.3), which represent the way speakers organize their narrations, connect pieces of information, and mark the continuation or end of their stream of speech by use of prosodic cues (Du Bois et al. 1993, Chafe 1994). It has been proposed that human cognition is limited and can only focus on one piece of information, which is why IUs are constrained to express no more than one new idea (Chafe 1994: 119). Thus, IUs entailing “substantive units are fairly strongly

constrained to a modal length of four words in English” (Chafe 1994: 69).⁸⁶ As shown above, tokens with more preverbal prosodic weight are more likely to occur with pauses, prosodic separation, and higher V3-rates. It could be argued that more syllables express more content and are thus more likely to express a new idea which would need to be separated from the following IU expressing another new idea (Chafe 1994: 140)

Table 6-6:Token count and V3-rate according to prosodic integration and pauses.

	No pause after adverbial			Pause after adverbial		
	<i>N (total)</i>	<i>N (V3)</i>	% V3	<i>N (total)</i>	<i>N (V3)</i>	% V3
Prosodically integrated	450	64	14	53	18	34
Prosodically separated	121	66	55	40	32	80

When tokens with and without pauses after the sentence-initial adverbial and tokens with and without prosodic separation of the sentence-initial adverbial are cross-tabulated and compared for their rate of V3-structures, some remarkable trends emerge. First, although tokens without pauses and prosodic separation and V3 make up the second-largest group of the data (64 tokens), this result is proportionally small when compared to the number of V2-cases with the same characteristics (450 tokens; V3-rate of 14%). Thus, if the sentence-initial adverbial occurs in the same IU as the finite verb, and if there is no pause after the adverbial, V2-structures are highly favored. However, if there is a pause after the adverbial, the V3-rate is notably higher (34%), which is also true for tokens with a prosodically separated preverbal constituent (55% V3). The highest proportion of V3-structures is found in tokens with a pause *and* prosodically separated constituents (80%). This provides clear evidence that the proportional frequency of V3-structures is highest in sentences with some form of prosodic marking, indicating the IU

⁸⁶ Chafe differentiates between fragmentary, regulatory and substantive intonation units: fragmentary IUs are truncated and do not (fully) express any essential information, regulatory IUs organize the discourse and information flow (e.g. discourse markers, interjections), and substantive IUs “convey *substantive* ideas of events, states, or referents [italics in the original text]” (Chafe 1994: 63).

including the adverbial may express new information that is separated from the remainder of the utterance.

6.3.3 Verbal properties

Since the outcome variable is placement of the finite verb in main clauses, it is plausible to suggest that some properties of the verb itself may have an influence on the outcome. For this reason, the factors tense, verb complexity and person/number were considered in the model. The results of these factors are described below.

6.3.3.1 Tense

The independent variable “tense” was selected as the third-most significant factor ($p < .001$) by the model. The factor was coded as binary, with preterit and perfect tense combined into “Past” and all verbs conjugated in the present tense as “Present”, independent of their meaning. Thus, tokens referring to ongoing or current events as well as tokens using a narrative present tense referring to events that happened in the past are both found in this factor group. In order to receive a more detailed analysis, the tokens were separated into four groups (preterit, perfect, “true” present, and narrative present; see Figure 6-5).

Clearly, tokens coded as “preterit” make up the largest portion of the data set (438 tokens) and clearly disfavor the use of V3-structures (17%). Interestingly, perfect tense appears to favor the use of V3 (36%), a finding that was not clear through the binary coding implemented in the model. As the LG perfect tense is constructed with an auxiliary verb (a form of ‘to be’ or ‘to have’) and a past participle, this effect may occur because complex verbs favor the use of V3

(see Section 6.3.3.2). More notable, however, is the strong favoring of V3 with verbs that are conjugated in the present tense. For “true” present tense verbs that refer to ongoing or current events, V3-tokens occur in 45% of all cases, while V3-structures in tokens that are conjugated in the present tense referring to past events (i.e. using a narrative present) occur at a rate of 61.5%.

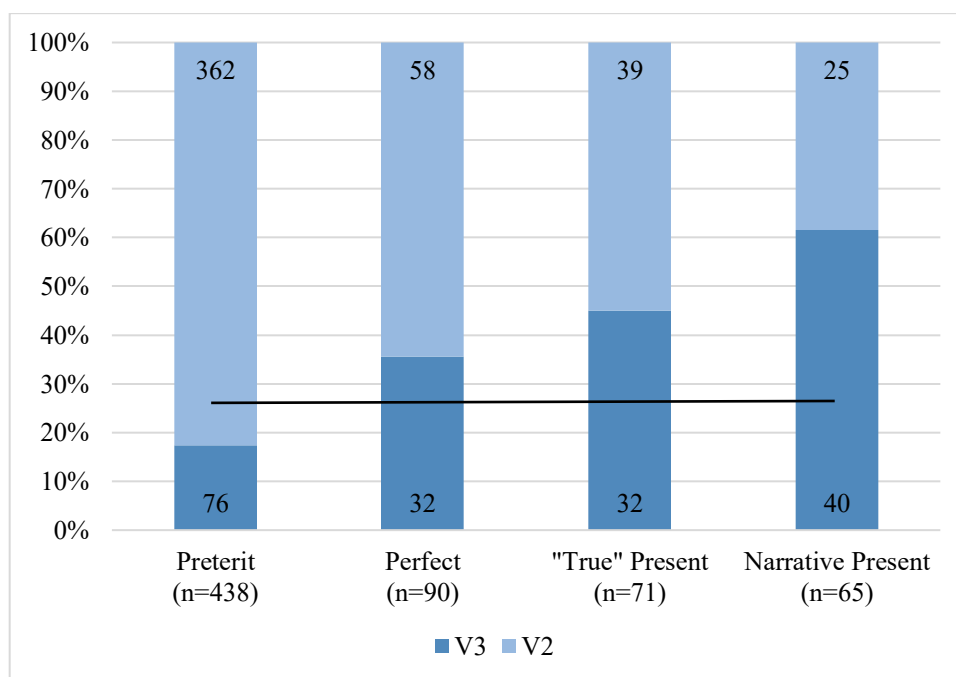


Figure 6-5: Token counts and V3-rate by tense.

In cases of “true” present tense use, the sentence-initial adverbial is often prosodically highlighted by a pitch accent (shown in capital letters) and seems to serve as a marker to contrast the proposition with information from the previous discourse. In example (168),⁸⁷ the speaker describes that he used to have a few hundred pigs at a time but gave up this business because it did not yield enough money. He then contrasts his narration with *nu vanDAAG* to indicate that he is no longer talking about his past experience, but about current circumstances in the large meat

⁸⁷ This example was previously used in (117) and (154), but is repeated here for the reader’s convenience.

production companies in the area. Similarly, in (169),⁸⁸ the speaker describes the process of planting corn and mentions that his farm has been using a planter that is able to plant sixteen rows of corn at once. The narration shifts from the description of his own equipment, with the sentence-initial adverbial *un NU*, which seems to emphasize the fact of a new development, namely a planter with twenty-four rows capacity used by many other farmers. Interestingly, both examples show a shift from past events (or something that has been done for a while) to current developments, and from personal experiences and practices to an unnamed mass of people (*de* - ‘they’; *büilt lüü* - ‘many people’) who seem to stand in some form of opposition to the speaker.

- | | | | |
|-------|--|--|---|
| (168) | <i>nu vanDAAG,</i>
... (0.8) <i>de hebben DUsend .. dusend un</i>
<i>dusends .. van swienen.</i> | | now today
they have-PRE thousand thousand and
thousands of pigs |
| | ‘Nowadays, they have thousands and thousands of pigs.’ | | |
| | Harald–1936–2019–36-37 | | |

- | | | | |
|-------|--|--|--|
| (169) | ... (1.6) <i>un NU,</i>
.. <i>büilt lüü hebben uh twenty-veer riegen,</i> | | and now
many people have-PRE twenty-four rows |
| | ‘And now, many people have a twenty-four row [planter].’ | | |
| | David–1943–2019–108-109 | | |

Although the use of V3-structures is favored for “true” present tense items, the use of narrative present tense favors V3-structures even more strongly. In (170), Chris talks about his childhood memories of butchering pigs at home. The narration starts with a man who came to the farm from town, who brought some kind of scaffold for butchering. The speaker describes the butchering process step-by-step, using *un dann* seven times in 15 IUs. Three of these utterances show a V3-structure (lines 350-51, 353, 366), while the four other cases either show a V2 with a null subject (lines 352, 356-357), a subordinate clause (line 355) or an infinitival verb phrase

⁸⁸ This example was previously used in (130), but is repeated here for the reader’s convenience.

(line 367-68), which is why they were not included in the data extraction. The entire narrative event, (except for line 348) is told in the present tense, although the speaker previously clearly stated that this event happened during his childhood. It seems that butchering was a recurrent event and always followed this exact order, which is reinforced by the repetitive use of *un dann* at the beginning of every sentence. Importantly, the speaker does make use of preterit and perfect tensed verbs in other parts of the conversation, so the use of present tense verbs is not due to lack of knowledge of how to express past tense. Rather, this seems to be a deliberate choice for narrative effect, evoking a sense of immediacy.

(170)	Chris	347	<i>do kummt n keerl van town,</i>	then come-PRE a guy from town
		348	<i>un .. he harr so'n ding,</i>	and he have-PAST such a thing
		349	<i>de kunnt .. upstohn.</i>	that can-PAST upright.stand-INF
→		350	<i>un dann,</i>	and then
		351	<i>.. ta- .. tau is up de schwien sien been,</i>	rope be-PRE on the pig his legs
		352	<i>un dann hoist Ø hiim liek up,</i>	and then hoist-PRE him straight up
→		353	<i>un dann he .. sch- schnitt sien .. sien hals.</i>	and then he cut-PRE his throat
	Herbert	354	<i>troothotten jan ((butcher's name??))</i>	
	Chris	355	<i>un denn dat bloot utkommen deit.</i>	and then that blood out.come-INF do-PRE
		356	<i>un dann,</i>	and then
		357	<i>... (1.0) Ø nimmt off de häut.</i>	take-PRE off the skin
		358	<i>we call skin hoor ((??)).</i>	we call skin hair
	Judith	359	<i>we weren't real--</i>	
	MHR	360	<i>huut.</i>	skin
	Chris	361	<i>huut.</i>	skin
		362	<i>Ø ni- nimmt dat all off,</i>	take-PRE that all off
	Judith	363	<i>we weren't tender.</i>	
	Herbert	364	<i>huut,</i>	skin
		365	<i>ja.</i>	yes
→	Chris	366	<i>un dann he nimmt de ding .. to't town in,</i>	and then he take-PRE the thing to the town in

367	<i>un dann,</i>	and then
368	<i>... (1.0) upschneiden.</i>	up.cut-INF

‘Then a guy from town came and he had a thing that could stand upright. And then the rope is around the pig’s legs and you hoist it straight up, and then he cuts his throat. And then, so that the blood comes out, and then (he) takes the skin off. We call skin ‘hair’. (He) takes it all off, and then he takes the thing to the town, and then cut (it) up.’

In summary, it can be clearly shown that present tense, both relating to current events and used as a narrative present, highly favor the use of V3-structures. In both cases, it seems that there the use of V3-structures serves narrative effects, namely to contrast the utterance with the previous discourse or to create a sense of immediacy.

6.3.3.2 Verb complexity

The sixth significant factor selected by the model (p .03) is verb complexity. Figure 6-6 shows that tokens with simple verbs (including separable and inseparable prefix verbs) occur with a V3- rate of 26%, whereas complex verbs (including modals + infinitives and auxiliaries + participles) show V3-rates of 29%. On closer inspection, it is interesting to note that the two lexical items with the largest token count within the group of “simple verbs” are *wesen* (‘to be’) and *haben* (‘to have’). Conjugated forms of *wesen* are found in 126 tokens, 24 of which (19%) show V3-structures. For *haben*, 75 tokens can be found, with 28 cases (37%) showing V3 (see example 171). In the group of “complex verbs”, a majority of tokens is comprised of a modal plus an infinitival verb (102 tokens, 53%), whereas auxiliaries plus participles make up a smaller proportion of the factor group (90 tokens, 47%). However, the proportion of V3-structures in tokens with modals is lower than in those cases with auxiliaries: 24% of tokens with modals and infinitives occur with V3-structures (see example 172), while the same is true for 36% of tokens

with auxiliaries and participles (see example 173).⁸⁹ In combination, this means that a total of 155 tokens show a conjugated form of *hebben* (23% of the data), and 58 of these tokens occur in a V3-structure, making up almost one third of all V3-tokens.⁹⁰

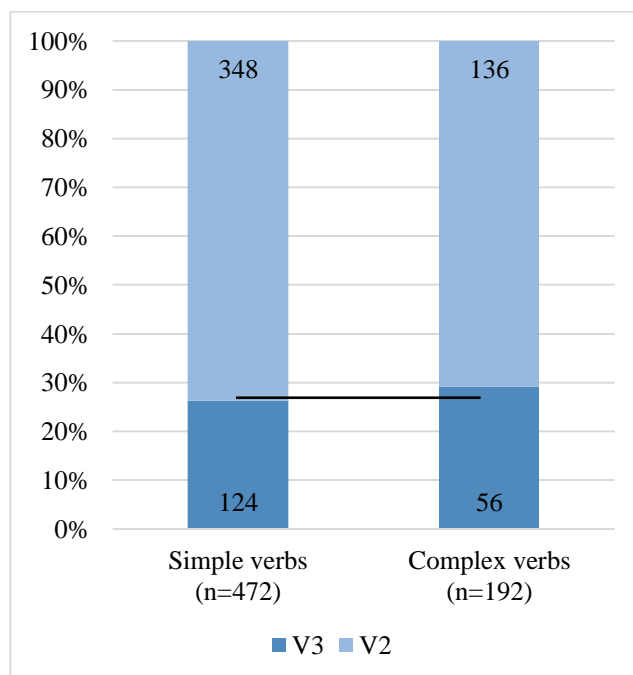


Figure 6-6: Token counts and V3-rate by verb complexity.

- (171) *meest tied,* | most time
wi hebben uh tee, | we have-PRE tea
 ‘Most of the times, we have some tea.’

Harold–1935–1998–36-37

⁸⁹ It should be noted that East Frisian Low German has been found to show variation in the perfect tense constructions with verbs of motion or change of state (Kakuchi & Wolf 2020). Thus, speakers may use a conjugated form of *hebben* instead of *wesen* (‘to be’) with these verbs (see example 173), although the exact distribution of the usage or the defining circumstances of this variable are not well-described. In this data set, out of the 30 tokens that could occur with a form of *wesen* (e.g. tokens with participles of *anfangen* (‘to begin’), *blieben* (‘to stay’), *driebe* (‘to drive’), *gahn* (‘to go’), *komen* (‘to come’), *lopen* (‘to walk’), *starven* (‘to die’), *upwassen* (‘to grow up’), *wandern* (‘to move around’), *wesen* (‘to be’)), only 10 tokens have a conjugated form of *wesen* as an auxiliary, two of which occur in a V3-structure. Thus, out of 90 tokens with auxiliaries, 80 show *hebben* (‘to have’) as the conjugated auxiliary.

⁹⁰ Twenty-eight tokens with *hebben* as a simple verb show V3 plus thirty V3-tokens with *hebben* as an auxiliary (all Perfect-cases V3-tokens minus two cases of *wesen* with V3).

- (172) *ja denn wi moot speckdicken hebben.* | yes then we must-PAST speckendicken
have-INF
‘Yeah, then we had to have Speckendicken [pancake with bacon baked into them]’
Dean–1943–2019–299
- (173) *dann mien pap het weer .. nah diitsland hen west.* | then my dad have-AUX again to germany
there be-PTCP
‘Then my father went to Germany again.’
Dave–1943–1998–30

6.3.3.3 Person/Number

Although not selected as significant by the regression model, a clear trend can be seen by visually comparing data showing the effects of person and number. In Figure 6-7, it is shown that Plural-tokens show a higher V3-rate (31%) than Singular-tokens (24%).

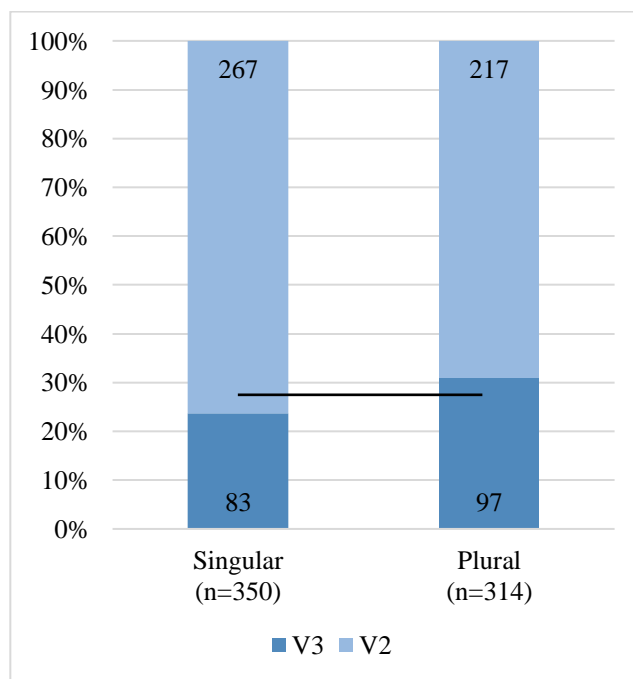


Figure 6-7: Token counts and V3-rate by person and number (singular vs. plural).

When broken down for each grammatical person, some variation in the proportion of V3-structures appear. Thus, 3rd person Plural shows the highest V3-rate (34%), followed by 1st person Singular (32%) and 1st person Plural (28%). On the other hand, tokens with finite verbs conjugated as 3rd person Singular (22%), 2nd person Singular (16%) and 2nd person Plural (0%) show distinctly lower proportions of V3-tokens. What distinguishes many of the 2nd and 3rd person Singular tokens is that they may not refer to a distinct human referent as consistently as the other grammatical persons. As Ballew (1997: 80) and Bender (1971: 154-155) point out, the use of 2nd person Singular *du* ('you') in American Low German varieties often replaces the use of the indefinite pronoun *man* ('one'), indicating that the referent of the pronominal subject is not a distinct person but rather referring to an impersonal, general entity. This interpretation seems to be true for all 45 *du*-tokens in this corpus and is exemplified in example (175). Similarly, many of the 3rd person Singular-tokens refer to non-human subjects or show expletive *dat* ('that'). On the other hand, *ik* ('I') and *wi* ('we') necessarily entails the existence of a human referent (i.e., the speaker) and *se/de* ('they') is often used to speak about a group of (often undefined) people (see 178 and 179). Thus, it could be hypothesized that V3-structures occur more frequently with human subject referents. However, further testing would have to be done to verify this tentative interpretation.

Table 6-7: Token count and V3-rate by person and number.

	<i>N (total)</i>	V3	% V3
1. Sg (<i>ik</i>)	79	25	32
2. Sg (<i>du</i>)	45	7	16
3. Sg (<i>he/se</i>)	226	51	22
1. Pl (<i>wi</i>)	144	40	28
2. Pl (<i>ji</i>)	1	0	0
3. Pl (<i>se</i>)	169	57	34

- (174) .. (0.7) *un DANN,*
 .. *ik heb mien grotmoder .. uh ... (1.3) lest dat*
book. | and then
 I have-AUX my grandmother read-PTCP
 the book
 ‘And then, I read that book to my grandmother.’
 David–1943–2019–693-694
- (175) *dann dan- d- du kreegst teihn cent för de*
been, | then you get-PAST ten cents for the legs
 ‘Then, you got ten cents for the legs.’
 David–1943–2019–693-694
- (176) *dann,*
mien moder da- deit dat flesk all ka- .. in in
kannen. | then
 my mother do-PRE the meat all in cans
 ‘Then, my mother put all the meat in cans.’
 Tako–1924–1998–31-32
- (177) *un denn wi- .. wi butchern de uns sülvst.* | and then we butcher-PRE them us self
 ‘And then we butcher them ourselves.’
 Earl–1926–2019–22
- (178) *un do de avend för't eten,*
do de harren n heel groot plat ((plate)) full
flesk, | and then the evening for the food
 then they have-PAST a very big plate full
 meat
 ‘That evening for dinner, they had a very large plate full of meat.’
 Edward–1928–1998–40-41
- (179) *and then,*
 .. *de hebben neei kark bouden,* | and then
 they have-AUX new church build-PTCP
 ‘And then, they built a new church.’
 Dean–1943–2019–402-403

6.3.4. Accessibility (previous mention, switch reference, subject type)

Previous studies have shown that V3-structures often occur with pronominal subjects as the second preverbal constituent after sentence-initial temporal adverbials (Freywald et al. 2015: 84, Alexiadou & Lohndal 2018: 257). The fact that V3-structures almost always show pronominal subjects with minimal phonetic material which is usually unaccented (Freywald et al.

2015: 84), has been interpreted as evidence for it being a “familiarity topic [referring] to discourse referents that have been mentioned in the previous context, or that are generally known” (Freywald et al. 2015: 89). In order to explore this idea for heritage LG, all subjects were coded for subject type: pronominal, noun phrases, and other (including demonstrative pronouns and expletives).

From a strictly descriptive perspective, the data in this dissertation mirrors what studies on other Germanic contact varieties have found: with 88 out of 180 tokens, pronouns occur most frequently in V3-structures. However, when compared with tokens showing V2-structures, it becomes obvious that this result may simply be driven by the fact that pronouns make up by far the largest factor (n=380) as compared with NPs (n=197) and other subjects (n=87). In fact, the comparison of V3-rates indicates that pronouns actually show lower proportions of V3 (23%) than NPs (30%) and other subjects (43%). It should be noted, however, that a total of 44 tokens in the “other” category is the demonstrative pronoun *de*, which marks 3rd person singular or plural, often referring to an individual or group of people or objects (see example 180). This specific demonstrative pronoun shows a V3-rate of 59% (26 V3-tokens). For tokens with subject NPs, these often refer to human referents, but may also refer to objects (example 181) or animas (example 182).

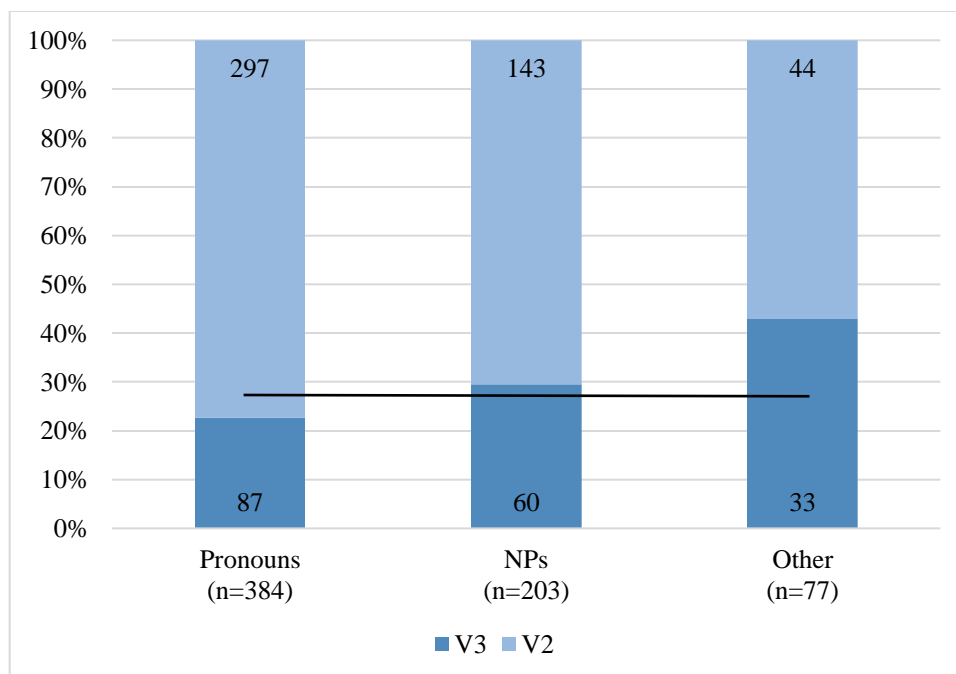


Figure 6-8: Token counts and V3-rate by subject type.

- (180) *dann de a- alltied **hebben** uh .. rot- ... (0.7) | then they always have-PRE red cabbage*
k- ... (0.7) kohlsalat. | salad

'Then they always had red cabbage salad.'

Chris-1941-2019-256

- (181) *un dann waske **hung** all .. all up lien, | and then*
| they have-AUX new church build-PTCP

'And then, all the laundry hung from the line.'

Lisa-1939-2019-46

- (182) *un dann heel focken de .. uh .. uhm .. sw- uh | and then very often the sows there lay-*
*mutten .. daar **liggen** .. down. | PRE down*

'And then very often the sows lay down there.'

Herbert-1933-2019-184

The use of pronouns and demonstrative pronouns is typically interpreted as marking givenness of the subject referent, which must have been salient in the previous discourse or is clear based on the context (Féry 2020: 664). To test this hypothesis and gauge the accessibility of the subject referent, one factor for previous mention and one factor for switch reference were

coded. Indeed, there is a higher proportion of V3-structures in tokens with a subject referent that has been mentioned within the 10 previous IUs (31%) compared to tokens with a subject that has not been mentioned (23%).

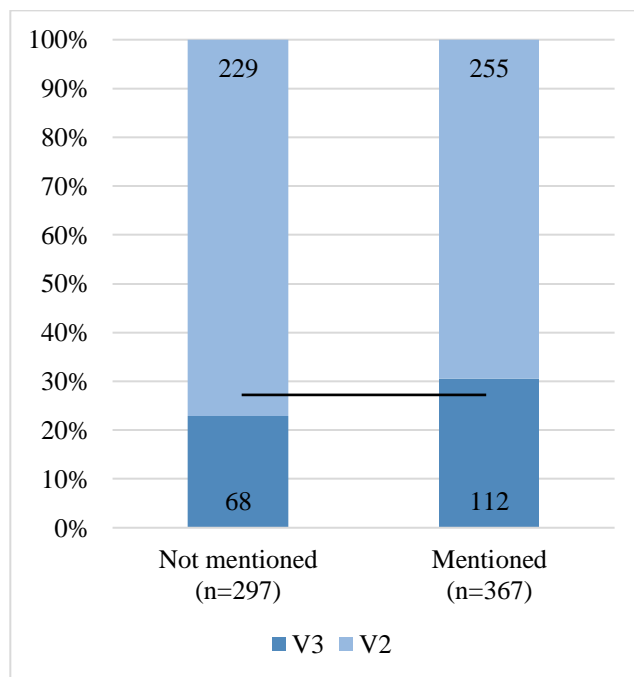


Figure 6-9: Token counts and V3-rate by previous subject referent mention. (Within 10 preceding IUs).

When cross-tabulating subject type and previous subject mention, some interesting patterns emerge. Both pronouns and other (i.e. demonstrative pronouns) show a higher proportion of previous mention (both at 70%) than subject noun phrases (21%), which supports the hypothesis that they are more salient in the preceding discourse. Interestingly, the accessibility of the subject referent seems to affect the proportion of V3-structures, regardless of the subject type (see Table 6-8). Pronouns, noun phrases and other subjects whose referents were not previously mentioned in the discourse (within 10 IUs) all show smaller proportions of V3-structures than their counterparts with a previously mentioned subject referent. Thus, V3-rates

increase from 14% to 26% for pronouns, from 27% to 40% for noun phrases and from 39% to 44% for other subjects with a subject referent mention within the preceding 10 IUs.

Table 6-8: Token counts and V3-rates of subject types by previous mention.

	No previous mention			Previous mention			Total
	<i>N (total)</i>	<i>N (V3)</i>	% V3	<i>N (total)</i>	<i>N (V3)</i>	% V3	
Pronoun	114	16	14%	270	71	26%	384
Noun phrase	160	43	27%	43	17	40%	203
Other	23	9	39%	54	24	44%	77
Total	297	68	23%	367	112	31%	664

This result may seem counterintuitive at first glance. Why would a speaker be more likely to use V3-structures, where both a sentence-initial adverbial *and* the subject are placed in the preverbal position if the subject was recently mentioned and should be relatively accessible from the previous discourse? To answer this question, all tokens were coded for subject referent of the immediately preceding sentence. If the subject in the extracted token refers to the same referent as the preceding sentence, this is coded as “same”, while subjects referring to distinct referents were coded as “other”. Figure 6-10 shows that V3-structures occur less frequently in tokens with a subject whose referent is identical with the subject in the immediately preceding sentence (25%) than in tokens where the subject referent is different from that of the preceding sentence (28%).

These results are especially striking when previous subject mention and subject reference are combined (see Table 6-9). While tokens with a subject referent that was previously mentioned but is not the same as the subject in the immediately preceding sentence show a V3-rate of 25%, the proportion of V3-structures increased to 37% in tokens with a previously mentioned subject referent but a switch referent in the directly preceding sentence. Thus, although the subject referent was relatively accessible in the discourse by its previous mention,

the speaker may feel the need to repeat the subject referent in the preverbal position because it is not identical with the subject referent in the immediately preceding sentence.

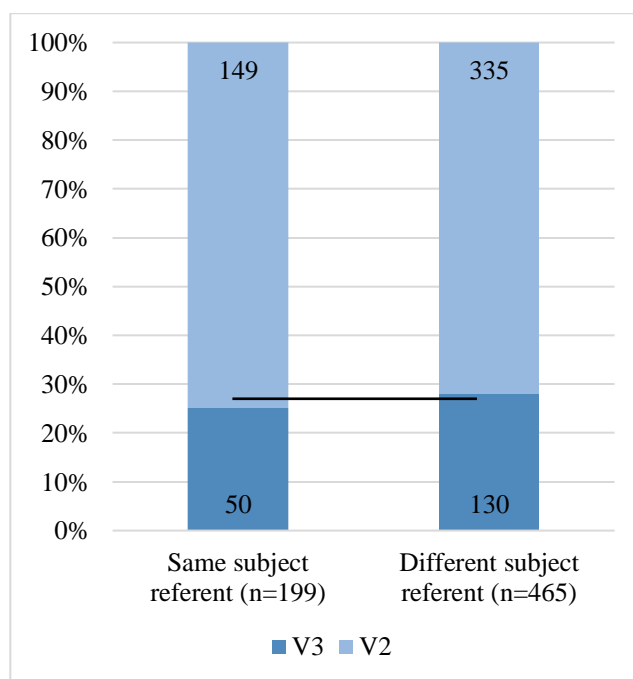


Figure 6-10: Token counts and V3-rate by subject referent in preceding sentence.

Table 6-9: Token counts and V3-rate by previous mention and subject reference.

	Same referent			Different referent			Total
	<i>N</i> (total)	<i>N</i> (V3)	% V3	<i>N</i> (total)	<i>N</i> (V3)	% V3	
No previous mention	0	-	-	297	68	23%	297
Previous mention	198	50	25%	169	62	37%	367
Total	198	50	25%	466	130	28%	664

One exemplification of this method is seen in (183). Here, Lisa recalls living without a freezer during her childhood days. In the preceding lines, she has recounted how her father would buy fish during the wintertime and how he stores it in a snowbank next to their house. In line 211, a new subject referent is introduced (*mam*) which was not previously mentioned in the conversation. The narrative then shifts back to the father to describe his actions of going to the snowbank and retrieving pieces of fish for the mother (lines 213-214). The use of the pronoun *he*

implies that the speaker assumes a high givenness of the subject referent (the father) from the longer explanation shortly before. In line 215, the narration focused again on the mother (using the pronoun *se*), but the use of a V3-sentence may be encouraged here because the subject referent may not be as accessible anymore given the single mention and three interrupting IUs with a different (potentially more salient) subject referent. At the same time, the V3-structure and its prominent placement of the subject may be interpreted as a contrast marker: while the father was the one to retrieve the fish from the snowbank, the mother was the one to prepare it for dinner.

(183) Lisa	211	<i>dann wull mam n paar stücken hebben,</i>	then want-PAST mom a few pieces have-INF
	212	<i>to .. uh= maken för eten.</i>	to make-INF for eat-INF
	213	<i>.. dann .. g- gung he daar hen,</i>	then go-PAST he there to
	214	<i>un he namm daar n paar rut,</i>	and he take-PAST a few out
→	215	<i>.. un dann ... (0.9) se maakt de klaar,</i>	and then she make-PRE them ready
	216	<i>to eten.</i>	to eat-INF

‘Then mom wanted to have some pieces [of fish] to prepare for dinner. Then he went there [to the snowbank] and took some out, and then she prepared them for dinner.’

Although example (183) provides some interesting insights, of course, it is only one of many examples. What it shows, however, is that speakers seem to alternate between using V2- and V3-structures, and may use these structures deliberately for particular purposes. As this section has shown, a previously mentioned subject referent may lead to higher V3-rates, indicating that these structures occur with subject that are highly accessible in the discourse. However, it seems that V3-structures are most frequent when the subject referent is salient but not identical to the directly preceding subject. Thus, it seems that placing the subject before the

finite verb in V3-structures serves as reminder of a previously mentioned but potentially less activated referent, and may therefore help cognitive processing of the utterance.

6.4 Discourse markers, frame setters and prosody

Language change and grammaticalization processes are generally well described, and there is a growing literature on the grammaticalization of discourse markers in the (pre-) pre-field in German (Auer & Günthner 2003, Imo 2012, Siebold 2021).⁹¹ It is generally accepted that an increase of the target structure is an important factor for its grammaticalization (Bybee 2003, Bybee & Hopper 2001, Hopper 1991), that adverbials may develop into discourse markers (Auer & Günthner 2003, Siebold 2021) and that discourse markers often occur in the (pre-)prefield and may be prosodically marked from the subsequent sentence (Imo 2012: 79). Therefore, I will explore the frequency and V3-rate of specific adverbials including on their prosodic integration for each group to provide further evidence supporting the hypothesis that *dann* may be developing into a discourse marker.

In order to analyze this hypothesis, the data set was divided by group (Group A: recorded 1998; Group B: recorded 2018/19) and the most frequent adverbials were grouped together. Thus, *do* and *daar* were classified into one factor, as both can be used for local or temporal descriptions meaning ‘there’ or ‘then’, and can usually be used interchangeably. Second, *dann* and *denn* are defined as allophones of the same lexical item, meaning ‘then’.⁹² Finally, all other tokens, including a wide variety of prepositional phrases, as well as temporal and locative

⁹¹ Since the literature on Low German discourse markers and pre-field structures is very limited, I will have to draw conclusions from similar developments described in studies of High German.

⁹² Although the High German conjunction *denn* (‘because’ or ‘since’) exists in Low German, none of the items in this corpus have a causal meaning, and are thus interpreted as allophones of *dann*.

adverbials are combined into one group. Tables 6-10 and 6-11 show the token count and V3-rates for the three adverbial factor groups (column ‘Total’ on the right). The data shows a strong decrease in the use of *do* from 41% in Group A to 22% in Group B, an increase of *dann*-usage from 44% to 56%, and an increase of other adverbials from 15% to 21%. The use of sentence-initial *dann* has thus replaced *do* as the largest factor group and makes up a majority of the tokens in Group B, which confirms its increase in frequency. It is also interesting to note that the group of other constructions has also increased, which may point to a more varied use of sentence-initial adverbials.

While the overall increase of *dann* is noteworthy, the results are even more interesting with regard to V3-structures and prosodic integration. As prosody was found to be the strongest indicator of V3-structures, the data for each group was separated by prosodically integrated and prosodically separated tokens.⁹³ For Group A, prosodically integrated sentence-initial adverbials overall show lower V3-rates (10%) than their prosodically separated counterparts (53%). Importantly, *do* shows the lowest V3-rates in prosodically integrated (4%) and separated tokens (36%), followed by *dann* (14% in integrated and 57% in separated tokens), while other adverbials show the highest V3-rates (21% and 59%). Therefore, although the effect is the same for all three adverbial factor groups (i.e. increased V3-rates with prosodic separation), there is a clear direction in the V3-rates based on the factor group (*do* < *dann* < *other*).

Compared to Group A, Group B shows much higher rates of V3-structures, although the directions of effect are generally very similar. Thus, there is an overall lower V3-rate for prosodically integrated sentence-initial adverbials (22%) than for prosodically separated tokens

⁹³ Prosodically integrated means that the sentence-initial adverbial occurs in the same IU as the finite verb, while prosodically separated means that the sentence-initial adverbial occurs in a different IU as the finite verb and is thus prosodically marked.

(65%). Interestingly, the proportions of V3-structures have decreased for *do* from 4% to 3% for tokens with prosodic integration and from 36% to 25% for tokens with prosodic separation, which is remarkable given the (strong) increase of V3-rates for all other factor groups. In fact, V3-rates in tokens with *dann* increased from 14% to 29% for tokens with prosodic integration and from 57% to 66% for tokens with prosodic separation. Tokens with other sentence-initial adverbial show even stronger effects, with increases in V3-rate for tokens with prosodic integration from 21% to 28% and from 59% to 75% with prosodic separation. Again, V3-rates are markedly higher in tokens with prosodic separation and the proportional V3-usage with *do*, *dann* and other adverbials mirrors the pattern found in Group A ($do < dann < other$).

Table 6-10: Token count and V3-rate by type of sentence-initial adverbial in Group A.

Adverbial	Prosodically integrated			Prosodically separated			Total
	N (total)	N (V3)	V3 %	N (total)	N (V3)	V3 %	
do	112	4	4%	14	5	36%	126
dann	105	15	14%	29	17	57%	134
other	28	6	21%	17	10	59%	45
Total	245	25	10%	60	32	53%	305

Table 6-11: Token count and V3-rate by type of sentence-initial adverbial in Group B.

Adverbial	Prosodically integrated			Prosodically separated			Total
	N (total)	N (V3)	V3 %	N (total)	N (V3)	V3 %	
do	68	2	3%	12	3	25%	80
dann	161	47	29%	41	27	66%	202
other	29	8	28%	48	36	75%	77
Total	258	57	22%	101	66	65%	359

At this point, I want to tie these findings back to the discussion of discourse markers and frame setters, and Chafe's proposition of "one new idea per IU". As was previously shown, discourse markers and frame setters both occur in a fronted position in order to link the new information to previous discourse (Erteschik-Shir 2007: 105), but have been described as

differing on the basis of their own semantic value to the subsequent statement. Thus, while frame setters serve to characterize the validity of the proposition and act as interpretative anchors (Chafe 1976, Jacobs 2001, Krifka 2008, Maienborn 2001, Schalowski 2017: 20), discourse markers are semantically “bleached” (Imo 2012), adding no semantic information to the utterance, but rather acting as connectors between the preceding discourse and the new proposition (Schalowski 2017: 3). Although a more qualitative analysis of the functional distribution of *dann* would be desirable (see Siebold 2021), its strong overall increase in frequency, as well as the high rate of prosodically separated tokens and V3-structures allows for a tentative interpretation that *dann* may be developing into a discourse marker in Iowan Low German. At the same time, it is important to note that the *other* cases show even higher proportions of prosodically separated IUs and V3-rates. Because these sentence-initial adverbials add semantic value to the following proposition, they seem to serve as frame setters that anchor the utterance with respect to the previous discourse. In fact, they appear to highlight new information, and are often used to contrast the statement with earlier proposition.

6.5 Summary

This chapter has provided a rigorous statistical analysis and detailed description of V3-usage in spoken heritage Low German. Employing a variationist approach, the target structure was compared with the tokens in which the outcome variable does not occur, thus offering new insights into the proportional occurrence of the variable context. The following list gives a brief overview of the most relevant and important findings of this analysis:

- V3-structures overwhelmingly occur with sentence-initial adverbials plus subjects, although some cases of adverbial plus object or “apparent V3” (two non-subject constituents) were found.
- Besides speaker variation, prosody is the strongest predictor for V3-structures: higher prosodic weight (3 or more preverbal syllables), prosodic separation, and pauses after the sentence-initial adverbial all lead to higher V3-rates. In combination, the effect of these factors become even stronger.
- Prosodically separated adverbials may serve to highlight a contrast between information from the previous discourse and new (contrary) information in the subsequent IU
- Although pronominal subjects account for the highest number of V3-tokens, proportionally, subjects expressed as noun phrases or demonstratives favor V3-structures.
- The V3-rate is higher in tokens with a subject that has been mentioned in the ten preceding IUs, irrespective of the subject type (pronoun, NP, other).
- Subjects in V3-constructions are salient in the discourse (previously mentioned), but may need “reactivation” because the immediately preceding sentence had a different subject referent.
- V3-structures are favored with Present tense verbs (both “true” present tense and narrative present tense) and Perfect tense verbs. The latter effect may potentially be due to the fact that complex verbs favor the use of V3, and Perfect formation requires a complex verb phrase (auxiliary + participle).
- The conjugated verb with most V3-tokens is *hebben* (‘to have’), occurring both in its simple form and as an auxiliary in Perfect tense formation.

- Sentence-initial *dann* may be developing into a discourse marker, but both frame setters and discourse markers show higher V3-rates when prosodically separated.

7

Social factors in V3-variability in a heritage speech community**7.1 Introduction**

Some researchers have proposed that linguistic variation may be due to individual language loss either caused by ageing processes (attrition) or because of a lack of input during childhood (incomplete acquisition) (Bender 1980, Wirrer 2009). If a higher V3-rate is caused by language loss processes, we would expect (1) V3-structures to occur randomly, without predictable triggers and (2) at higher rates in older individuals, if caused by language attrition or (3) mainly in younger speakers if caused by incomplete acquisition. The previous sections have already addressed (1) and shown that V3-usage is, in fact, highly predictable, as it occurs mostly with sentence-initial adverbials, in particular prosodic environments (more prosodic weights, prosodic separation, and pauses), with present tense, complex verbs, when previously mentioned, after a switch reference, and with demonstrative pronouns. The following section addresses sociolinguistic factors that may influence the usage of V3-structures, such as gender, age, year of birth, and group, as well as individual differences across time.

7.2 Coding for social factors

The analysis of social factors influencing the use of V3-structures is based on the same data set explored for linguistic factors in Chapter 6. As such, the main clauses with sentence-initial adverbials were extracted from 52 interviews recorded in 1998 and 2018/19. The data set includes 664 tokens (180 tokens with V3, 27%) and the outcome variable is verb placement, defined as V2 or V3 (see Section 4.4.2). The six social factors under investigation are gender,

age, year of birth, language acquisition, HG-knowledge and LG-speaking partner, as lined out below.

7.2.1 Gender

Although Labov (1990) has shown that female speakers often show higher rates of new variants during phonological language change, the findings in Chapter 5 are in line with previous findings on discourse-pragmatic and syntactic change, which have found less clear indications of gender effects (Cheshire et al. 2005, Sneller & Fisher 2015, Tagliamonte & D’Arcy 2009). In the study of all main clauses (Chapter 5), male speakers tended to use more V3-structures. However, since the variable context was rather widely defined, this finding may have been influenced by men using more sentences with sentence-initial adverbials, which highly favor the use of V3. Therefore, this study will consider whether men indeed make use of V3-structures in higher rates than women in a more narrowly defined linguistic environment.

7.2.2 Age and year of birth

Since the data set for the analysis of main clauses with a sentence-initial adverbial was extracted from interviews recorded in 1998 and 2018/19, age and year of birth were defined as two different factors. For example, two speakers born in 1908 and 1928 may show differences in language use influenced by communal changes, even though both speakers were 90 years old at the time of the interview. Or reversely, a person interviewed in 1998 *and* 2018 has aged 20 years but this person’s year of birth has not changed.

The findings in Chapter 5 suggest that speakers' age does not directly affect the use of V3-structures, as older speakers do not necessarily produce higher V3-rates than younger speakers (when all speakers from both data sets are compared based on their age, disregarding of the year of recording). However, it was hypothesized that there may be an ongoing intergenerational shift, as speakers who were born later tended to show higher V3-rates than speakers born earlier. For this reason, both factors were again included as continuous, scaled variables in the statistical model to explore the effect of age and year of birth on V3-usage in a more defined linguistic environment.

7.2.3 Other sociolinguistic variables

Since gender, age and year of birth only provide limited insights into the sociolinguistic background of the speakers, three additional binary factors were added: did the speaker grow up monolingually LG before entering elementary school, does the speaker have knowledge of High German, and do (did) they have a LG-speaking partner? All three factors were coded as "yes" or "no". The language acquisition factor may inform our understanding of potential influence from English in the grammatical development of the person's LG grammar. The second factor can be seen as a proxy for awareness of normativity effects: since HG canonically shows V2-ordering, and formal instruction of HG emphasizes the grammaticality of this structure, this grammatical knowledge may influence the person's LG use. Finally, having a LG-speaking partner may be seen as having more opportunities to speak LG and thus counteract "attrition effects". However, since some of these variables were coded based on second-hand information for the speakers interviewed in 1998 (i.e. obituaries, church records etc.), they were not included in the statistical model. The results will be explored descriptively below.

7.2 Results

The statistical model (introduced in Chapter 6 and repeated in Table 7-1 for the reader's convenience) selected four linguistic factors and one sociolinguistic factor as the most significant variables for the prediction of V3-structures. The significant sociolinguistic factor was "Gender". Interestingly, at $p=.05$, the variable "Year of birth" almost reaches significance, which supports the hypothesis that there may be a steady communal shift occurring. In contrast, "Age" ranks ninth in the model, indicating that there is no clear effect of age on V3-usage. In the following sections, these three factors as well as the descriptive results for speakers' use of V3 based on their language acquisition, HG-knowledge, and their partner's LG-proficiency are explored.

Table 7-1: Generalized linear mixed model of all tokens with sentence-initial adverbial. (N= 180/664; Overall rate: 27%; repeated from Chapter 6)

	β	SE	z	p
(Intercept)	-0.46	0.57	-0.82	.41
1. Prosodic weight	1.16	0.16	7.26	<.001 ***
2. Prosody (unmarked)	-1.91	0.31	-6.19	<.001 ***
3. Tense (Past)	-1.44	0.33	-4.33	<.001 ***
4. Complex verb (yes)	0.82	0.32	2.59	.001 **
5. Gender (male)	1.16	0.55	2.12	.03 *
6. Year of birth	0.37	0.25	1.44	.05
7. Previous Mention (yes)	0.47	0.35	1.34	.18
8. Same Referent (yes)	-0.34	0.37	-0.91	.36
9. Age	0.18	0.27	0.67	.51

Significance codes: <.001 '***', .001 '**', .01 '*'

$\alpha = 0.05$ throughout the dissertation

7.2.1 Gender

Gender was significant in the model ($p < .05$) and selected as the sixth factor group. Overall, the data set contains tokens produced by 16 women and 26 men, in a total of 52 interviews.⁹⁴

Women produced between 1 and 64 tokens with sentence-initial adverbials ($M=15$; $SD= 17$), while men produced between 1 and 33 tokens ($M= 12$; $SD= 9$).⁹⁵ However, it should be noted that one female individual (Lisa) produced 110 out of 268 tokens, accounting for 41% of the data in her group (women), which explains the higher average token count for female speakers. She also produced 11 out of 32 V3-tokens (34.4%).

Despite the higher average token count for women, they produce a lower proportion and average count of V3-structures. In fact, women produce between 0-6 V3-structures per interview, with an average of 1.8 V3-tokens, and an overall proportion of 12%, which is far below the overall proportion of 27% in the entire data set. Moreover, seven women produce no V3-structures at all, all women who produce V3-structures also use V2-structures, and the highest individual rate of V3-structures lies at 43% (Grace). On the other hand, men produce between 0-31 V3-structures per interview, with an average of 4.4 V3-tokens, and an overall proportion of 37.4%. Further, five men do not produce any V3-structures, three men use only V3-structures (Daniel, Dave, Harry), and the two speakers with the highest token count (David:

⁹⁴ Two women and eight men in this data set were interviewed in 1998 and 2018/19. From my personal field research experience, it seems that more men than women still speak Low German. Some men reported that they learned the language while working as farmers and often used it in relation to agricultural businesses (selling grain, buying cattle etc.). At the same time, men on average seemed more eager to speak the language and more confident in their skills, independent of their actual proficiency.

⁹⁵ Notice that speakers who did not produce any tokens with sentence-initial adverbials were disregarded in this data set. The entire corpus entails 58 interviews with 46 speakers (18 women, 28 men), including three women and nine men who were interviewed twice (in 1998 and 2018/19). That means that two women and two men did not produce any tokens with sentence-initial adverbials.

33; Dean: 28) show a proportion of 94% and 86% V3-structures. The picture, overall, is relatively clear: men prefer the use of V3-structures while women do not.

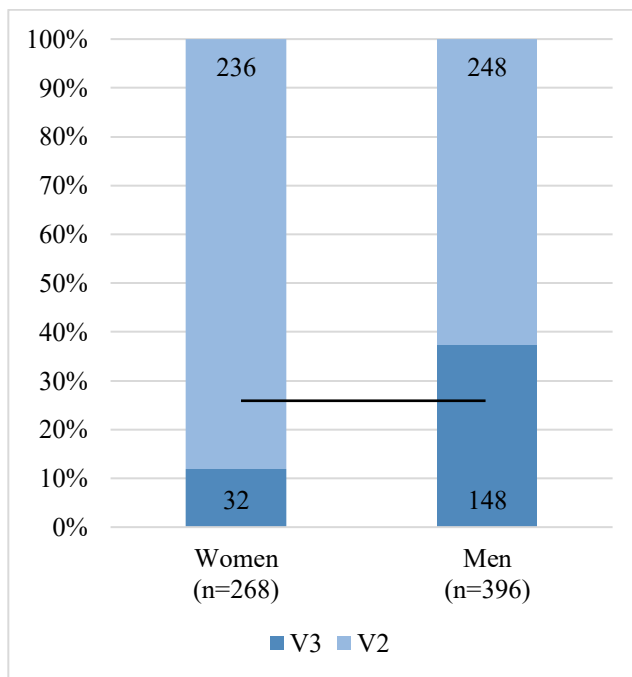


Figure 7-1: Token counts and V3-rate by speakers' gender.

Based on a summary of decades of research on phonological change, Labov (1990: 210-218) proposes two principles regarding the influence of gender on language change:

- (I) For stable sociolinguistic variables, men use a higher frequency of nonstandard forms than women
- (Ia) In change from above, women favor the incoming prestige form more than men
- (II) In change from below, women are most often the innovators

Unfortunately, there are no such principles for morphological, syntactic or discourse-pragmatic change (Cheshire et al. 2005: 143), and studies on linguistic change that include social factors have shown diverging results based on the community and grammatical phenomenon. For

example, in a study of apparent-time change in the use of innovative morphosyntactic and discourse-pragmatic variables (e.g., quotative *be like*, discourse marker *like*, possessive *have*, modal *have to*), Tagliamonte & D’Arcy (2009: 100) found that adolescent speakers are the drivers of change. They suggest that (young) women participate in linguistic change at a faster rate, while men show a slower increase of usage (Tagliamonte & D’Arcy 2009: 97). Other studies, however, indicate an interaction of social class and gender with regard to stigmatization of linguistic change. In their study of GET-passives (‘he got caught’ vs. ‘he was caught’), Sneller & Fisher (2015: 9) find that emergent salience of the structure resulted in its stigmatization, which led women and upper-class speakers to use the variant less frequently, while men (especially from lower-income classes) used the structure more frequently. The researchers do, however, project that these social factors will eventually fade out as the linguistic variant becomes more widespread, similar to the use of DO-support in English (Warner 2005). An interesting historical study from Donaldson (2014) suggests that differences in language use according to gender may even be found in narratives and represented speech in Old French prose texts. It seems that the represented speech by female figures in these texts is more conservative in adopting the emerging Subject-Verb grammar, and more strongly preserves traditional V2-structures (Donaldson 2014: 323).

Since the data clearly shows that men use V3-structures more frequently than women, the data could be interpreted according to Labov’s principle (I): men use nonstandard forms more frequently than women. However, this implies the existence of a standard or prestige variety of the language, which women adhere to more strongly. Since Low German does not have a standardized or prestige variety, and most speakers in this corpus do not have enough High German knowledge to assume it as the standard for their LG interactions, speakers may not be

aware of a normative standard. Therefore, it would need to be tested whether speakers of this variety judge V3-structures as less prestigious than V2-structures, and whether women show different ratings than men. Moreover, since V3-structures tend to occur with prosodically separated preverbal material and seem to be used for discourse-pragmatic purposes or to create narrative effects, the assumption of standard or prestige may not hold here. Rather, it may be worthwhile to analyze usage of V3-structures by men and women from a more holistic and qualitative perspective, and to explore whether distinct strategies of narration and storytelling lead to different proportional outcomes. Therefore, while men are clearly the group favoring the outcome variable and driving this linguistic change, further research is needed to account for the gender difference in the results.

7.2.2 No age effects

In this community of heritage speakers, most individuals started learning the L2 (English) at five years of age at the latest, if not simultaneously with the L1 (LG). In addition, most speakers self-reported a decline in L1-usage after entering school and throughout their adult lives. Thus, I will assume that older individuals have been learning and using their L2 for a longer period of time than younger speakers. If longer and more frequent L2-usage led to more L1 attrition, a higher level of V3-usage may be assumed for older speakers.⁹⁶ To test this hypothesis, the V3-rates from all interviews with tokens showing sentence-initial adverbials were evaluated based on speaker age. Speakers' ages range from 55 to 93 years.

⁹⁶ This hypothesis works under the assumption that V3-usage marks "erroneous" or nonstandard grammar.

Figure 7-2 shows the proportional V3-rate for each interview based on the speaker's age at the time of the interview. The age range lies between 55 years (on the left) and 93 years (on the right). Three speakers, aged 55, 80 and 91, use V3-structures in 100% of their tokens. Eleven speakers (between 58 and 93 years old) use no V3-structures at all, while all other observations fall between these two extremes (mostly between 10-50% V3-usage). Although the dotted trendline shows a slight increase, there does not seem to be a distinct pattern or clear correlation between age and V3-rate.

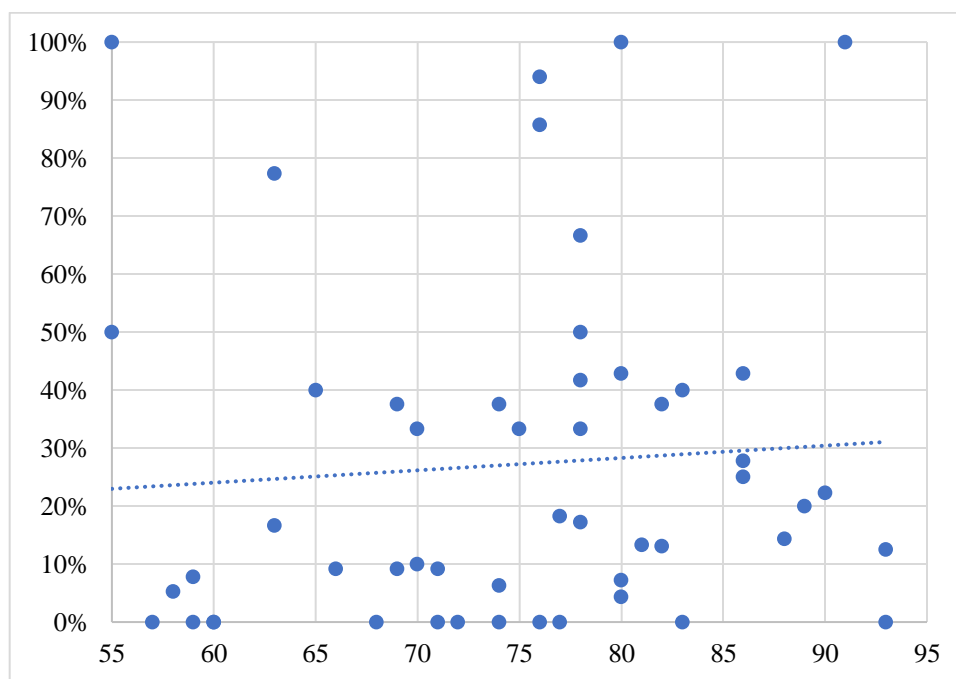


Figure 7-2: Proportion of V3 by speaker's age at the time of the interview. (Age in years from youngest on the left to oldest on the right)

7.2.3 Generational and individual changes

The previous section found that there is no clear direction of effect for age and V3-rate, indicating that older speakers do not necessarily use more V3-structures. However, when the

data is transferred to show speakers' year of birth (1905-1950) instead of age at the time of interview, a strong effect is found (see Figure 7-3). It shows a higher average V3-use for speakers born at a later time, indicating a slow language shift. Thus, the five speakers born between 1905 and 1919 show a proportional use of V3-structures of less than 25%. Although many speakers born in or after 1920 use V3-structures less than 30% of the time and 10 speakers do no use it at all, there is a large number of speakers born after 1920 who show V3-rates between 30% and up to 100%. Therefore, the dotted trendline shows a steady increase in the proportional use of V3-structures, indicating an ongoing intergenerational language change.

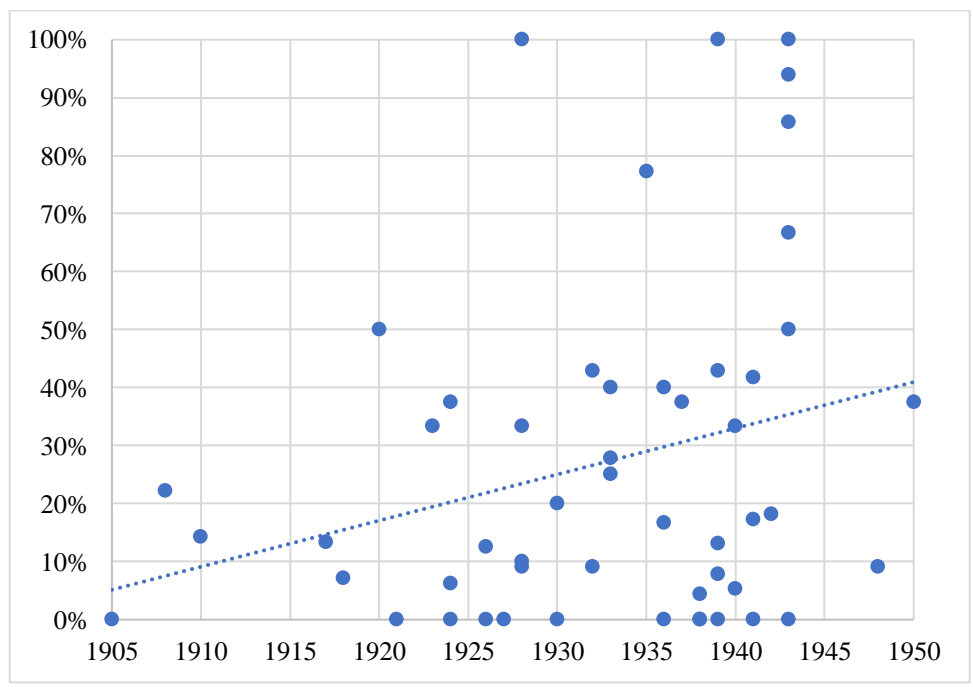


Figure 7-3: Proportion of V3 by speakers' year of birth.

The trend indicating a slow intergenerational change based on speakers' year of birth is confirmed by a comparison between the two data sets (1998 vs. 2018/19). The 1998-data set entails interviews with speakers born between 1905 and 1950, whereas the 2018/19 data set

contains recordings from speakers born between 1926 and 1950. Unsurprisingly, Group A (recorded in 1998) shows a proportional V3-usage of only 19%, whereas a strong increase to 34% in 2018/19 can be observed (see Figure 7-4).

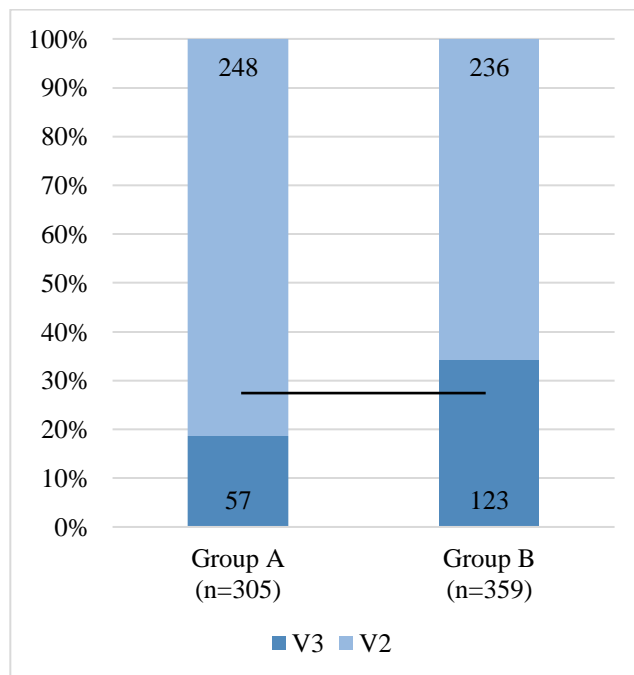


Figure 7-4: Token counts and V3-rate by group (1998 vs. 2018/19).

The general increase in Group B's V3-usage is not only due to the fact that speakers born earlier (who tended to use V3 less frequently) have deceased. Figure 7-5 shows the V3-rates of ten speakers who were interviewed both in 1998 (left bar) and in 2018/19 (right bar), showing an increase of proportional V3-usage for eight speakers (indicated by the green upward arrows in Figure 7-5). Only two speakers show a decrease of V3-rate (Walter: from 40% to 25%; David: from 100% to 94%). However, since there are a comparable *number* of tokens and V3-structures in Walter's case, and David is still producing a very high rate of V3-structures, these results could be interpreted as stabilization of their behavior. Importantly, although three speakers (Elaine, Hans, Eldred) make no use of V3-structures in 1998, they make use it (at least to some

extent) in 2018/19, which may imply a slow expansion of the structure to speakers who did not originally make use of it.

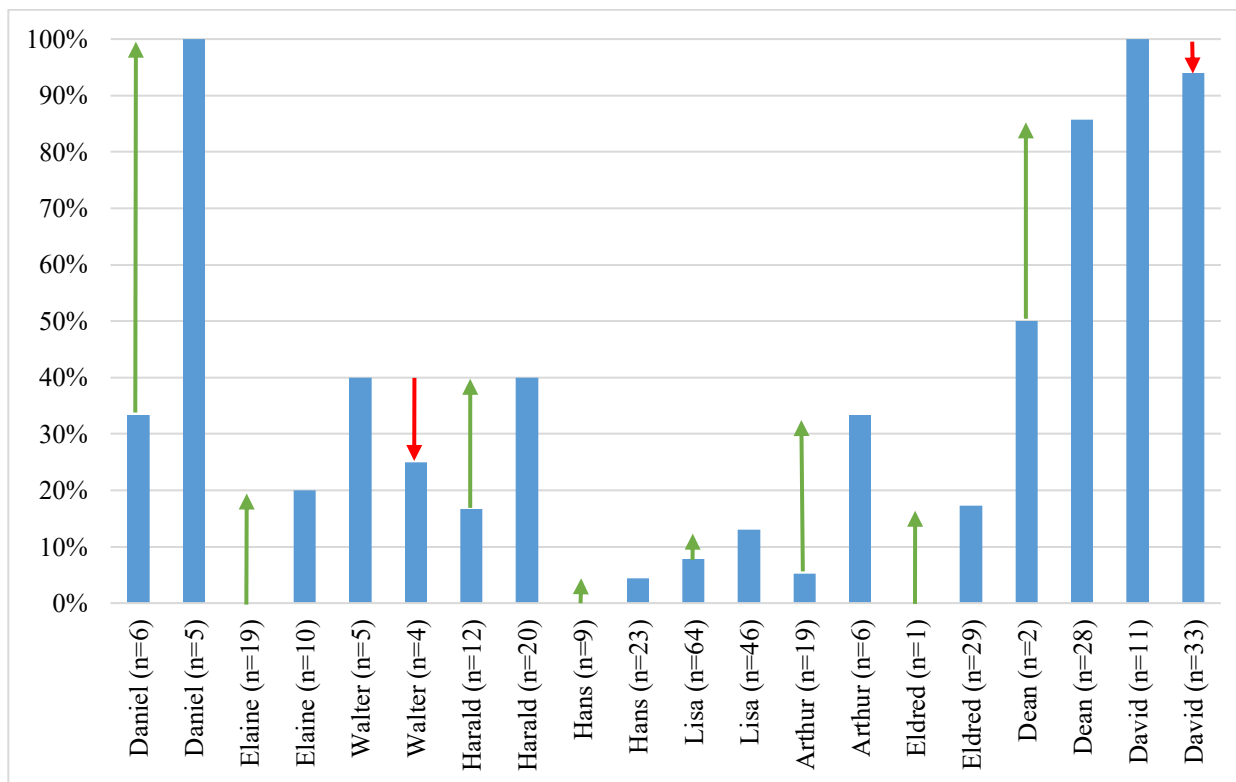


Figure 7-5: Development of V3-rates in individual speakers. (Left bar shows data from 1998, right bar shows data from 2018/19; speakers ordered by year of birth from oldest on the left to youngest on the right).

Thus, the data show a steady increase of average V3-rates according to year of birth, with speakers born after 1925 leading the linguistic change. The differences in proportional use are most noticeable when the data are separated according to the time of recording, revealing a strong increase of proportional V3-use from 1998 to 2018. When explored on an individual level, speakers show either increasing or stabilizing rates of V3-usage. Therefore, this development can be interpreted as an ongoing intergenerational language change.

7.2.4 Other sociolinguistic factors

The three additional sociolinguistic factors under scrutiny in this section are HG-knowledge, LG-speaking partner and language acquisition prior to entering elementary school. Although none of these factors were included in the model, some informative trends may still be found in the descriptive analysis.

For the factor “Language acquisition”, speakers’ language acquisition prior to entering elementary school was categorized as monolingual (LG) or bilingual (LG/E). As pointed out in Section 4.3.2, this factor may be co-linear with “age”, since all speakers born before 1939 grew up monolingual, while more speakers born after 1939 grew up bilingual even before starting elementary school. Nonetheless, the results (see Figure 7-6) provide some interesting trends: while speakers who grew up monolingually LG seem use V3 at a lower rate (20%), speakers who grew up bilingually make use of V3-structures at higher rates (46%).

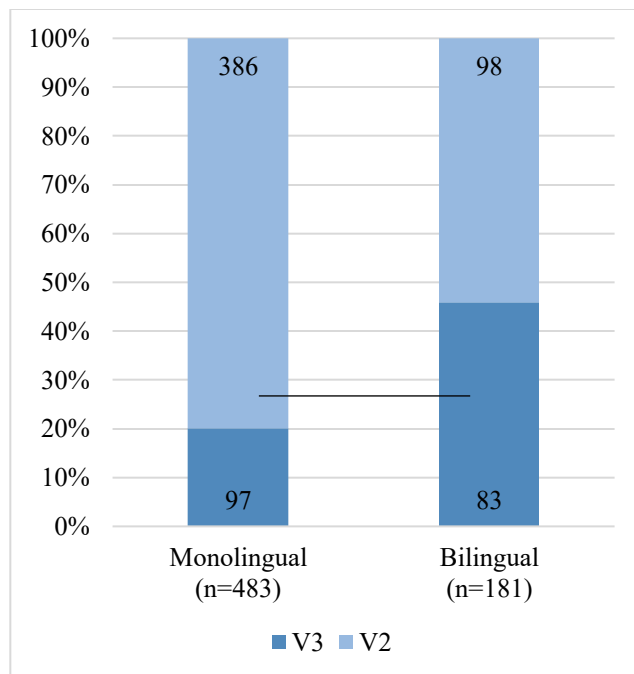


Figure 7-6: Token counts and V3-rates according to language acquisition. (Speakers who grew up monolingually LG until entering elementary school vs. speakers who grew up bilingually from birth.)

The second sociolinguistic factor explored for Group B is “LG-speaking partner”. Here, speakers were divided into two categories, based on their partners’ ability to *speak* LG as well. Those speakers whose partners spoke no LG or only understood LG were coded as “no”, and only those speakers whose partners fluently speak or spoke LG were coded as “yes”. Although the partners’ ability to speak LG may not necessarily mean that the couple used LG often, it is still possible that LG-speaking couples spoke the language more often than other speakers and that speakers have/had more chances to use LG on a daily basis. As shown in Figure 7-7, it seems that participants with LG-speaking partners make use of V3 at a smaller rate (12%) than speakers without LG-speaking partners (39%), who seem to favor the use of V3 compared to the overall rate (27%).

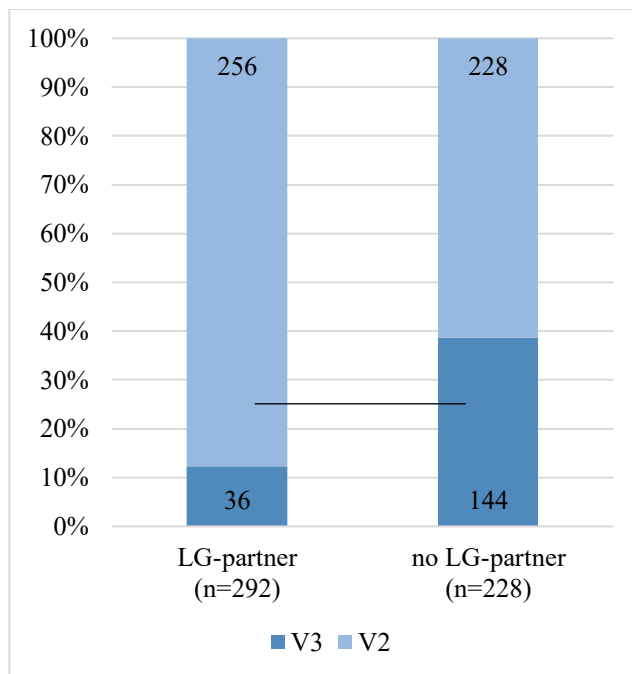


Figure 7-7: Token counts and V3-rates according to partners' LG-proficiency.

For the factor “High German knowledge”, speakers were coded as either knowing or not knowing High German, based on their self-reports and independent of their level of proficiency. Since HG used to be the language of written and formal communication in this community until 1918, and was used in many churches even until the late 1940s, HG could be interpreted as the standardized variety that provides some grammatical normativity. Also, since HG typically does not show V3-structures (but see Breitbarth in press, Bunk 2020), knowledge of HG may strengthen the use of V2 instead of V3-structures. As Figure 7-8 shows, it seems that HG knowledge may indeed have a negative effect on the use of V3 in LG. While those speakers who report no HG-knowledge make use of V3 at slightly higher than average rates (28%), those speakers who report at least some HG-knowledge use V3 less frequently (20%).

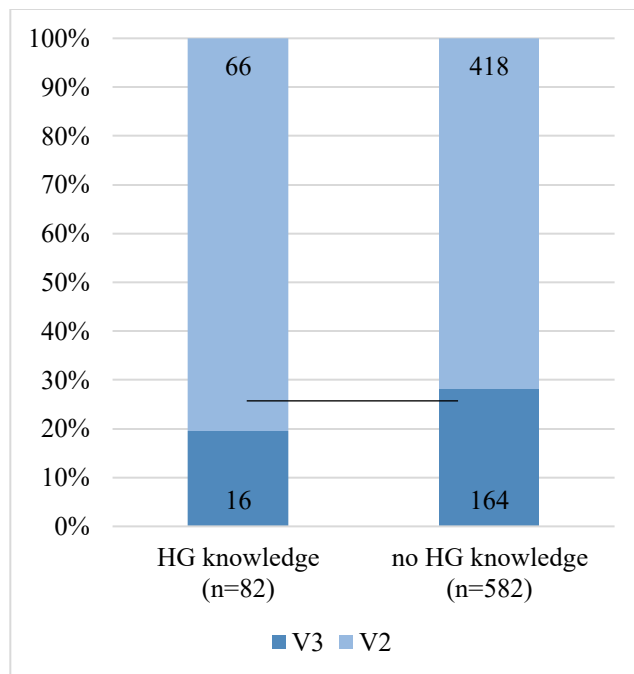


Figure 7-8: Token counts and V3-rates according to speakers' HG knowledge.

Even though these findings may point to some interesting trends in the sociolinguistic factors influencing the use of V3, I would like to point out some limitations to these findings. First, as Chapters 5 and 6 have shown, the use of V3-structures is highly circumscribed by linguistic factors such as sentence-initial adverbials, prosody, tense and discourse-pragmatic features. Moreover, the three factors scrutinized here are all linked to a larger sociocultural change in the community: speakers who were born later are more likely to have grown up bilingually from birth, are less likely to have acquired HG because the churches had shifted to English already, and are more likely to have a partner who does not speak LG since the community became more outward-looking over time. Hence, the findings here show patterns that may be due to language shift processes and reflect the sociocultural changes laid out in Chapter 2. However, since V3-structures are highly constrained by linguistic factors, these changes may correlate with a wider sociolinguistic change in the community but are not necessarily caused by sociolinguistic features.

7.3 Summary

This section explored the sociolinguistic factors affecting the use of V3-structures in a data-set of 664 main clauses with sentence-initial adverbials produced by heritage Low German speakers. As was discussed in Section 3.4., V3-structures seem to be a relatively well-described phenomenon in many German(ic) contact varieties. However, there seems to be some debate as to the social factors underlying these structures. These suggestions include individual language attrition (Bender 1980, Wirrer 2009), cross-linguistic interference from the contact language (Alexiadou & Lohndal 2018, Sewell 2015), discursive motivations (Selting & Kern 2009, te Velde 2017a, Wiese 2011, Wiese et al. 2016), and communal language change (Pecht 2019). Based on the previous literature, I formulated a number of predictions for patterns in the data based on social factors (Table 3-2, repeated in Table 7-2).

Table 7-2: Predictions of V3-usage based on sociolinguistic hypotheses.

	Hypothesis	Who uses V3 (most)?	When does V3 occur?	Are there changes across time?
Incomplete Acquisition	Speakers did not acquire V2-structures correctly because of a lack of input in childhood.	Speakers who grew up with fewer LG interlocutors (presumably those born later).	Anywhere, its use cannot be predicted.	No. Speakers who used the structure in the past will still use it; speakers who did not use it in the past, will still not use it.
Language Attrition	Speakers forgot how to use V2-structures correctly because they do not use the language enough anymore.	Older speakers whose grammars become unstable (especially those with fewer chances to speak LG).	Anywhere, its use cannot be predicted.	Yes. A general increase with age, regardless of the rate of previous usage (but intensified with lack of interlocutors).
Communal Language Change	V3-structures are a syntactic option in the speakers' grammars that may be used to fill a discursive need.	Anyone, but probably more prominently younger speakers (who tend to drive linguistic change).	Under certain circumstances which can be predicted by linguistic factors.	The structure may now be used by speakers who did not formerly use it. Rates of use may increase or remain similar, given comparable linguistic/discursive circumstances.

As shown in Chapters 5 and 6, the usage of V3-structures is highly predictable based on linguistic factors. That means that these structures do not occur arbitrarily and thus should not be interpreted as grammatical errors. In fact, the usage of V3-structures is highly constrained by linguistic factors and motivated by discourse-pragmatic needs. These needs include contrasting subsequent information with previously established statements, to retain the right to speak, and to highlight the following utterance. In addition, this chapter has shown that some social factors may influence the use of V3-structures, albeit only “Gender” was significant in the statistical model. Interestingly, men made noticeably more use of V3-structures than women, but whether

this is due to differences in discourse-pragmatics (i.e. narrative strategies) or women preferring more conservative structures (V2) needs to be further explored.

From a descriptive exploration of the data it was shown that there is no correlation between V3-usage and age, which indicates that the use of V3-structures is not due cognitive decline caused by ageing processes. In fact, V3-usage is more frequent in younger speakers, and has increased within twenty years. Individuals interviewed in both data sets either showed a (strong) proportional increase or stabilization of usage. Even those speakers who did not use V3-structures in 1998 made use of them in 2018/19. Interestingly, the additional social factors explored in this chapter also showed some clear patterns. While speakers who grew up bilingually favored the use of V3-structures, speakers who grew up monolingually disfavored it. On the other hand, those speakers who knew some HG used fewer V3-structured than speakers who do not know HG, and speakers with a LG-partner used V3 less frequently than speakers whose partner does not speak LG. While these three factors are definitely interesting, they also point to a larger trend in this heritage community: because of the communal changes, speakers who are born later are more likely to have grown up bilingually, without HG-instruction in the local churches, and to be married to a non-LG-speaking partner. The fact that these social variables affect the verb placement within a highly constrained linguistic environment indicates an ongoing intergenerational language change.

8 Conclusion

8.1 Main findings

This dissertation explored two major fields, namely the sociolinguistic history of the East Frisian community in Grundy County, Iowa, and the verb placement variation in main clauses produced by heritage Low German speakers in this community. The following summary follows this order, providing the most important results of the sociolinguistic history before turning to the syntactic phenomenon.

Chapter 2 made two major contributions to the sociolinguist study of language islands. First I presented a translated and updated model of Mattheier's (2003) *Sprachinsel-Lebenslaufmodell* ('language island life model', see Table 2-1). The model is based on trends and patterns found for German-speaking language islands in the USA, and proposes eight prototypical stages of development: (1) the initial situation, which defines the community and causes mass migration; (2) the phase of migration; (3) the establishment of the settlement, which may lead to in-group identity building; (4) the phase of consolidation, in which linguistic adaptation processes within the group (dialect mixing or koineization) may occur; (5) a phase of stability with minimal language change; (6) a turning point in language usage, caused by sociocultural changes; (7) a phase of assimilation to the majority language, often in form of a belated three-generation assimilation process including the "decay" of the language; (8) the "death" of the language island.

In addition to translating this model from German, I proposed to terminological and to content-related updates. First, I proposed using the more neutral and descriptive terms *language*

shift or *language change* instead of “language island decay” based on the observed process, and exchanging “language island death” with *conclusion of language shift*, to be more accurate and use less negatively connotated terms. Second, I suggested that the “sociocultural changes” Mattheier described as causing the onset of language shift align well with Salmon’s (1983, 2005) verticalization process approach, which assumes that language shift is more likely to occur once local institutions are no longer run by community members, but transfer their leadership to state or national organizations. Moreover, I added Bousquette’s (2020) domain-based language continuum to the model, in order to describe the language shift in six different domains, ranging from externally to internally oriented (national, regional, media, education, religion, home) more accurately.

Following this updated model, I described the developmental phases of the East Frisian community in Grundy Center, beginning with their origins in modern-day Northwestern Germany. The settlement developed in 1856, mostly from settlers who had previously lived in East Frisian communities in Illinois, and rapidly grew until 1900. The community established churches, schools and newspapers following a noteworthy pattern: although LG remained the spoken language within the family and the community and HG remained the religious language (as was the case in this group prior to migration), E was adopted in the educational and media domains (i.e. in local newspapers) even before the turn of the century, indicating the East Frisians’ indifference towards HG outside of worship and religious service. The decision to adopt E in education and media from the beginning of the settlement led to an American-born generation which grew up speaking LG in the community, learning E in school, and HG in Sunday school. However, it seems that these speakers were not comfortable with HG and started advocating for more E in the churches even before WWI. After anti-foreign language policies

temporarily forced many congregations to shift to E church services during, many churches continued to alternate between HG and E services or offered bilingual worship after the end of the war, mostly due to the pressure of the younger generation. By the end of the 1940s, all local churches had completely shifted to E worship. This first phase of language shift did not immediately affect LG, which was still spoken as the main community language and transferred to children until the late 1940s. The last generation of speakers, however, consciously decided not to teach their children LG for fear of educational disadvantages. Thus, although there may still be a sizable number of receptive bilinguals born after 1950, the language shift to E from an acquisition point of view has been completed.

After Chapter 3 provided a detailed description of previous findings on verb placement variation in German(ic) varieties, Chapter 4 explained the data collection and transcription methods, and introduced the participants. In Chapter 5, a corpus of more than 5600 IUs from 58 interviews was compiled based on two data sets recorded in 1998 and 2018/19. A total of 2043 main clauses (including 150 V3-tokens; 7%) were extracted from the corpus and coded for the outcome variable (verb placement) and eight independent factors (gender, age, year of birth, verb complexity, tense, person/number, presence of sentence-initial adverbial and prosodic integration of preverbal material). First, the data shows that verb placement variation seems to have increased from 1998 to 2018/19. Thus, while the data set from Group A shows 90% V2-structures (5% V1; 5% V3), Group B shows fewer V2-tokens (83%) but an increase in V1 (7%) and V3 (10%). A generalized linear mixed model was fit onto the data, showing that the presence of a sentence-initial adverbials was by far the strongest predictor for the occurrence of V3-structures. The effect was so strong that tokens without a sentence-initial adverbial showed almost 99.7% V2-structures in Group A and 98.9% V2-structures in Group B. Based on this result, the variable

context was redefined and narrowed down to only those instances with a sentence-initial adverbial in a main clause.

For this reason, Chapter 6 and 7 provided a second analysis of a data set containing only main clauses with a sentence-initial adverbial. The corpus used for the analysis in Chapter 6 and 7 was manually searched for tokens with sentence-initial adverbial and the new data extraction yielded 664 tokens (180 V3; 27%). The data stem from 52 transcripts, and 40 individual speakers, with ten speakers being interviewed both in 1998 and 2018/19. Again, all tokens were coded for the outcome variable (verb placement) and twelve independent variables: gender, age, year of birth, verb complexity, tense, person/number, prosodic weight, prosodic integration, pauses, previous subject referent mention, switch reference and subject type. A generalized linear mixed model selected six factors as significant: prosodic weight, prosodic separation, tense, pause, verb complexity and gender. Since three of the six significant factors are related to prosodic aspects, these factors were explored in more detail first. It was found that tokens with 3 or more preverbal syllables (vs. 2 or less preverbal syllables) showed higher V3-rates, and that this effect was even stronger if these tokens also showed a prosodically separated sentence-initial adverbial (69% V3) or a pause after the sentence-initial adverbial (70%). The highest proportion of V3-cases is found in tokens with both prosodic separation of the sentence-initial adverbial and a pause after said adverbial (80%). This may indicate that the IU containing the sentence-initial IU actually contains new information that is highlighted by being separated from the remainder of the sentence.

Further, it was shown that verbs conjugated in the present tense (both “true” and narrative present) favor the use of V3 potentially for narrative effects such as to contrast the utterance with the previous discourse or to create a sense of immediacy. In addition, it was shown that V3-

structures are favored with full NP subjects (30%) and other subjects (mainly demonstrative pronouns; 43%) as compared with pronominal subjects (23%), in contrast to findings in the previous literature. Numerically, however, pronouns are the largest factor group, including the most V3-tokens (87 tokens), which shows the importance of comparing cases of the target structure with those *not* showing the phenomenon to arrive at a more informed analysis. These findings were expanded with regard to the accessibility of the subject referent in the discourse. It was shown that a previously mentioned subject referent leads to higher V3-rates, implying that these structures are favored with very accessible subjects in the previous discourse. However, a crosstabulation showed that V3-structures appear to be even more strongly favored when the subject referent is has been previously mentioned but is not identical with the directly preceding subject. Thus, putting the subject before the finite verb in V3-structures appears to function as a reminder of a previously stated but presumably less active referent, thereby aiding cognitive processing of the utterance.

With regard to sociolinguistic factors, it was found that there seems to be no effect of speakers' age on V3-rates, thus challenging suggestions that these structures may be due to individual language loss. Instead, a clear direction of effect was found for year of birth: younger speakers, especially those born after 1925 tend to show higher V3-rates than earlier-born speakers, indicating a systematic intergenerational language change. This change seems to be largely driven by men, as they produce notably higher V3-rates than women (12% vs. 37%), which may be an interesting point for further investigation in the future. Finally, it was hypothesized that the increased use of *dann* combined with its high rate of prosodic separation and V3-structures may be developing into a discourse marker. It seems, however, that the *other* cases of sentence-initial adverbial show the same patterns, only stronger. This could be

interpreted as a communal prosodic pattern which separates the sentence-initial adverbial for narrative effect, especially to highlight or contrast new information in the subsequent utterance with the previous discourse. For a final interpretation of this matter, however, a qualitative inspection of the data set would be needed.

8.2 Discussion of results

Verb placement variation, and V3-structures in particular, have generated much interest in current years and are generally a well-studied phenomenon. Nonetheless, this dissertation addressed some gaps in the previous literature by providing an account using variationist methodology and longitudinal data, and implementing prosodic and information-structural factors. In addition, this is the first detailed account of V3-sentences in heritage Low German in the USA. The following section discusses the findings in light of previous studies and attempts to explain why the usage of V3-structures may be more salient in contact varieties.

First, the study showed that V3-structures very rarely occur on the clause-level, as only 7 out of 2043 tokens with a preverbal object and a subject were found. In line with all major studies, the occurrence of a sentence-initial adverbial was identified as the most significant factor constraining the use of V3-structures. In a corpus of 664 sentences, 180 examples of V3 were found with a sentence-initial adverbial, which is typically followed by a subject (but objects are possible!) before the finite verb. As such, this dissertation is the largest collection of V3-examples within one community, even without the V2-examples that were a crucial component of the variationist analysis. Throughout the dissertation, the importance of *numerical* vs. *proportional* differences in the data was highlighted, as certain factor groups showed the highest *number* of V3-sentences but in comparison to the number of V2-tokens, the *rate* of V3 was in

fact lower than that of other factor groups. Thus, the dissertation emphasizes the importance of comparing target and non-target structures according to their variable environments.

One such example is the type of constituent between the sentence-initial adverbial and the finite verb. Most studies have proposed that V3-structures most commonly show a pronominal subject (e.g., Alexiadou & Lohndal 2018: 257, Walkden 2017: 56), which is interpreted as signifying a familiar topic that was salient in the previous discourse (e.g., Freywald et al. 2015: 84). My analysis allows for a more detailed exploration of this information-structural aspect. While V3-sentences with pronouns are also the largest *numerical* group (in line with other studies), this is due to the fact that pronouns are just the most common type of subject in the overall data. When compared with the number of V2-sentences entailing a pronominal subject, the *rate* of V3-sentences in fact is smaller than it is in sentences with subject noun phrases and demonstratives. Thus, this example shows that comparing the number of V3-sentences with the number of V2-sentences for any given factor provides important comparisons and puts factor group size into perspective.

In a similar direction, it may be worthwhile to explore information-structural aspects with additional factors, such as previous subject mention and switch reference. Some studies have suggested that V3-sentences occur mostly with pronouns and that these by definition are salient in the discourse (e.g., Freywald et al. 2015: 84). But if V3-sentences are not the default structure after sentence-initial adverbials (and this seems to be the case for all varieties studied so far), and if the pronominal subject is very accessible in the previous discourse, why would speakers feel the information-structural need to place it before the finite verb? While I support the idea of V3-structures serving particular information-structural needs, my analysis suggests a more fine-grained picture: V3-sentences occur at higher rates (37%) with subjects that were mentioned

within the 10 previous IUs but which are not identical to the immediately preceding subject. In other words, V3-structures may serve to “reactivate” the reference to a subject that was salient in the discourse but may have been momentarily deactivated due to the mention of a different subject. Since this finding only emerged by cross-tabulating two information-structural factors and further exploring the transcripts, I hope that future studies may consider similar approaches.

One central aspect of this dissertation, which has already been criticized after conference presentations, is the inclusion of tokens that are spread across multiple IUs in the data set.⁹⁷ Some remarks included the idea that V3-structures with preceding-prosodic unit sentence-initial adverbials should actually be seen as V2-sentences with an adverbial in the pre-prefield (i.e. disregarded as “actual” V3-sentences). I maintain that my approach is valuable for a number of reasons: First, many previous studies do not account for prosody at all, which means that it is impossible to gauge whether their examples indeed occurred within one IU or multiple. Transcribing natural speech and marking prosodic contours (even if there is disagreement on how to categorize grammatical structures) at least makes the data more transparent, which is lacking in previous approaches that do not provide this information. Second, I believe it is bad practice to categorically exclude or ignore data just because it does not fit a preconceived notion of what a certain grammatical structure ‘should’ look like. That is, disregarding V3-sentences which are divided across multiple IUs would render us blind to a structure that is apparently becoming more common both in contact and standardized varieties (e.g., Breitbarth forthcoming, Bunk 2020). The question should be “why are speakers using a prosodically marked adverbial followed by a subject and a finite verb and how do these structures differ from prosodically

⁹⁷ Preliminary results of this dissertation were presented at the Saarbrücker Runder Tisch für Dialektsyntax in November 2021, where two fellow researchers questioned the applicability of my definitions.

integrated V3-structures?” instead of preemptively restricting V3-structures to only those cases that are uttered within one IU.

Finally, I would like to offer an explanation as to why V3-structures seem to be more prominent in contact varieties and seem to become more frequent over time (as evidenced in the data in this dissertation). While previous accounts have suggested that instable grammars (Wirrer 2009, Bender 1971, 1980) or cross-linguistic influence (Alexiadou & Lohndal 2018, Sewell 2015) causes the emergence of V3-structures, I would like to expand the approach of natural communal language change (also proposed in Pecht 2019). The abundance of recent papers documenting the existence of V3-cases both in synchronic and diachronic data, indicates that V3-structures are an inherent syntactic option in many German(ic) varieties (e.g., West Flemish (Greco & Haegemann 2016), urban vernaculars of Dutch (Freywald et al. 2015), Danish (Quist 2008), Swedish (Ganuza 2010), and Norwegian (Opsahl & Nistov 2010) as well as *Kiezdeutsch* (te Velde 2017b, Wiese 2011, Wiese et al. 2009, *inter alia*), Heritage Norwegian (Alexiadou & Lohndal 2018), *Cité Duits* (Pecht 2019), *Russlanddeutsch* (Andersen 2016), Wisconsin German (Sewell 2015), Heritage Low German in the US (Bender 1980, Wirrer 2009), spoken High German (Breitbarth 2021, Bunk 2020, Schalowski 2017), Middle High German (Speyer & Weiß 2018) and Middle Low German (Petrova 2012)).

In any given speech community, speakers will show individual variation in their linguistic output. In data collections with many observations (i.e., large speech communities), individual variation in single speakers is cancelled out by the lack of variation in a large number of other speakers (see Beekma et al. 2017: 35 for an agent-based simulation of language change). However, there may be an almost unnoticeable increase in the occurrence of an emergent form until its frequency reaches a “critical mass” (Chambers 2013: 312). Once the

individual variation becomes systematic, a rapid language change may be the outcome. Now, it is statistically plausible that some speakers' individual variation may influence the entire population if the speech community consists of fewer members (see Beekes et al. 2017). In other words, the "critical mass" is reached faster and language change might spread more rapidly in smaller groups (or at least show more prominently in data collection).

Applied to heritage groups, this hypothesis might explain why we see language change in the last generation of active speakers despite relatively stable language transfer in previous generations. The first generations of settlers had tight-knit networks (which favors maintenance of linguistic norms (Milroy & Llamas 2013: 421)), were able to use the language in many different domains, and interacted with a larger number of other speakers. Thus, even if some speakers may have used V3-structures, this individual variation was probably imperceptible in the community and did not reach the critical threshold for spreading into the language use of other speakers. In the last speaker generation, however, individual variation may become more salient due to the smaller number of speakers and thus generate stronger effects in the community. This likely affects other speakers, who may start to use a previously infrequent form because they encounter it more frequently in the speech of their interlocutors. And it may of course impact the data collection, as the speech of speakers with more individual variation makes up a larger proportion of the data set. Given the sociocultural changes in heritage speech communities, it is therefore not surprising to find new forms taking hold in the last speaker generation.⁹⁸

⁹⁸ This explanation may also hold for speech communities using urban vernaculars, even though these groups typically have more speakers than (moribund) heritage languages. If an emergent form that arises from individual variation becomes more frequent in communal language use, it may rapidly spread to other speakers who are part of this speech community as well. This may be even more true given the fact that adolescents and young adults have been frequently found to use new linguistic forms to distinguish themselves from adult speakers or as a marker of group identity (e.g., Eckert 2000, 2003, Tagliamonte 2016). This hypothesis is supported by Bunk's study (2020: 163) and by data from the RUEG-corpus (Research Unit "Emerging Grammars in Language-Contact Situation: A

Overall, the findings highlight the effectiveness of the variationist method in unearthing interesting and sometimes unexpected trends and patterns in the data. Besides showing how spoken data from a non-standardized variety can be prepared to allow a wide range of data extraction and analysis, this dissertation has underscored the importance of circumscribing the linguistic environment of a linguistic variable and setting target items (here V3) in comparison to non-target items (V2). In addition, integrating syntactic variation, prosody and information-structure, and using longitudinal comparisons have proven very informative for the exploration of ongoing language change. More than anything, I hope that my dissertation has shown that Iowa Low German heritage speakers have maintained a robust grammar of their language. Where language change is found, it does not occur arbitrarily but can be predicted based on (socio-) linguistic factors, which may be found in other German(ic) varieties as well.

8.3 Limitations

This dissertation has added new insights into the sociolinguistic history and syntactic variation of a highly understudied Low German language island in Iowa. But any research naturally comes with its limitations.

In this case, it would have been interesting to have more background information on the speakers interviewed in 1998, to account for any impact of sociolinguistic variables, such as knowledge of HG, age of L2 (English) acquisition, and LG-speaking partner. Unfortunately, since this information was only (reliably) available for speakers interviewed in 2018/19, these

Comparative View") showing that bilingual speakers of different heritage languages in Germany use V3-structures more often in informal settings than in formal settings (Bunk & Rocker 2017), indicating that the use of V3-structures could be influenced by social expectations according to the situational formality (at least in these speakers).

factors could not be included in the statistical analysis, although some descriptive trends were discussed in Chapter 5. Additionally, it would have been worthwhile to conduct experiments to gather speakers' insights of V3-structures in terms of their acceptability, and become more familiar with speakers' ideas of normative syntactic rules. But due to the current situation, travelling to Iowa for further research was not possible after March 2020, and most participants are not technologically versed enough to participate in online experiments.

Finally, I want to point out that the findings in my dissertation may be very specific to this community and that the findings generated through a variationist methodology should be replicated and tested in other language-contact groups.

8.4 Future research

As mentioned in the previous section, this dissertation has a few limitations but also offers some ideas for future research which I would like to lay out here. These include further research in the target community in Grundy Center, expanding the research to other speech communities, as well as expanding the methodology to other linguistic phenomena.

First, since research into speakers' awareness of potential normative syntactic rules and preference tasks on syntactic structures was hindered by the Covid-19 pandemic, it would be interesting to inquire with speakers about their preferences concerning V2 or V3-structures based on differing prosodic contours. This task could be done in LG for all participants in this dissertation as well as for receptive bilinguals who may still have some understanding of the language. In addition, similar experiments could be done in HG with those speakers who have some HG proficiency in order to explore whether knowledge of a standardized variety impacts the awareness and judgment of non-canonical structures like V3.

Along the same line, I would love to extend this research to other speech communities, such as the East Frisian community around Flatville, Illinois. Since this group has a similar sociolinguistic history as the East Frisians in Grundy County, with more and younger speakers, it would be extremely interesting to see whether the intergenerational changes found in this dissertation also hold true for a very similar group, and whether the systematic patterns stabilize for a younger speaker generation (born after 1950). Moreover, I would like to replicate the study with East Frisian LG speakers in Germany to scrutinize the impact of HG as a standardized hegemonic variety as compared to the US-based groups with E as the majority language. Although V3-structures can be found in HG-varieties, higher awareness of normative grammatical rules may lead to lower frequencies of V3-structures in LG. Nonetheless, it would be very revealing to assess the (socio-) linguistic factors favoring the occurrence of V3-structures in this variety. Finally, I would like to use the variationist methodology while implementing prosodic and information-structural approaches to study other morphosyntactic phenomena, especially in relation to the verbal prefield. Specifically, the relative frequency and (socio-)linguistic factors influencing the use of null subjects and left-dislocated structures could be explored, in order to understand the interaction between majority language, syntactic change, prosody and information-structure.

Overall, I believe that the exploration of prosodic and syntactic features may advance both linguistic theory and issues of language change. Since the target phenomena can be found in many Germanic varieties, the results of this dissertation are not only interesting for Low German syntax research, but could also provide new insights into the mental representation of grammatical constructions among speakers of other languages.

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EDUCATION

- 2022 PhD in German Applied Linguistics and Language Science
The Pennsylvania State University (PSU)
- 2016 Master of Education, *Universität Bremen*
- 2013 Bachelor of Arts, *Universität Bremen*

SELECTED PUBLICATIONS

- Rocker, M. (2022). Prolonged language maintenance in multilingual texts: Evidence from the Ostfriesen Zeitung and a reader's diary. *Selected Proceedings of the 11th Workshop on Immigrant Languages in the Americas (WILA 11)*. Somerville, MA: Cascadilla Press, 29–39.
- Schröer, M. & Rocker, M. (2021). Deutsch als Fremd- und Herkunftssprache in der Dominikanischen Republik. In P. Voerke, D. Uphoff, & D. H. Gruhn (Eds.), *Germanistik in Lateinamerika*. Universitätsverlag Göttingen, 79–98.
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SELECTED AWARDS AND GRANTS

- 2022 Research and Graduate Studies Office Dissertation Support Funding
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- 2020 Adele Miccio Travel Award, The Center for Language Science, PSU
- 2019 Chaiken Holocaust Fund, Jewish Studies Program, PSU
- 2019 Global Programs Graduate Student Travel Grant, PSU
- 2018 College of the Liberal Arts Superior Teaching and Research Award
- 2016 – 2017 Deutscher Akademischer Austausch Dienst, Binghamton University
- 2014 – 2015 Pädagogischer Austauschdienst Deutschland, University of Waterloo

SELECTED PRESENTATIONS

- 2021 *Verb placement variation in Germanic contact varieties – Evidence from heritage speakers of Low German in Iowa*. 35th Comparative Germanic Syntax Workshop, Università di Trento, Italy (online), 23-25 June.
- 2021 Invited speaker, *From 'tropical Zion' to vacation destination: Sosúa's German-Jewish heritage*. Workshop Minderheiten germanischer Sprachen in Lateinamerika, Universität Bamberg (online), 30 April.
- 2019 *Another non-null subject language: Variable subject expression in German*. NWA 48. University of Oregon, Eugene, OR, USA. 10-12 October (with Katherine Kerschen and Cole Callen).