

**Dynamics Of Language Contact And Language Variation: The Case Of Transylvanian
Saxon In The Homeland And The Diaspora**

by

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DEDICATION

...to my father...

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Writing a dissertation can often feel like an isolating process, with many ups and downs, but it is by no means a work that one conducts in isolation from others. I have been fortunate to have the support of a lot of people, consisting of family and friends, Transylvanian Saxon community members, and a whole group of academia, who were great linguists, mentors, and colleagues. I am grateful for all these people in my life that have made this work possible and guided me along the way.

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LIST OF ABBREVIATIONS

ASD	Audio-Atlas of Transylvanian Saxon dialects
AUX	Auxiliary
BLP	Bilingual Language Profile questionnaire
GE	German
DET	Determiner
DO	Direct Object
ENHG	Early New High German
F	Feminine
INF	Infinitive
M	Modal or Masculine
MHG	Middle High German
OHG	Old High German
P	Particle
PGmc	Proto Germanic
PL	Plural
PO	Prepositional Object construction
PRS	Present
PST	Past
PTCP	Participle
REFL	Reflexive
Ro	Romanian
SG	Singular
SUBJ	Subjunctive
TrSax	Transylvanian Saxon
V	Verb

The following convention has been used throughout

Examples:

Unless otherwise specified, TrSax examples come from my own data; German and Romanian examples without a reference are based on my own intuition as a native speaker of Romanian and near-native speaker of German.

In showing the examples from the Audio-Atlas of Transylvanian Saxon dialects (ASD), I am following the citation format recommended on the ASD website: *ASD* |*town name*| *age* [*m/f*]| *file number* |*interval number*| ([*m/f*] stands for gender).

ABSTRACT

A driving concern of this dissertation is to explore morpho-syntactic variation in Viscri Saxon, a dialect of Transylvanian Saxon (TrSax), originating in Viscri, Romania. I aim to determine if/how German and Romanian, the languages in contact with Viscri Saxon, affect the structure of the language. If contact effects are observable, are some domains of Viscri Saxon morpho-syntax more affected by contact effects than others? Do German and Romanian affect Viscri Saxon to different degrees? Can contact effects on Viscri Saxon be identified by comparing a variety from Romania to a variety from Germany?

I address these questions by combining methods from language contact (focusing on factors that facilitate morpho-syntactic transfer) with methods from sociolinguistics (focusing on quantitative analyses that explore the effects of sociolinguistic factors on variation). The two grammatical domains of Viscri Saxon under consideration are two-verb clusters, i.e. auxiliary/modal + verb constructions in the right periphery of a clause, and conjunctions.

The first analysis targets word-order variation in two-verb clusters. Viscri Saxon allows both Aux/M-V and V-Aux/M orders, German requires V-Aux/M order, while Romanian requires Aux/M-V order. A preference for V-Aux/M in German-dominant speakers would indicate that German has an effect on TrSax; conversely, Romanian-dominant speakers would prefer Aux/M-V (cf. Kootstra and Şahin 2018). Inter-speaker patterns of variation show that distributions of each order range from exclusive use of Aux/M-V to exclusive use of V-Aux/M and variants are in free variation. Language dominance has an effect on word-order choice. For example, German-dominant speakers prefer V- Aux/M constructions.

The second analysis targets two coordinating conjunctions, *end* and *och*; both fulfill the grammatical function of ‘and’ in Viscri Saxon. Viscri Saxon *end* and German *und* are cognates. Viscri Saxon *och* and Romanian *şi* are similar – both function as the conjunction ‘and’ or the additive particle ‘also’. I predicted that German-dominant speakers would use *end* more than *och*, while Romanian-dominant speakers would use *och* more than *end*. However, variation in

conjunction choice is conditioned by linguistic factors and patterns similarly across all speakers: *end* is used to conjoin clauses, *och* is used to conjoin categories such as NPs, PPs, and APs, and clauses. Both *end* and *och* can conjoin clauses, but *end* is strongly preferred, and no dominant language effects on conjunction choice were present.

The dissertation has implications for processes of language contact: Matras (2011) suggests that items that are more tightly bound in their structural domain, i.e. more connected to a specific environment¹ may be less susceptible to contact effects. Because each TrSax conjunction is connected to a specific environment, conjunctions might be less structurally autonomous than verbs in verb clusters, and, thus, variation is not affected by the contact languages in this domain. Thus, results of the two case studies shed light on structural factors that facilitate transfer. This work also contributes to the documentation of TrSax verb clusters and coordinating conjunctions, and to the discussion of such phenomena in Germanic languages, by reviewing the scarcely available evidence from previous work, exemplifying similar phenomena in other related languages and dialects, and providing evidence from data gathered through my own fieldwork.

¹ Inflectional morphemes are considered to be tightly bound in their structural domain as they depend on the categories they attach to. They are classified as structural features that tend to be very resistant to change (though there are exceptions). I am not referring to phenomena similar to inflectional morphology here, but rather units (like category-specific conjunctions) that are embedded in subcategorization frames, i.e. they can select for specific categories like a TP or a DP and as such, are less flexible than verbs in verb clusters.

Chapter 1

Introduction

There is growing interest in explaining synchronic variation in endangered languages by using sociolinguistic analyses as a tool for understanding linguistic structure and contact-induced language change (cf. Nagy 2017, Meyerhoff 2019). Most often, sociolinguistic studies focus on well-documented languages, but endangered languages rarely exist in the absence of multilingualism. Thus, analyzing variation in a multilingual context requires not only the inclusion of social factors and potential linguistic constraints, but also a comparison of the linguistic systems that are in contact (cf. Thomason 2001). Furthermore, many endangered languages are transmitted and used only orally and lack thorough documentation. Teasing apart internally motivated variation and change from contact-induced variation and change can therefore be a challenging endeavor in such cases. However, a systematic analysis of synchronic variation in multilingual contexts² could further our understanding of the social and linguistic factors that lead to contact-induced change in a language (e.g. Otheguy et al. 2007).

The purpose of my dissertation is to show that analyzing structural variation in multilingual settings involving lesser-known languages can have several implications for linguistic theory and language change. First, extending analyses of variation to endangered languages contributes to thoroughly documenting the structure of lesser-known languages (cf. Meyerhoff 2015, 2019). Second, it contributes to understanding how predictions of contact-induced changes based on well-documented situations of language contact (cf. Thomason and Kaufman 1988) extend to situations that have not been studied before. Lastly, new situations require an adaptation or expansion of existing methodologies, thus creating a clearer picture of how existing methodologies can be improved. For example, typical sociolinguistic variables (e.g. age, gender, social class) cannot be used to explain how changes percolate in a speech community when there are only a handful of speakers left in a community. Such variables, as I

² My analyses and the studies I refer to focus primarily on multilingual situations in which imperfect learning of a target language do not play a role. I discuss this issue in more detail in Chapter 2.

will argue, might not be relevant when working with languages that are dedicated to a particular sphere of usage, such as in cases of diglossia, especially when such languages are oral and lack a reference or standardized variety. Variables that capture the multilingual profiles of the speakers may be more appropriate factors to consider in such situations.

As variation and language change are tightly interconnected, structural variation in an endangered language can be an indicator of a contact-induced change in progress. Contact-induced changes in an endangered language may happen naturally, as they would in a non-endangerment situation. However, such changes may occur more rapidly in an endangered language than they might in a high vitality language due to social circumstances that lead to intense contact (Palosaari and Campbell 2011:111). The social circumstances in an endangerment situation are characterized by uneven social dynamics between speakers of an endangered language (typically a numerically subordinate group) and speakers of a dominant language (a numerically dominant group). Such circumstances lead to an intense contact among the languages that sets the stage for structural features to spread from one language to another (O'Shannessy 2011:80).

Recent models of contact-induced language change suggest that new forms are transferred in a recipient language due to the influence of a contact language (or source language) in cases of intense bilingualism. Such structures may be initially ungrammatical in the recipient language, but speakers become more tolerant of them based on counterparts that are grammatical in the source language (Fernández et al. 2017). Transferred forms exist in variation with native forms, and, over time, structures that are shared with the contact language become more frequent with increased exposure to and use of the contact language until they become part of the grammar of the recipient language (cf. Kootstra and Şahin 2018). Additionally, as I will show in this dissertation, variation in an endangered language can be a well-established structural characteristic that sets the language apart from other languages in the community.

The dissertation comprises two case studies on morpho-syntactic variation in Transylvanian Saxon (TrSax), an endangered Germanic language spoken along German and Romanian in Romania and émigré communities in Germany. TrSax has been in prolonged contact of several centuries with German and Romanian, each language fulfilling a different role in TrSax communities. Historically, each of the three languages had a specialized function for a communicative sphere in a manner indicative of triglossia (cf. Fishman 1991). TrSax is

traditionally seen as the home language and the main language used for communication with members of the TrSax community. German is used for literacy purposes and it is viewed as a prestige variety by Transylvanian Saxons. German is an official minority language in Romania available for education, religious purposes and, to some extent, in the media. Transylvanian Saxons typically receive their education in German and also use it in church. Even though Romanian is the official language for communication, school, media, labor, and government in Romania, Transylvanian Saxons typically learn Romanian once they start primary school.

The data analyzed in the two case studies were collected through my own fieldwork in Romania and in Germany. The data were recorded using sociolinguistic interviews (Tagliamonte 2006) and all speakers interviewed are originally from the village of Viscri, Romania. Throughout the dissertation, I use the term TrSax³ when discussing the language more generally, and the term Viscri Saxon when discussing characteristics of the dialect from Viscri.

I identified two areas of TrSax grammar that display variation and in each case one of the variants has a structural correspondent in German and the other variant has a structural correspondent in Romanian. The first variable is word order in auxiliary/modal + verb constructions that are strictly adjacent and occur in the right periphery of a clause. Such constructions are commonly encountered in West Germanic languages and are known as *verb clusters* because nonfinite and finite verbs cluster together and cannot be separated by any intervening elements (cf. Wurmbrand 2017:45). Verb clusters can occur in Aux/M-V order (shown in 1) or V-Aux/M order (shown in 2) in TrSax. The examples I show below illustrate two-verb clusters in subordinate clauses⁴. German requires V-Aux/M order and Romanian requires Aux/M-V order in subordinate clauses.

- (1) wot de Guoiss-malsch hu_{Aux} ge-dreank-en_V Aux-V
 that the goat-milk have.3PL.PRS PTCP-drink-PTCP
 (There were families) that drank the goat milk.

³ At the beginning of the 20th century, there were 248 localities in Romania where dialects of TrSax were spoken, and variation among dialects was most prevalent at the phonological level ([Bottesch 2008:353] cited in Sift 2015:190). Due to this great amount of variation, each locality is believed to have its own dialect. For example, TrSax speakers from Viscri call their dialect *Weißkircherisch* ‘Viscri Saxon’. The speakers I consulted believed that *Weißkircherisch* is different from TrSax dialects in neighboring villages, and could name at least a few words that they claimed were present only in *Weißkircherisch*.

⁴ My analysis focuses primarily on word-order variation in two-verb clusters that occur in subordinate clauses. In addition, I illustrate main clause verb clusters in Chapter 5 and show that word order variation patterns similarly to subordinate clause clusters in Viscri Saxon.

- (2) datt se Wasser ge-dreank-en_v hat_{Aux} V-Aux
 that she water PTCP-drink-PTCP have.3SG.PRS
 ‘(It was her bad luck) that she drank the water.’ Viscri Saxon

The second variable is conjunction choice between two coordinating conjunctions, *end* and *och*, that fulfill the grammatical function of ‘and’. The two conjunctions are shown in (3) and (4) below; *end* is used to conjoin two clauses (TP) in (3) and *och* is used to conjoin two clauses in (4):

- (3) [et waus uständig]TP
 it be.3SG.PST inconvenient
- end** [kanntj niet moihr wunni gehn]TP
 and can.3SG.PST not more when go.INF
 ‘It was inconvenient and one could not go (there) all the time.’

- (4) [mer zahn af de Fosnecht]TP
 we move.3PL.PST on the.F.SG.DAT carnival
- och** [nei ea.m Harwest seull-en mer af de Hochzeit]TP
 and now in.DAT fall shall-3PL.PRS we on the.F.SG.DAT wedding
 ‘We went for the carnival and now in fall we are expected to the wedding.’
 Viscri Saxon

The examples above show that both conjunctions can be used in the same environment, i.e. to conjoin two clauses. However, existing work on TrSax conjunctions indicates that the two conjunctions are category-specific, i.e. they conjoin specific types of categories or coordinands. *End* is strongly preferred to conjoin tense clauses and *och* is strongly preferred to conjoin (non-finite) clauses (Shinohara 2016). German and Romanian do not display variation in coordinating conjunction choice, because they each have only one coordinating conjunction that fulfills the function of ‘and’ and can be used to conjoin all kinds of coordinands. German has the coordinating conjunction *und* ‘and’ that is a cognate of *end*. Romanian the coordinating conjunction *și* ‘and’ that also functions as the additive particle ‘also’, a property shared with TrSax *och*, which can be used as the additive particle ‘also’ as well.

Because the languages in contact with TrSax do not display variation in any of the areas analyzed in this study, the first step in each case study is to determine whether the structural correspondences between TrSax and German and TrSax and Romanian are the result of transfer, i.e. whether variation is between inherent TrSax forms and transferred forms. More recently,

processes and outcomes of language contact have been explored through experimental and corpus studies with bilingual speakers. Such studies show that cross-linguistic interactions have an effect on structures that are shared between the languages of the bilingual. For example, Hartsuiker et al. (2004) showed that the recent use of one structure in one language leads to the repetition of the same structure in the other language of a bilingual. Thus, structures that are similar between the languages of a bilingual are most prone to contact effects (cf. Baptista et al. 2014, Jacob et al. 2017). Furthermore, with increased exposure to and use of a contact language frequency distributions of forms that are in variation in a recipient language are affected. Variants that are similar in the recipient language and the contact language become the preferred forms in the recipient language (Fernández et al. 2017). It is not clear however, whether the same holds in cases of trilingualism, such as in the case of the speakers surveyed in this dissertation, and if structural similarity between languages is a sufficient predictor for the locus of contact effects. In cases of trilingualism, simultaneous effects from two contact languages onto a recipient language might lead to different outcomes than in cases of bilingualism. For example, if effects from both contact languages push in the same direction, changes in the recipient language might be more likely to occur, such as in cases of multiple causation (Thomason 2001).

There is a consensus that contact effects such as the transfer of features from one language to another are determined by a variety of social and structural factors (Thomason 2001, Aikhenvald 2007, Matras 2007, Muysken 2013). I follow Matras' (2007:31, 2011:204) view on transfer⁵, according to which transfer of a feature from a source language into a target language involves the removal of a separation within subsets of a speaker's linguistic repertoire such that the same feature is used across both languages. The direction and the degree of transfer, however, are determined by the social contexts and the typological properties of the languages in contact (Thomason and Kaufman 1988:19).

Having identified two areas in TrSax that display variation and variants in each case have correspondences to structures in German and Romanian, I therefore set out to answer the following **research questions**:

RQ1: If there are contact effects from German and/or Romanian in either of the areas that display variation in TrSax, are they equal in kind and degree?

⁵ Matras (2007, 2011) uses the term 'borrowing' in his definition, as does Thomason (2001). I discuss terminology issues in more detail in Chapter 2.

RQ2: In the absence of a monolingual variety, can the source of a potential contact-induced change in TrSax be identified by comparing varieties of the same dialect when spoken in two distinct linguistic ecologies (i.e. Germany and Romania)?

RQ3: Are there relevant social and linguistic factors that can be used to explain the possible influences from German and/or Romanian onto TrSax?

To answer these questions I compare data from Viscri Saxon as spoken in Romania to Viscri Saxon as spoken in Germany in order to control for speakers' use and exposure to each of the languages in contact with Viscri Saxon (cf. Kootstra and Şahin 2018). I use a measure of language dominance assessed through the Bilingual Language Profile (BLP) questionnaire (Birdsong et al. 2012) as an indicator of increased use and exposure to German and Romanian. The BLP assesses four dimensions of language dominance⁶: language acquisition history (e.g. age when acquisition started, years spent in a country where the language is spoken), proficiency in each language (self-rated by participants on a 6 point Likert-scale based on reading, listening, and writing skills), language use (based on percent each language is used on a weekly basis at home, at work, etc.), and language attitudes (self-rated by participants on a 6 point Likert-scale). The BLP computes a language dominance score by weighing the different modules, factoring in participants' age as well. I make the following proposal: variation that patterns similarly across speakers with different language dominance scores in German and Romanian⁷ can provide a clear account of the structure of TrSax, while differences among such speakers can shed light on trajectories of contact-induced change in TrSax under the influence of German and Romanian.

With regards to RQ1, I hypothesize that potential contact effects from German would occur in the form of increased use of German-like structures in both areas that display variation in TrSax. Speakers who are German-dominant might therefore display a preference for V-Aux constructions and the conjunction *end* (in environments where either *end* or *och* could be used). Conversely, possible contact effects from Romanian would lead to increased use of Romanian-like structures in TrSax, i.e. Romanian-dominant speakers would have a preference for Aux-V

⁶ I view language dominance as a potential effect of both social and linguistic factors: linguistic because it incorporates language proficiency and there are ways of measuring proficiency based on actual language production, and social because speakers' language dominance is also connected to (social) factors such as length of exposure to a language, use, and setting.

⁷ Because the BLP includes questions that assess literacy in a language and TrSax is an oral language, dominance scores for TrSax were generally lower than for German and Romanian. Therefore, I chose to use only German and Romanian language dominance scores in my analysis. I explain these decisions in more detail in Chapter 4.

constructions and the conjunction *och*. Answering RQ1 will also deliver answers for RQ2 and thus a better understanding of the possible effects German and Romanian have on variation in Viscri Saxon. If the hypothesis I laid out were confirmed, it would indicate that German and Romanian have similar effects on variation in Viscri Saxon. However, if the results of the two case studies do not confirm the hypothesis, they will inform answers for RQ2 and RQ3. For example, if German has an effect on variation in Viscri Saxon, but Romanian does not, factors such as the typological similarity between TrSax and German, or the prestige status of German in TrSax communities could explain such potential findings. RQ3 could also be answered by comparing the results from each case study, i.e. by establishing whether the two morpho-syntactic areas that display variation are affected to a similar degree by German and/ or Romanian. Considering that social factors remain constant between the two case studies, differences in the results would deliver a clearer picture of the role language-internal structural factors play in modulating contact effects.

The target population in this study is highly suited to answer these questions, because speakers from each group increased their use and exposure to one of the contact languages over the past 25 years. After the revolution in 1989, a considerable number of TrSax speakers left Romania and migrated to Germany, to the extent that some TrSax localities were left with only a handful of speakers. The number of TrSax inhabitants from Viscri, for example, plummeted from 278 before 1989 (Corsale and Iorio 2013) to only 15 in 2015 when I conducted my initial fieldwork. The dominant population in Viscri has been comprised of ethnic Romanians and ethnic Roma since 1990 and both ethnic groups use Romanian as their primary communication language. Currently, about 150 – 200 Transylvanian Saxons who left Viscri around 1989 live in the wider Nuremberg area in Germany. In light of these events, intensified contact between Viscri Saxon and Romanian in Viscri is characterized by increased exposure to and use of Romanian among the remaining Viscri Saxon speakers. Some mixed families use Romanian at home along with or instead of Viscri Saxon. In contrast, Viscri Saxon speakers who currently reside in Germany have very limited use for Romanian and have increased their exposure to and use of German. Some of the TrSax children born in Germany have only passive knowledge of Viscri Saxon and German has become a home language in addition to Viscri Saxon in such families.

The first case study on word order variation in verb clusters shows that language dominance has a significant effect on word-order choice and speakers who are German-dominant are more likely to use V-Aux/M order (German-like) than speakers who are Romanian-dominant. Furthermore, individual patterns of variation range from exclusive use of Aux/M-V to exclusive use of V-Aux/M order, indicating that there are no grammatical constraints on word order variation in subordinate clauses and that the distribution of word orders is highly conditioned by speakers' language dominance in German and Romanian.

The second case study on coordinating conjunction choice shows that variation is conditioned primarily by linguistic factors in this case: *end* is used to conjoin clauses and this rule is invariable, while *och* is used to conjoin phrases and clauses. Even though both *end* and *och* can conjoin clauses, *och* is used only to a limited degree in those cases and language dominance does not have an effect on conjunction choice, contrary to what occurs with verb clusters.

Results of the first analysis are consistent with models of contact-induced language change proposed in cross-linguistic experimental studies targeting bilinguals (e.g. Kootstra and Dodens 2016): increased use and exposure to a donor language conditions the frequency distributions of cross-linguistically shared structures in a recipient language leading to increased use of donor-language structures over time. Such effects are not present in the case of conjunctions, possibly because there are strong structural boundaries among languages in this subsystem, i.e. conjunctions are still structurally bound in their syntactic domain in TrSax. It is possible that conjunctions are anchored in subcategorization frames that they are sensitive to, meaning that they may be sensitive to the categories that they select for. This could in part explain why some languages use distinct conjunctions when conjoining distinct categories (i.e., NPs versus TPs; I discuss this matter in more detail in Chapter 6). In that sense, one could argue that conjunctions are structurally ground in their syntactic domain in TrSax. However, the fact that both conjunctions are fulfilling a shared function in TrSax (i.e. conjoining clauses) indicates that a change under the influence of German and/or Romanian is possible. By comparing the results of the two analyses I show that different morpho-syntactic subsystems of the language respond differently to contact effects, while sociolinguistic circumstances remain the same. These results shed light on some structural aspects of transfer and support generalizations that have been proposed in the form 'borrowing hierarchies': features that are more bound in their

structural domain or more dependent on a particular environment (i.e. conjunctions⁸ in TrSax) are more resistant to change in contact situations than features that are structurally autonomous (Matras 2011:208). Therefore, data from understudied languages such as TrSax can yield a closer understanding of the outcomes of language contact, especially of how particular linguistic structures may be affected by contact-induced change.

Cross-linguistic influences such as the transfer of linguistic features from one language to another are well attested in proficient bilinguals, and transfer can be bidirectional, from the more dominant to the less dominant language of the speakers or vice versa (Odlin 2013, Kootstra and Dodens 2016). Transfer, especially at the morpho-syntactic level, has been extensively discussed in case studies and areal surveys of language contact situations where two (Otheguy et al. 2007, Backus et al. 2011), three (Clyne 1997, 2003), or more languages coexist (Gumperz and Wilson 1971, Haig 2006). The consensus is that any type of feature can transfer from a source language to a recipient language in cases of intense contact characterized by prolonged contact among languages or intense multilingualism in a speech community. However, to my knowledge, the issues of morpho-syntactic transfer from more than one source language into a recipient language, and the effects more than one source languages have on a recipient language, are less discussed in case studies of multilingual speakers.⁹

One of the important contributions of this dissertation is to provide a closer understanding of the social and structural aspects of language contact effects in a multilingual setting through sociolinguistic analyses that capture speakers with different linguistic profiles. Another important contribution is made by documenting two areas of TrSax grammar that have received little to no attention in past studies. By documenting verb clusters and coordinating conjunctions in TrSax, I am also able to show that TrSax differs from related West Germanic languages in both of these domains. The first case study brings an original contribution on verb clusters in Germanic languages by showing that word order distributions can be the result of language contact effects. The second case study opens a discussion on the development of

⁸ In general, function words, such as conjunctions, are frequently borrowed in situations of language contact (see Mithun 1988, Matras 1996). However, as will become clearer in Chapter 6, I am not targeting the transfer of conjunctions in this particular situation, but the expansion of the type of categories that can be conjoined for each TrSax conjunction, based on corresponding structures in the contact languages.

⁹ I distinguish such multilingual situations from cases where multilingual speakers dealing with multiple source languages contribute to the emergence of a new language (i.e., a Creole, Baptista 2002).

category specific conjunctions in TrSax, a property of TrSax that is not encountered in other Germanic languages.

The dissertation is structured as follows. Chapter 2 provides an overview of studies that analyze the outcomes of language contact, with a focus on factors facilitating contact-induced change through morpho-syntactic transfer. Chapter 3 provides a historical and sociolinguistic overview of TrSax in Romania over the centuries, and the roles of TrSax, German, and Romanian in TrSax communities. I also discuss relevant information about the three languages in the two Viscri Saxon communities targeted in this study, and how political events shaped the linguistic ecologies in the two communities. Chapter 4 describes the data collection, the participants from the two groups, and the surveys used in evaluating language dominance among participants. I provide an overview of the different modules of the language dominance scores and what they encompass, and show where exactly the two groups differ from each other and where they are similar. The broader methodology used in identifying target structures in the data and the approaches taken in analyzing variation are also covered in Chapter 4. In Chapter 5, I present the first case study in variation in Viscri Saxon, i.e. word order variation in two-verb clusters. Chapter 6 presents the second case study on variation, i.e. variation in conjunction choice. Finally, Chapter 7 provides a brief summary of the dissertation, discusses the findings of the two case studies in connection to the research questions, and attempts to draw conclusions on the basis of the results of the two studies taken together. Some additional issues brought up by the two case studies are discussed and suggestions are made for future research.

Chapter 2

Overview Of The Literature On Contact-Induced Change With A Focus On Transfer

The focus of the present dissertation is morpho-syntactic variation and change in TrSax, a language spoken in an intense language contact situation. TrSax is an endangered language and members of the TrSax communities in Romania and Germany are slowly replacing TrSax with Romanian or German in various communicative domains. In analyzing how recent changes in the linguistic ecology that TrSax is a part of are affecting the structure of TrSax, a series of social and linguistic factors need to be considered. For example, some of the factors that shape the possible outcomes of language contact are connected to the intensity of contact, language typology, language-internal structural properties, linguistic ecology, speakers' proficiency, use, exposure, and access to the languages in a speech community, etc. While TrSax has been in prolonged contact with both German and Romanian, previous studies indicate that contact with Romanian was sporadic and limited over time. In contrast, German has been used more consistently in TrSax communities for literary and religious purposes and was viewed as a prestige variety. Since the mass migration of Transylvanian Saxons to Germany after the revolution in Romania in 1989, contact between TrSax and Romanian has intensified in Romania and many TrSax speakers started using Romanian in various aspects of their lives. At the same time, TrSax speakers who moved to Germany increased their use of German over the past 25-30 years.

The present chapter discusses possible outcomes of language contact, with a focus on morpho-syntactic transfer in language contact situations. In doing so, I consider situations that involve prolonged use of a donor or recipient language (and to some extent bilingualism) or contact situations that result in bilingualism (regardless of duration). The cases I discuss, as well as the theoretical implications I consider relevant for my analyses do not pertain to contact situations that involve incomplete learning of a target language (for example in cases of language shift). Thus, several contact settings fall outside of the scope of the present dissertation (e.g.

language shift, the formation of mixed languages, pidgins, and creoles), as the outcomes of language contact are to some extent different to the outcomes I discuss in this chapter.

The present chapter is structured as follows: I start by reviewing a series of studies that exemplify different types of contact situations and the effects languages have on each other in such situations. I discuss some of generalizations that were made based on outcomes of language contact, and the attempts at establishing hierarchies among linguistic categories that are susceptible to contact effects. I present findings from cross-linguistic priming studies to provide an overview of the most recent models of the processes of language contact and the mechanisms of contact-induced change. While this is not a study on cross-linguistic priming, my findings support some of the key findings from such studies as they illustrate similar changes due to contact. This chapter also lays out the theoretical framework proposed by Thomason (2001, 2010) for identifying contact-induced changes in a language, and explains the approach I take for the specific contact situations I am investigating.

2.1 Language contact and morpho-syntactic transfer

When two or more languages come in contact, the transfer of linguistic features from one or more source languages to one or more receiving languages often occurs. As a consequence, one or more of the languages involved in the contact can experience some degree of change, both in patterns of structure and use (O’Shannessy 2011:78). Contact-induced change is considered an instance of language change that would have been less likely to occur without contact with another language (Thomason 2001:62) and is caused by phenomena classified in the literature as interference (Thomason and Kauffman 1988, Thomason 2001), borrowing (Winford 2003, Aikhenvald 2007), convergence (Gumperz and Wilson 1971, Poplack et al. 2012), or code-copying (Johanson 1998, 2002). While these terms can refer to similar outcomes, there are some inconsistencies in their use. For example, ‘convergence’ tends to refer to structural resemblance between languages due to prolonged contact (Gumperz and Wilson 1971:151), or to the enhancement of features that are shared between languages in contact (Toribio 2004, Baptista et al. 2014). ‘Borrowing’ is used in a broader sense to refer to the borrowing of linguistic features from one language into another regardless of directionality (Aikhenvald 2007:2, Matras 2011:204).

As a convention, I will use the term ‘transfer’ due to its more neutral nature (cf. Heine and Kuteva 2005, Meakins and O’Shannessy 2012, Odlin 2013) to refer to linguistic features

(e.g. lexical, phonological, morphologic, syntactic, semantic), which are incorporated from a source language into a receiving language. Furthermore, I use Matras' (2011:204) definition for transfer, namely "the removal of an invisible demarcation line that separates subsets within the linguistic repertoire (or the speaker's 'languages')." This results in the same structure or category being used by speakers across their languages.

I will refer to contact-induced changes in the broader structure of a language as structural transfer and to changes that affect the morpho-syntactic structure more specifically, as morpho-syntactic transfer. Syntactic transfer can come in the form of a single morpheme, a grammatical relation or pattern (i.e. word order), the function of a grammatical form, or a combination of these forms (Heine and Kuteva 2005:2). Generally, some linguistic subsystems, such as phonology¹⁰ and inflectional morphology, are considered to be more stable and thus more resistant to change than components such as vocabulary (Winford 2005:377). However, any linguistic feature, be it a single form or a pattern, can be transferred from one language to another given the right socio-linguistic circumstances (Aikhenvald 2007, Thomason 2001). For example, in cases where the agents of change are fluent speakers of the receiving language, non-basic vocabulary tends to be transferred first from one language to another. As contact conditions intensify, basic vocabulary items and structural features may also transfer from one language to another. In situations where such learning plays no role, intense contact (characterized by a prolonged duration of contact and a great level of bilingualism in the receiving language) may increase the likelihood of structural features to be transferred along with lexical items (Thomason 2010:36 - 37).

Exceptions to such tendencies, while rare, do occur. Structural transfer with no lexical borrowing has been attested in situations where community norms prohibit the use of foreign forms, both lexical and grammatical, as they are seen as a sign of unacceptable language mixing (Aikhenvald 2003:3). This can be exemplified by the development of similar grammatical structures in Arawak and East-Tucanoan languages that have been in prolonged contact in the multilingual area of the Vaupés in northwest Amazonia. For instance, Tariana, an Arawak language, developed case morphemes uncommon in other Arawak languages for marking core grammatical relations, under the influence of East-Tucanoan languages. Due to cultural

¹⁰ Prosody is less investigated in contact situations. I direct the reader to Queen (2001) and Queen (2013) for a discussion on how intonation patterns can be volatile in situations of language contact.

prohibitions against the use of loan forms, the new Tariana morphemes were created from language internal resources, but employed in cases where they would be required in East-Tucanoan languages, thus making them functionally similar to case-marking morphemes found in East-Tucanoan (Aikhenvald 2003:5-7). While the new morphemes can be traced back to a language-internal source, the external effect of the East-Tucanoan languages on the structure of Arawak is in the development and long-term maintenance of shared grammatical rules.

Other cases in which contact-induced structural transfer occurs despite rigorous separation of languages in the community (Gumperz and Wilson 1971, Nadkarni 1974) are in situations of prolonged contact and intense bilingualism. The more intense the contact situation, the more likely it is that structural transfer will occur. Intensity of contact can be identified by the duration of contact, the relative population sizes (e.g. source language speakers versus receiving language speakers), and the degree of bilingualism that is present in the community (Thomason and Kaufman 1988:65-66). The longer the contact between two languages, the higher the chances for bilingualism to develop, which in turn sets the stage for increased structural transfer.

Another factor that can influence the degree of structural transfer among languages is typological distance among languages. When typological distance between a source and a receiving language is small, i.e. when typologically similar languages are in contact, linguistic subsystems that are generally more resistant to change are more likely to change (Thomason 2010:40). Typological similarity among the languages involved can facilitate the transfer of structural features from one language to another in the same way prolonged contact can contribute to such outcomes. For example Haig (2006) notes that the alignment of smaller syntactic units, such as relative clauses or noun phrases, is more likely when typologically similar languages are involved, but similar results can be found in cases of prolonged contact between typologically distinct languages. Haig (2006) compared the structure of three different minority languages, Laz, Kurmanji, and Zazaki, in contact with Turkish, the dominant language in Anatolia, Turkey. He found that there were some similarities among the four languages when it came to the alignment of larger syntactic units, but Turkish influenced each language differently. Kurmanji and Zazaki are Iranian languages and are structurally very different from Laz (a Kartvelian language), which shares many structural similarities with Turkish. Laz has gradually moved closer to Turkish, aligning not only constituents after the Turkish pattern, but also replicating Turkish phrase structure and morphemes. In contrast, Kurmanji and Zazaki only

experienced changes at larger syntactic units, i.e. at clause level, under the influence of Turkish. While Turkish had some degree of structural influence on each of the other three languages, Haig (2006:217) attributes the differences in outcomes to the variable degrees of structural compatibility among each language pair, but also to differences in the relative population sizes of each community. Kurmanji and Zazaki speech communities were larger in size than the Laz community, thus making the Laz community more susceptible to Turkish pressure.

The examples discussed above are relevant when evaluating the potential effects of both German and Romanian on the structure of TrSax. On the one hand, TrSax and Romanian speakers used to be separated in communities where Transylvanian Saxons were the dominant population, and Romanian had limited use among Transylvanian Saxons. However, the prolonged contact between the two languages can lead to contact effects from Romanian onto the structure of TrSax. On the other hand, the typological similarity between TrSax and German combined with the fact that the two languages have also been in prolonged contact set the stage for structural transfer from German into TrSax.

For example, the German-like word order in verb clusters (i.e. V-Aux) may be a rearrangement of an inherent TrSax feature (i.e. Aux-V order) under the influence of German as previous studies suggest, and the transferred feature became more prominent in TrSax towards the end of the 19th century (Holzträger 1912). The effect of Romanian, in light of recent intensified contact between TrSax and Romanian, may also be in the form of maintenance of the Aux-V order in TrSax, i.e. Romanian might be preventing the wholesale adoption of the German-like word order in TrSax due to the structural overlap of Romanian and TrSax Aux-V constructions. Silva-Corvalán (1994) suggests that a source language can influence a recipient language by enhancement of features shared between two languages, and over time, with increased use and exposure to the contact language, transferred forms could replace the formerly predominant forms. However, the direction of change, as I will show in the first case study on verb cluster variation in Chapter 5, is determined by the nature of contact. The wholesale adoption of transferred forms from a source language into a recipient language can occur in speakers who are clearly dominant in the source language, but inherent and transferred forms can also coexist in a language for a prolonged period of time.

Similarly, multiple causation, i.e. a combination of internal and external factors that have an effect on language change (cf. Thomason 2001), could explain why TrSax, unlike current

Germanic languages, has two coordinating conjunctions that fulfill the function of ‘and’, *end* and *och*. As I will discuss in more detail in Chapter 6, the TrSax coordinating conjunction *och* ‘and’ functions as the additive particle ‘also’ as well. Currently, West Germanic languages have only one coordinating conjunction similar in form to English ‘and’ (e.g. Standard German *und* ‘and’). Particles derived from Old High German *ouh* that functioned both as the conjunction ‘and’ and the additive particle ‘also’ are retained only with the function of ‘also’ (e.g. Standard German *auch* ‘also’) in other West Germanic languages (cf. Braunmüller 1978). Contact between TrSax and Romanian may have led to the maintenance of *och* as a conjunction and an additive particle in TrSax, due to the functional similarity of *och* to Romanian *și*, which functions as the conjunction ‘and’ and the additive particle ‘also’ in Romanian.

While it is difficult to establish for how long variation has been present in verb cluster and conjunction choice in Viscri Saxon, to show that German or Romanian have an effect of variation in Viscri Saxon I expect to find shared grammatical rules (cf. Aikhenvald 2003, Matras 2007). When it comes to verb clusters, most West Germanic languages that display word order variation also favor specific word order with specific constructions. For example, Luxembourgish, a close relative of TrSax, allows both Aux/M-V and V-Aux/M orders in auxiliary + participle clusters, but requires Aux/M-V order for modal + infinitive clusters (Dubenion-Smith 2010). Pertaining to conjunction choice in TrSax, previous studies indicate that *end* is strongly preferred to conjoin finite clauses and *och* is used to conjoin phrases such as NPs, APs, and non-finite TPs (Shinohara 2016). But the Viscri Saxon examples shown in the introduction show that there are categories, such as finite clauses, where either *end* or *och* can be used. Generalizing over both areas that display variation in TrSax, if variants that have shared structures between TrSax and one of the contact languages are influenced by a contact language, such influences may be in the form of an expansion of their function in TrSax modeled after their corresponding counterparts in the contact language. For example, if V-Aux/M order is possible in all types of constructions in German, it may be possible in all types of constructions in TrSax under the influence of German. Conversely, because the conjunction *und* ‘and’ can be used with all kinds of categories in German, TrSax *end* ‘and’ could also occur with all kinds of categories if it is influenced by German *und*.

Deciding whether the source of a particular morpho-syntactic feature is language internal or contact induced can pose difficulties. An interesting example is the case of preposition

stranding in Quebec-French, which could be easily attributed to influence from preposition stranding in English, but is discussed as a language-internal development in the literature (Appel and Muysken 1987, Poplack et al. 2012). The following examples from Appel and Muysken (1987:160) show an instance of preposition stranding in Quebec French in (5), the typical preposition use in Standard French in (6) and the English equivalent, which contains preposition stranding as well, in (7). The prepositions are indicated in bold:

- (5) la fille que je sors **avec**
the girl that I go out with
‘The girl that I go out with.’ Quebec French (Appel and Muysken 1987:160)
- (6) la fille **avec** qui je sors
the girl with that I go out
‘The girl that I go out with.’ Standard French (Appel and Muysken 1987:160)
- (7) the girl that I go out **with** English (Appel and Muysken 1987:160)

Phrase-final prepositions are prescriptively ungrammatical in Standard French, but they are acceptable in English, thus making the example shown in (5) a good candidate for an example of contact-induced change. Poplack et al. (2012) argue that preposition stranding in Quebec French is a language-internal change and not a change induced by contact with English. The evidence they bring is twofold. First, the type of preposition stranding encountered in Quebec French is also present in Metropolitan French (from Paris), and second, preposition stranding in Quebec French is limited to relative clauses, while in English it can occur in main clauses as well. It can be argued that the more limited use of preposition stranding in Quebec French as compared to English is not strong enough evidence against contact-induced change. As Thomason (2010:34) points out, transferred structural features are often not a perfect match between the source language and the receiving language, hence they do not need to be identical in the two languages.

In a response to Poplack et al.’s (2012) study, Muysken (2012) suggests that a contact explanation for preposition stranding in Quebec French might still provide an account for the phenomenon (among other possible explanations), pointing out that several studies found contact-induced changes to occur in relative clauses. Generalizing over several studies that analyze contact-induced changes in relative clauses (e.g. Nadkarni 1975, also discussed below), Muysken (2012:237-238) proposes that relative clauses may be a vulnerable area for language

(Nadkarni 1975). The examples below illustrate the difference between Konkani relative clauses (10), Kannada relative clauses (11), and the Kannada influenced Konkani relative clause (12):

(10) [jo mhantaro pepar vaccat assa] to daktaru assa
 REL old-man paper reading is that doctor is
 ‘The old man that is reading the newspaper is the doctor.’
 Konkani (Nadkarni 1975:675)

(11) [yava mudukanu pepar odudda iddano] avanu daktaranu iddane
 which old-man paper reading is that doctor is
 ‘The old man that is reading the newspaper is the doctor.’
 Kannada (Nadkarni 1975:675)

(12) [khanco mhantaro pepar vaccat assa-ki] to daktaru assa
 which old-man paper reading is that doctor is
 ‘The old man that is reading the newspaper is the doctor.’
 Konkani (Nadkarni 1975:675)

The native Indo-Aryan relative clause typical for Konkani is introduced by the relative particle *jo*, as in (10), while the Kannada relative clause is introduced by a relative pronoun *yava* ‘which’, as in (11). Konkani relative clauses can also be introduced by a relative pronoun, *khanco* ‘which’, a pattern that was formerly not encountered in Konkani and is not present in other Indo-Aryan languages closely related to Konkani. The new Konkani relative clause also contains the verb marker *-ki* that corresponds to the element *-o* marking the verb in the Kannada relative clause, hence becoming more similar to the structure of Kannada relative clauses. Nadkarni’s (1975:675) most compelling argument for syntactic transfer from Kannada into Konkani is that this structure was not encountered in Konkani in earlier stages of the language¹¹, and is not present in other languages that are from the same language family as Konkani, but have less intense contact with Kannada. Nadkarni (1975:673) argues that in the case of Konkani syntactic transfer was initiated by intense bilingualism, a condition that can lead to changes in various subsystems of language structure.

These studies indicate that language contact effects occur in a receiving language in relative/ subordinate clauses in cases of prolonged contact where languages are separated in the community (e.g. Jendraschek 2011) and in cases of intense bilingualism (e.g. Nadkarni 1975). The first case study in my dissertation (Chapter 5) targets word order variation in verb clusters

¹¹ Thomason (2001) provides a rigorous methodology to detect contact-induced change that would give support to Nadkarni’s conclusions.

that occur in subordinate clauses. The second case study (Chapter 6) analyzes conjunction choice and the target structures occur in different types of clauses and in various positions of a clause. Therefore, one of the potential structural factors that could account for differences in the effects German and Romanian have on structural variation in TrSax is the ‘locus’ of the target variable. The effects of German and Romanian on word order variation in verb clusters might pattern differently from those regarding conjunction choice, because verb clusters occur in subordinate clauses and the structure of subordinate clauses tends to be volatile in language contact situations.

Variation between native and transferred forms is not uncommon in cases of language contact. Note that in all the cases of relative clause syntactic transfer presented above, both the native and the transferred structures were still used in the receiving language. Heath (1984:371) points out that a possible source of variation is the differential adaptation of transferred forms into the receiving language by members of the community, depending on degree of bilingualism. For example, first generation German immigrants in Australia had little to no English influence in their German, while second- and later-generation Germans showed more English influences in their German (Clyne 2003). When investigating German-English and Dutch-English bilingualism in Australia, Clyne (1992, 2003) found that both German and Dutch (verb last languages) were moving towards a more rigid SVO word order under the influence of English, which is dependent on word order due to lack of case marking. The tendency was for both languages to overgeneralize SVO word order, but it happened to different degrees in each language. SVO generalization was not found in the German of first generation German immigrants in Australia, but second or later generations of Germans were starting to use it. In contrast, the tendency towards SVO generalization was already present in the speech of first generation Dutch immigrants (Clyne 2003:132).

The difference between the two groups can be explained by differences in the degrees of bilingualism and by typological similarity among the languages involved. First, Germans in Australia were observed to use only German at home with their children, while the Dutch used more English with their children, thus exposing them less to Dutch (Clyne 2003:43). Second, Dutch is closer to English than German, in that it has less case marking, hence word order may play a bigger role in Dutch than in German (Clyne 2003:133). The fact that both languages were changing towards SVO order shows that certain forms in the heritage language of a group may

advance under the influence of the dominant language in the wider community, but differences in outcomes can be the result of more or less exposure to the heritage language. With less exposure to the heritage language such changes may be more rapid.

Given the more intensified contact between TrSax and Romanian in Romania and TrSax and German in Germany, the differences in the patterns of variation displayed by the two groups of trilinguals targeted in this study can show how changes in the language ecology affect the pace and direction of contact-induced changes in a language. Interestingly, when looking at German-Dutch-English trilinguals, Clyne (2003:135) found that SVO overgeneralization in Dutch under the influence of English occurred less frequently for Dutch speakers who also used German, i.e. in Dutch-German-English trilinguals, than for Dutch-English bilinguals, indicating that in the case of the former, German had a conservative effect on the typological drift of Dutch towards English.

Overall Clyne's (2003:134) findings show that trilingual transfer phenomena are similar to bilingual ones, but in the case of trilingualism, a morphologically more complex language (e.g. German) can slow down the changes in a morphologically less complex language (e.g. Dutch) under the influence of a third, typologically more analytic language (e.g. English). In the case of TrSax-German-Romanian trilinguals, Romanian could be the (morphologically more complex) language that decelerates changes in TrSax under the influence of German, a language that is typologically very close to TrSax. In the bilingual speaker examples discussed by Clyne (2003), degree of bilingualism played an important role in contact-induced change. Therefore, I assess the degree of trilingualism in the TrSax speakers involved in my study through the Bilingual Language Profile questionnaire (Gertken et al. 2014). The language dominance scores provided by the questionnaire are considered as one of the major factors that can have an effect on contact-induced change in TrSax. Thus, speakers who are German-dominant could show more German influences in their TrSax, speakers who are Romanian-dominant could show more Romanian influences in their TrSax (or less German influences), while balanced trilinguals could pattern somewhere in the middle.

The cases I presented so far show that structural transfer from a source language into a recipient language is a possible outcome of language contact in various scenarios. Intensity of contact, assessed by duration of contact, degree of bilingualism, and relative sizes of the groups coming in contact, is a strong predictor of whether structural transfer will occur. Furthermore,

variation between inherent and new forms is a common stage of contact-induced change. Backus et al. (2011:740) point out that once new structures are transferred into a receiving language from a contact language, the use of new structures may increase in frequency over time.

As I will elaborate more in Chapter 3, TrSax, German, and Romanian have been in prolonged contact of about 800 years. However, German has been used as a literary language and it was spoken by a more restricted and educated group of Transylvanian Saxons. Unlike Romanian, German was not used by a separate group of people in contact with Transylvanian Saxons. Thus, the nature of contact between TrSax and Romanian in Romania and TrSax and German in Germany has changed abruptly and in the same direction as Transylvanian Saxons left Romania in a mass migration to Germany. Over the past 25 years, in TrSax speakers became exposed to and started using the contact language more in the two locations surveyed. It remains thus to be established what the effects of increased use of and exposure to German and Romanian are on the structure of TrSax in light of this intensified contact.

Such effects are further explored in experimental studies that not only show how frequency distributions of competing forms are modulated by the grammars of bilingual speakers, but also how innovations come into a language through a contact-language. Crucially, use and exposure to the contact language or language dominance are included as central predictors of contact effects in these studies. I review some of the relevant studies in the following section.

2.2 A model of contact-induced change based on cross-linguistic priming studies

More recently, processes and outcomes of language contact have been explored through psycholinguistic studies. More specifically, experimental and corpus studies are investigating the effect of cross-linguistic priming on language change (see Kootstra and Muysken 2017 for an overview), and these studies show that cross-linguistic interaction can lead to contact-induced language change. Priming refers to speakers' tendency to re-use structures they were recently exposed to, and in a cross-linguistic context it refers to the effect a speaker's experience in one language has on the structure of the other language. Assuming that the languages of a bilingual can be simultaneously activated (cf. Grosjean 1998, 2001), recent experience in one language can influence processing in the other language (Marian and Spivey 2003) thus leading to cross-linguistic interaction.

For example, Hartsuiker et al. (2004) showed that the recent use of one structure in a language leads to the repetition of the same structure in another language. They conducted a cross-linguistic syntactic priming experiment involving Spanish-English bilinguals who learned Spanish as their first language and English second. The purpose of their experiment was to determine whether the use of active/passive voice constructions in Spanish would prime similar constructions in English. Participants interacted with a bilingual confederate in a picture description task where the confederate would use Spanish and participants would respond in English. Results of their experiments show that participants were more likely to produce a passive voice utterance in English after hearing a passive voice utterance in Spanish, as compared to hearing an active voice sentence in Spanish. These results indicate that structures that are shared between the languages of a bilingual are most prone to contact effects.

These findings have direct implications for the case studies treated in this dissertation: given that variation in both areas of TrSax targeted in this dissertation occurs between variants that have overlap with German and with Romanian, these two areas should be good candidates for contact effects from either language. In the case of verb clusters, the V-Aux/M order syntactically overlaps with the required order in German verb clusters, while the Aux/M-V order overlaps with the order required in Romanian verbal complexes. When it comes to conjunctions, there is functional and phonological overlap between TrSax *end* and German *und* ‘and’ (i.e. both conjoin TPs, but German *und* can conjoin all kinds of categories), and functional overlap between TrSax *och* and Romanian *și* (i.e. both particles function as conjunctions and additive particles in their respective language).

Hartsuiker et al. (2004) do not discuss the implications of their findings for the outcomes of language contact, but several studies using similar experimental designs explain how cross-linguistic priming can lead to long-term language change. Kootstra and Dodens (2016) investigated how cross-linguistic recent and prior experience influence syntactic choices across languages in Dutch-dominant Dutch-English bilinguals. Recent experience was assessed in the form of cross-language structural priming, while prior experience was assessed through verb bias, i.e. the frequency with which particular verbs are used with specific structures. If the same types of verbs would be used with similar structures across the languages of a bilingual, this would indicate that cross-language activation at the lexical level influences linguistic choices at the syntactic level. Long-term, cumulative priming effects were also assessed by conducting

priming experiments in several blocks and testing whether priming effects persisted from one block to another. Participants heard sentences in one language and were asked to describe a picture in the other language. The targeted structures were dative events that can be described through a prepositional-object construction (PO), e.g. *John gives the book to Mary*, or a double-object constructions (DO), e.g. *John gives Mary the book*.

Kootstra and Dodens (2016) also looked at whether priming in a bilingual would be possible from either language, i.e. not just from their L1 to their L2 (as in the study described above), but also from the L2 to the L1. Participants were tested in a Dutch sentence - English picture condition (dominant to non-dominant language), and an English sentence - Dutch picture condition (non-dominant to dominant language). Significant effects for cross-linguistic syntactic priming and verb bias were present in both conditions: participants were more likely to produce a DO in the target language after they heard an utterance with a DO versus a PO construction in the prime language. Furthermore, participants produced more DO constructions if the verb in the target picture was biased towards a DO construction in both conditions.

Combined, these results suggest that the languages of a bilingual are connected at the lexical and syntactic level. Cross-linguistic priming effects were also long-term in that they persisted between experimental blocks, but such effects were only found from Dutch to English, i.e. from the dominant to the non-dominant language. These results have implication for the outcomes of language contact: they show that the long-term cumulative effects of cross-linguistic priming can influence the frequency distributions of linguistic structures, thus leading to language change.

One of the important findings in Kootstra and Dodens's (2016) study is that priming is strengthened by co-occurring lexical features, i.e. lexemes that are used with a specific structure in one language will be used with the same structure in the other language of a bilingual. This is confirmed also by the findings in Travis et al. (2017), in a study that offers insights into cross-linguistic priming beyond experimental. They analyzed both within and cross-language structural priming of Spanish 1sg subject pronoun expression (*yo* 'I'), which is optional in Spanish but not in English, in a Spanish-English corpus from a bilingual community in New Mexico. Additionally, Travis et al. explored whether a lexical boost effect, i.e. a similarity between prime and target, would also account for the strength of priming. This was investigated by looking at whether an expressed Spanish pronoun would be more likely to prime an expressed Spanish

pronoun (*yo-to-yo*) than an expressed English pronoun (*I-to-yo*). First, they found that when the pronoun subject was expressed (rather than dropped) in Spanish or in English via a code-switch, the following pronoun would also be expressed. Thus priming this case occurred both within and across languages, but it was weaker across languages. This was established by looking at subject continuity across clauses, i.e. the degree to which 1sg subject priming would persist across intervening clauses. Second, they found that *yo-to-yo* priming was stronger than *I-to-yo* priming, but they did not attribute these findings to a lexical boost effect on its own. Rather, they showed that such priming effects depended on the degree of association between subject pronoun + verb constructions. For example, priming effects were smaller when targets contained verbs that favor expressed 1sg subjects, such as cognition verbs. Thus, Travis et al. suggest that while a lexical boost effect can strengthen priming, language-internal constraints are not weakened in a bilingual context. Furthermore, they argue that exploring the associations that exist between the lexicon and the grammar can lead to a better understanding of how bilingual grammars overlap and how they shape every-day language use.

These studies underline the effect of language dominance on variation in a language and the fact that lexemes and structures tend to be interconnected in transfer. Pertaining to the effect of language dominance on variation, as I pointed out in Chapter 1, Viscri Saxon recordings made in the 1970s indicate that both V-Aux/M and Aux/M-V orders were present in Viscri Saxon verb clusters at the time. One of the ways increased use and exposure of German could influence verb clusters in Viscri Saxon is by an increased use of V-Aux/M (German like) order. Romanian would have the opposite effect, i.e. increased use of Aux-V order (Romanian-like).

The lexical effect findings in Kootstra and Dodens (2016) and Travis et al. (2017) are especially relevant when looking at conjunction choice in Viscri Saxon, as the main effects I investigate are not related to the transfer of the lexemes that represent each conjunction, but the transfer of morpho-syntactic properties connected to conjunction choice. This would also fall in line with Matras' (2007, 2011) view on transfer as the dissolution of structural boundaries between the languages of a bilingual and the use of the same structure in both languages. The first transfer effect I expect to encounter in Viscri Saxon conjunction choice is the loss of the category specific function of the two conjunctions. The lexical boost effect would predict that German *und* 'and' would influence Viscri Saxon *end* in that the latter can be used with all kinds of categories in Viscri Saxon, because *und* can be used to conjoin all kinds of categories in

German. Similarly, the Romanian particle *și*, which functions as the conjunction ‘and’ (with all kinds of categories) and the additive particle ‘also’, could serve as a model for the function of *och* in Viscri Saxon: because the particle *och* can function as the additive particle ‘also’ in TrSax, the conjunction *och* may have gotten its category specific function due to competition between the two forms. Intensified contact with Romanian may serve as a model for Viscri Saxon in that it would indicate that the same particle (i.e. *și* in Romanian, *och* in Viscri Saxon) can function both as a conjunction and an additive particle without the need for category specific constraints when it is used as a conjunction. Once the category specific functions of either conjunction are lost in Viscri Saxon due to influence from the contact languages, variation between the two forms can be further influenced by the contact language through frequency distributions of variants.

Even though the studies mentioned earlier did not set out to specifically analyze and account for variation in a multilingual context, the targeted structures were present in variation and overlapped cross-linguistically. In a specific attempt to evaluate the effects of cross-linguistic priming on contact-induced change, Kootstra and Şahin (2018) compared the syntactic preferences of Papiamento-Dutch bilinguals from Aruba to those of Papiamento-Dutch bilinguals in the Netherlands. Papiamento, as spoken in Aruba and Curaçao has an absolute preference for DO constructions. Dutch uses both DO and PO constructions to express dative events. Contact-effects from Dutch in the Papiamento spoken in the Netherlands would be visible in the form of increased use of PO constructions. Participants from both groups were shown video stimuli of ditransitive events and were asked to describe them in Papiamento. Kootstra and Şahin conducted a baseline experiment first in which speakers used only Papiamento, in order to establish the syntactic preferences of both groups and determine if they differed from each other. A second experiment was run where participants were primed with audio stimuli of Dutch sentences before they would describe the clips in Papiamento. Results of the first experiment showed that participants in the Netherlands used significantly more PO constructions than participants in Aruba, thus indicating that the Papiamento spoken in the Netherlands is changing under the influence of Dutch. Results of the second experiment showed that Dutch primes influenced PO structures in Papiamento in both groups. These results strengthen the findings from the first experiment, namely that contact-induced effects from Dutch influence syntactic choices in Papiamento. These results complement the findings described in Kootstra and Dodens

(2016) by showing that cross-linguistic syntactic priming occurs even in cases where the primed structure is not commonly used in the target language. This would explain how structures transfer from one language into the other before they become more conventionalized over time.

The methodology used by Kootstra and Şahin (2018) shows that comparing two groups of bilinguals with different levels of language dominance can give insights into how a contact language (i.e. Dutch) influences a recipient language (Papiamentu). A similar methodology is used in this dissertation with the purpose of identifying contact effects from German and Romanian on Viscri Saxon. However, the target population is comprised of trilingual speakers, because Viscri Saxon has been historically used along German and Romanian and it is not possible to use a monolingual variety for comparison with a contact variety. These studies are still very relevant to the current study in that they take into account language dominance and they target similar features that the languages in contact have with each other. Comparing data from Viscri Saxon speakers with different levels of language dominance in German and Romanian (cf. Kootstra and Dodens 2016, Travis et al. 2017) should not only inform us about the effects of German and Romanian on Viscri Saxon, but also about the features that remained stable despite intensified contact with German and Romanian if no differences are detected between the two groups.

A similar comparison of bilinguals with different levels of language dominance delivers a clear account of how innovative constructions in one language are modeled based on constructions in another language. Fernández et al. (2017) set out to test whether bilinguals become more tolerant to constructions that are ungrammatical in their native language, but are grammatical in the contact language, thus changing their L1 representations over time based on their L2 experience. They tested two groups of Portuguese-dominant Portuguese-English bilinguals in a sentence recall/sentence matching experiment that contained Portuguese and English sentences modeled on constructions that were grammatical in English but not in Portuguese. Participants read a sentence and then pressed a button to record an oral recall of that sentence. Processing difficulty was measured based on reading times, speech initiation times, and errors in production. The two bilingual groups differed in their level of English proficiency and their results were also compared to an English monolingual group. Results of this experiment show that high-proficiency bilinguals had a higher tolerance to ungrammatical constructions in Portuguese. The two bilingual groups performed similar to each other when

processing English sentences and both groups showed a lower tolerance towards the target constructions than monolingual English participants.

In a second experiment, Fernández et al. used a cross-linguistic priming procedure to compare the performances of Spanish-English bilinguals in the USA to those of Spanish-English bilinguals in Argentina. This allowed for a comparison between high-contact and low-contact Spanish varieties, and for control of language proficiency in English. They used constructions that were shared between the two languages (e.g. active/passive voice alternations) and constructions that were not shared (e.g. DO and PO alternations, realized differently in English than in Spanish) to determine whether recent experience with a target construction in one language would prime a similar construction in the other language. Their experiment was comprised of a picture description task in Spanish preceded by an English or Spanish prime in the form of a written sentence. Priming effects were significant both in the case of similar and dissimilar constructions, and there were no significant differences between the two groups, thus indicating that proficiency in English was not a significant modulator of cross-linguistic priming effects. Furthermore, both groups produced innovations in their Spanish after being exposed to English primes, but the high-contact bilinguals produced significantly more innovations than the low-contact bilinguals. Such innovations can offer an insight into the process of contact-induced language change, as they exist in variation with already established forms in the receiving language. Thus Fernández et al. (2017:264) propose a model of contact-induced change according to which once innovations are introduced into a language through a contact-language, they exist in variation and competition with traditional forms, and shifts in the frequency distributions of competing forms are mediated through cross-linguistic priming. Depending on the direction and strength of priming effects, innovations could over time become the preferred form or go out of use.

These results could explain how bilinguals renounce the structural boundaries between languages for specific subsystems thus leading to structural transfer from one language into another. For example, the function of the conjunction *end* could extend beyond conjoining tense clauses under the influence of German. Such occurrences might seem ungrammatical at first, but they would become more and more tolerated due to contact effects from German and coexist in variation with already established forms, i.e. both *end* and *och* should be possible in the same environments in high-contact German trilinguals. Romanian would have a similar effect for *och*:

if *och* was not used to conjoin finite clauses in the past, high-contact Romanian trilinguals would use *och* with (non-finite) phrases and tense clauses.

The studies discussed so far bring evidence that diachronic language change is the result of sustained interaction between a bilingual's two languages. Innovations come into a language due to bilinguals' tendency to establish correspondences between their languages and in this process structural boundaries between subcomponents of their languages seem to dissolve. Constructions that were initially ungrammatical or dispreferred in one language become more tolerated under the influence of a contact language and over time incorporated into the grammar of the language. These studies show that bilinguals establish correspondences between their languages, sometime even by resetting the realization of argument structure (i.e. Fernández et al. 2017). These findings fall in line with Matras' (2007, 2011) view on transfer as the separation between two subcomponents of a speaker's linguistic repertoire and the use of the same structures or categories across his/her languages. However, these studies only incorporate the social circumstances of language contact to a limited degree.

Thomason and Kaufman (1988) point out that the social circumstances are the wildcard when it comes to likelihood of transfer. Structural similarity between the languages in contact and shared structures may facilitate transfer and contact effects from one language to another, but they can only account for the likelihood of transfer to a certain degree. The two areas of structural variation that I analyze in this dissertation, i.e. word-order variation in verb clusters (Chapter 5) and conjunction choice (Chapter 6), are both morpho-syntactic phenomena, but there are some differences between the two. In the case of verb clusters variation is in word order, but the forms of the auxiliary/modal and lexical verb are not affected. In the case of the conjunctions, there are two different forms, *end* and *och*, and each conjunction favors specific categories. As the two case studies will show, there might be an additional semantic dimension in the case of the two conjunctions that is not present in the case of verb clusters. Because the social factors in the two communities I am investigating remain constant regardless of the linguistic structure I am analyzing, a brief overview on possible linguistic factors determining the 'borrowability' of structures is in order.

2.3 Borrowing hierarchies and likelihood of borrowing

When it comes to likelihood of borrowing, generalizations are made based on how frequently types of borrowings (i.e. what categories tend to be borrowed) are attested cross-

linguistically. Thomason and Kaufman's (1988:74-76) borrowing scale, for example, specifies that non-basic vocabulary is borrowed before basic vocabulary and structures in cases of less intense contact, and more intense contact among languages in a speech community may lead to a higher likelihood of structural borrowing. Their scale also distinguishes between some types of structural categories in cases of intense contact, i.e. derivational morphology tends to be borrowed before inflectional morphology, but they point out that speakers' attitudes can lead to exceptions to such tendencies and potentially hinder structural transfer to some extent (Thomason and Kaufman's 1988:72).

Perhaps one of the challenges in establishing borrowing hierarchies comes from the fact that the same categories behave differently in different language contact contexts. For example, Otheguy et al. (2007) showed that contact between Spanish and English in New York resulted in lower rates of null subjects in the Spanish of speakers who were born and raised in New York as compared to the Spanish spoken by speakers who immigrated after the age of 16. Overt subject pronouns are much more frequent in English than in Spanish, the latter being a pro-drop language allowing high levels of variability in the use of null and overt pronouns in specific syntactic environments. The cross-generational differences in the use of null subjects in the Spanish spoken in New York show that contact-induced changes can advance rapidly in cases of bilingualism and that such changes can come in the form of the overgeneralization of certain forms already present in a language (cf. Baptista et al. 2014).

Targeting the same structures, Nagy (2018) analyzed heritage language (HL) production data from different generation speakers of eight heritage languages (e.g. Cantonese, Italian, Korean, Russian, Faetar etc.) in contact with English in Toronto. All the languages targeted in Nagy's analysis differed from English in that they allowed null subjects. The rate of overt subjects in each language was analyzed in connection to socio-linguistic factors. Data from different generations was used to establish differences between speakers that had more contact with English (2nd and successive generations of HL speakers) and speakers that had less contact with English (1st generation). Results of the analyses did not show any systematic links between rates of over subjects and the sociolinguistic factors they tested, thus leading Nagy (2018) to conclude that contact effects from English could not be detected in the analyzed HL varieties.

In another study Nagy et al. (2017) analyzed null subjects in several varieties of Faetar (Francoprovençal, Italy) and compared the homeland variety to the heritage language variety in

Toronto, Canada in order to detect contact-induced changes in each variety. The influence of Italian would be reflected in a high rate of null subjects, while influences from English would be reflected in a high rate of overt subjects. They found that both homeland and heritage Faetar were moving in the same direction (towards a lower rate of null subjects) and the grammatical factors that were included in the analysis had similar effects in both varieties. A generational difference was detected, but in the opposite direction of what Otheguy and colleagues (2007) found: young speakers in both sites were distancing themselves from Italian (which is also widely spoken in the Faetar community in Toronto) and from English in order to mark their Faetar identity by staying faithful to Faetar grammar.

The mixed results from the studies described above suggest that different contact situations lead to different outcomes when looking at the same structural domain. With the purpose of ranking a set of structural factors that facilitate transfer, Matras (2011) reports on two large-scale samples of language contact situations and the generalizations that can be established based on them. The first sample comes from about 75 dialects of Romani in contact with about 25 European languages. The second sample is a cross-linguistic survey on grammatical borrowing. The nature of contact among the languages in both samples is characterized by prolonged contact between the donor and recipient languages (of about 500-600 years), and the fact that speakers of the recipient language are bilingual and have been so for a few generations. The hierarchies proposed by Matras based on the two samples are in (13) below. They are established based on individual categories and category classes and tend to be implicational.

(16) Structural factors facilitating transfer (Matras 2011:208):

- a. nouns > non-nouns, function words
- b. free morphemes > bound morphemes
- c. derivational morphology > inflectional morphology
- d. agglutinating affix > fusional affix

The hierarchy shown in *a.* implies that nouns transfer before other types of categories such as verbs, or function words. At the same time the classes shown in (16) from *a-d* can be interpreted as a scale, where nouns are more likely to transfer than free morphemes and other categories in the classes below nouns (*b-d*). Matras (2011:208) following Johanson (2002) proposes that structural detachability and semantic transparency play an important role on where elements place on the scale. For example, nouns are high ranking because they are more autonomous than

other categories; their meaning does not depend on a particular environment. Categories that are lower on the scale, such as affixes tend to have a more abstract meaning and depend on other parts of speech. At the same time, the scale is established based on frequency of occurrence, i.e. items that rank high on the scale were most frequently attested as transfers in the samples analyzed. Matras (2011:211; 227) suggests that the categories included in the scale might behave differently in diglossic situations, where the recipient and the donor language each have their specific domain specialization. In such a context, items that are routinely employed in the recipient language and associated with that routine tend to be more stable in the language. In all contexts, however, transfer is facilitated by structural detachability and semantic transparency.

There are direct implications for Matra's claims for the two structural areas examined for contact effects in this dissertation. Conjunctions occur more frequently in the data than verb clusters, which are restricted to subordinate clauses that contain an auxiliary/ modal and a lexical verb. Furthermore, there are no apparent semantic motivations for word order variation in verb clusters in many West Germanic languages (cf. Wurmbbrand 2017), but in general conjunctions have a semantic dimension in addition their morpho-syntactic properties (cf. Haspelmath 2007). It remains to be established in Chapter 5 and Chapter 6 if there are any semantic dimensions for word order variation in verb clusters, and if there are semantic associations between a specific conjunction and the categories they conjoin in Viscri Saxon. If differences occur in how German and Romanian affect the two areas of variation in Viscri Saxon, it might be possible to attribute such differences to frequency of occurrence of the target structures and/ or their semantic transparency. Because conjunctions occur more frequently than verb clusters, it may be possible to encounter fewer contact effects from German and Romanian in conjunction choice than in verb clusters. Their frequency of occurrence may be anchoring them in the subcategorization frames that they are sensitive to, i.e. they are still tightly connected to the categories they are sensitive to, and thus less structurally autonomous than features such as verbs in verb clusters. As a result, their structural dependency may make TrSax conjunctions more resistant to change than verb clusters in intense contact situations (cf. Matras 2011:208). Establishing whether contact effects occur in the first place, by examining the distribution of each variant (in each area that displays variation) in Viscri Saxon will be the first step to take in each case study. Accounting for contact-induced change will follow based on the steps discussed in Thomason (2001, 2010), described in the following section.

2.4 Accounting for contact-induced change

One of the challenges in identifying structural transfer is due to the high likelihood for languages that are genetically related (such as TrSax and German) to develop similar structures without them being in contact (Aikhenvald, 2007). Thus, contact-induced syntactic change is harder to identify when two such languages are in contact. Thomason (2001:93-94; 2010:34) proposes the following framework for identifying and determining contact-induced structural change. First, the receiving language needs to be considered as a whole, as structural changes rarely happen in isolation. Second, a source language needs to be identified, which has been in significant enough contact with the receiving language for structural changes to occur. Once the features that transferred from a source language to a receiving language are identified, we must prove that those features are shared. Finally, we must show that the receiving language did not possess those features prior to the contact, and that the source language did possess them. While the steps are clearly laid out, Thomason (2001) recognizes that there are possible limitations in following all these steps successfully, especially the last two steps. To show that a transferred structure in TrSax is shared with corresponding structures in German or Romanian, I will first analyze whether they share the same grammatical properties. The last step, however, is especially challenging when working with an orally transmitted language such as TrSax that lacks substantial diachronic documentation. To tease apart contact-induced variation from language-internal variation, I compare two groups of TrSax speakers with different access, use, and exposure to German and Romanian and I factor in language dominance as a potential modulator of variation between native and transferred forms. If variation patterns similarly across groups and speakers with different levels of dominance in German and Romanian it can be taken as an indication that the structures that are in variation are well established in the language. If significant differences are found between groups and across speakers, I can potentially predict the trajectory of change in TrSax in connection with language dominance.

Having laid out the theoretical framework, I will give a detailed overview of the history of Transylvanian Saxons in Romania and the nature of the contact between TrSax and German, and TrSax and Romanian in the following chapter.

Chapter 3

Historical And Sociolinguistic Overview Of Transylvanian Saxon

The purpose of the present chapter is to provide historical and sociolinguistic evidence for the formation and maintenance of TrSax in Romania, and to describe the roles German and Romanian played in TrSax communities over the centuries. This will lead to a better understanding of the historical events that shaped TrSax communities and their language, and the distinct sociolinguistic factors that defined TrSax linguistic ecologies over time. In doing so, one of my aims is to offer a richer picture of the nature of language contact between TrSax, German, and Romanian.

I start with an overview of the history of Transylvanian Saxons and their migration to Transylvania, Romanian in the 12th century AD. I describe the events that led to the formation of several TrSax dialects in Transylvania, the adoption of German as an official language in TrSax communities, and the place of Romanian in these events. I continue with an overview of the key sociopolitical events from the 20th century that led to the decimation of TrSax inhabitants in Romania and to a drastic reconfiguration of the linguistic ecologies in TrSax communities. I use the Viscri Saxon community as an example of how these events affected the TrSax population and how they reshaped language practices in TrSax communities over the past 70 years.

3.1 The origins of Transylvanian Saxon

Transylvanian Saxons came to Transylvania as colonists from the Rhine and Moselle regions in Western Germany, Luxembourg, and Flanders between the 12th and 13th century AD. All Germanic colonists were called *Saxones*¹² in Hungarian court chronicles from the 12th century AD, which were kept in Latin at the time (Arvinte 1968:405). The colonists came in several waves over east-middle Germany and settled in three separate regions in Transylvania between 1141 and 1300 (Mitzka 1943). The first TrSax settlement developed in southern

¹² Transylvanian Saxons were mistakenly called *Saxones* because they are not from the Saxony region (*Sachsen*) in Germany. The name *Sachsen* ‘Saxons’ prevailed and this can lead to confusion on occasions, because TrSax and the Saxon dialect are not related. The first colonists are also referred to as *Flanders* in some of the early chronicles (Mitzke 1943).

spoke Hungarian), and Romanians (*Rumänen*). Even though the region was not densely populated at the time, Transylvanian Saxons lived in close proximity to these other ethnic groups from early on.

Ney (1984:12-14) further describes how TrSax was formed during the colonization of the three regions. Transylvanian Saxons were granted significant administrative and religious autonomy in Transylvania by the Hungarian kings. They built villages and later cities in a systematic way, and established their main administrative and religious center in Sibiu (Hermannstadt). Colonists lived in close proximity and contact with each other, and this led to the development of a mixed, more uniform language from the different varieties settlers brought to Transylvania. There is a consensus that all TrSax dialects are closely related, and that they exhibit many similarities to Middle and Moselle Franconian (and Middle German more broadly) and Luxembourgish (Schulerus 1906:15, Klein 1961:44-67, Haldenwang 2013:137). The early settlement patterns led to the formation of three major TrSax *Sprachinseln* ‘language islands’ in Transylvania that could still be distinguished more recently. Figure 2 below depicts a map of the three language islands at the beginning of the 20th century:

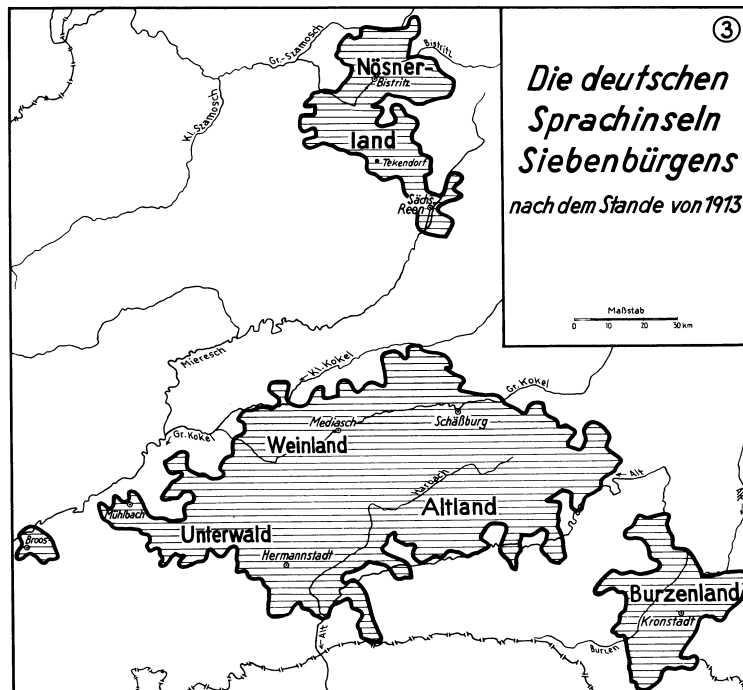


Figure 2 – The Transylvanian Saxon language islands around 1913
(Source: Klein 1961, map number 3)

The development of the TrSax dialects in relative isolation from each other led to several linguistic differences among the dialects, but they also display similar characteristics, which allow the dialects from all three regions to be traced back to the same original varieties that contributed to the formation of TrSax, i.e. Moselle Franconian and Luxembourgish (Mitzka 1943).

Scheiner (1895) investigated the TrSax dialects in the three different regions by conducting fieldwork in several localities in each region. He found that, while there were some differences among dialects from one region to another, they displayed many syntactic, phonological, and lexical similarities. This prompted Scheiner to classify the TrSax dialects from the three regions further into two main dialects (based mostly on phonological and lexical characteristics): northern TrSax (the northern settlement, shown on the map as *Nösnerland*) and southern TrSax (the two southern settlements, shown on the map as *Weinland*, *Altland*, *Unterwald*, and *Burzenland*). Scheiner's (1895) study indicates that, despite their geographical isolation, TrSax dialects still displayed many similarities to each other and were widely spoken in the three regions at the end of the 19th century.

The successful preservation of TrSax in Romania can be further attributed to historical events that supported the privileged status Transylvanian Saxons enjoyed in Transylvania and gave them a sense of ethnic unity. Furthermore, as I will discuss in the following section, the separation of languages in the TrSax communities and the nature of contact with German and Romanian also led to the successful maintenance of TrSax.

2.2 German and Romanian in Transylvanian Saxon communities

Over the centuries, Transylvanian Saxons belonged to the middle and upper social classes in Transylvania. The well-educated Transylvanian Saxons studied at German universities in Halle, Leipzig, and other cities as early as the 15th century, thus enforcing the use of German among the nobles. They represented only a small fraction of the TrSax population, though, which was mostly comprised of craftspeople, traders, and wealthy farmers (Ney 1984:15).

Transylvanian Saxons officially adopted the protestant religion in the 16th century, marking themselves as a unified and separate ethnic group in Transylvania. Such events also prompted Transylvanian Saxons to mark their collective identity through their own language, TrSax. While there are some documents written in TrSax dating back as early as 1450, official

documents were kept in Latin or German until the 16th century. After the reformation of the church, German became the official language for such purposes.

The German language found in written documents from the 15th and 16th centuries in Transylvania is characterized as having Middle High German (MHG) sentence construction, phonological characteristics of Early New High German (ENHG), combined with phonological and lexical characteristics of the local TrSax dialects. The German spoken in Romania continues to exhibit influences from the TrSax dialects along with characteristics of East and West Middle German throughout the 19th century. A circular decree imposes the replacement of any variety used for official purposes with Standard German between 1846-1848 (Dogaru 2007:4). At that time, Transylvania was part of the Austro-Hungarian Empire (since 1691). Thus, contact between TrSax and Standard German intensifies when Standard German becomes the only accepted literary language in TrSax communities and the official language imposed in church and school. When exactly written TrSax was given up entirely is not clear, because Transylvanian Saxons had their own literature both in German and in TrSax at the beginning of the 20th century (Ney 1984:10-16).

The evidence presented above indicates that German has been present in TrSax communities as a literacy language for several centuries. However, the German spoken in Romania was used mostly by a select group of Transylvanian Saxons. Otherwise, Transylvanian Saxons had limited access to German for religious and official administrative purposes. As I will discuss in the following section, the regular use of German among Transylvanian Saxons become common in the 20th century, once primary schooling became mandatory.

The contact between Transylvanian Saxon and Romanian, however, has been of a somewhat different nature over the centuries. The two ethnic groups, i.e. Transylvanian Saxons and Romanians, lived in close proximity to one another, as Romanians have been the dominant ethnic group in Transylvania over the centuries. They were amiable neighbors, but the two ethnic groups were in sporadic contact with each other over the centuries, and their communication was limited to trade or sheep herding (Klaster-Ungureanu 1958). This was promoted by the separation of the ethnic groups in TrSax villages as follows: Transylvanian Saxons typically occupied most of the village, while ethnic Romanians lived at the peripheries. The latter were historically an underprivileged group with few rights while Transylvania was under Hungarian occupation, thus Transylvanian Saxons and Romanians belonged to different social classes. The

groups were further separated religiously, i.e. each group had their own church, and many Transylvanian Saxons would not encounter Romanians even if they lived in the same village. However, the shepherders or the merchants would come into contact outside of the villages.

Therefore, despite prolonged contact between the languages, Romanian seems to have had a remarkably small influence on TrSax (McClure 1973:164). More recent events, however, reshaped TrSax communities and their linguistic ecologies, leading to more intense contact with Romanian. I will further discuss these events in the following section.

3.3 Recent sociopolitical events with an effect on TrSax

The end of World War II led to the decimation of TrSax inhabitants in Romania. Due to their German heritage, many Transylvanian Saxons were sent as laborers to Russia as a war debt paid by Romania, while others retreated with the German army to avoid deportation. Many more left Romania in the years immediately after the revolution in 1989 when country borders opened, and immigrated to Germany (Bottesch 2007:344).

Table 1 below gives an overview of the decline in the numbers of TrSax inhabitants in the Braşov County from 1930 – 2011. This county roughly corresponds to the *Burzenland* dialectal region shown in Figure 2.

Year	1930	1956	1966	1977	1992	2002	2011
Population	50,585	39,546	40,857	38,623	10,059	4418	2923

Table 1. Number of Transylvanian Saxons in the Braşov County from 1930 to 2011
(Source: Pascu 2016: 352)

The first drop in the TrSax population is evident in 1956, the first census conducted after World War II. A decline of 22% in TrSax inhabitants is seen in Brasov County between 1930 and 1956, and a more drastic decline occurs in 1992 and 2002, in the years immediately after the revolution in 1989. The number of TrSax inhabitants plummeted from 38,623 in 1977 to 10,059 in 1992 (a 74% drop) and to only 2923 in 2011, a 96% drop as compared to 1930. While these statistics are only for Braşov County, similar trends are observable in the rest of Transylvania. This specific county was chosen because Viscri, the village where participants in my study come from, is located in Braşov.

Immediately after WWII Romania became a communist country (from a former monarchy). With the industrialization process started by the communist regime, many people from the villages were mobilized to the cities for work. For Transylvanian Saxons, this also meant that they had to use more Romanian than in the past. Similarly, when Transylvanian Saxons were sent to work on cooperative state farms, they came in close contact with Romanians, and the use of Romanian among TrSax speakers intensified (McClure 1973).

However, the German identity of the Transylvanian Saxons only got stronger during communist times in Romania. They identified with a 'free' Germany, rather than with communist Romania. Especially in the cities, German words and phrases were used in TrSax conversations as a sign of education and sophistication (Gal 1987:647). While German maintained its prestige status amongst all Transylvanian Saxons, people who lived at the countryside used their local dialect in all interactions, and resorted to Standard German only if necessary (Isbăşescu and Mantsch 1975).

In 1974 there were about 180.000 Transylvanian Saxons living in 248 different localities in Transylvania, and they constituted about 1% of the total population of Romania. They were officially recognized as a German minority, and had access to German schools (including high school), German theater in bigger cities, their own newspaper written in German, and a regular TV broadcast in German (Ney 1984:19). Around that time, primary school became mandatory and most Transylvanian Saxons, whether they were in the cities or at the countryside, were learning German.

Transylvanian Saxons, who were able to do so, emigrated from Romania to Germany before the revolution in 1989 to escape the harsh life people in Romania were facing due to the communist regime. At that time, Germany and Romania had an agreement and an official process, through which citizens of German descent, i.e. Transylvanian Saxons and other German minorities from Romania, could legally immigrate to Germany. The process was lengthy, expensive fees were paid to the Romanian government, and some applications went through multiple trials. After the revolution, when borders opened, a considerable number of Transylvanian Saxons left Romania and settled in Germany. Many of them had relatives or close friends who were already living in Germany. Currently, there are around 6,000 Transylvanian Saxons in Romania. German is still recognized as a minority language and there are schools that offer education in German.

To better illustrate how mass migrations of the Transylvanian Saxons to Germany affected TrSax communities I will discuss the case of TrSax in Viscri in more detail. The trends that are observable in Viscri could easily be extended to other TrSax localities. The decline in the TrSax population in Viscri affected the ways TrSax, German, and Romanian are used by Transylvanian Saxons in a way that is reflective of what happened in other TrSax communities in Romania. The evidence I present in the following section stems from sociolinguistic interviews I conducted with participants from Viscri.

3.4 Language contact and language use in Viscri, Romania

Viscrist is a multi-ethnic village in the Braşov County historically inhabited by Transylvanian Saxons, ethnic Romanians, and ethnic Roma. The latter two ethnic groups use Romanian as their main language. Table 2 below shows the distribution of the different ethnic groups in Viscrist from 1930 to 2011. The numbers of the TrSax populations available for the different years (indicated with grey), can be contrasted to the TrSax population numbers shown in Table 1 and similar trends in population decline can be observed.

Ethnic groups	1930	1975	1989	1993	2011
Tr. Saxon	562	342	279	30	15
Romanian	145	110	125	119	100
Roma	78	141	180	251	305
Other	2	30	30	47	0
Total	787	618	632	447	420

Table 2. Proportion of the ethnic groups in the population of Viscrist (1930 – 2011); Source: Corsale and Iorio 2013:24.

Transylvanian Saxons were the dominant ethnic group in Viscrist until 1989. Similar to the situation in the rest of the county, the number of Viscrist Saxons plummeted from 279 in 1989 to 30 in 1993 and to only 15 in 2015, when I conducted my initial fieldwork. The drop in the TrSax population was triggered by mass migrations of Viscrist Saxons to Germany. There is currently an active Viscrist Saxon community in the Nuremberg area in Germany composed of approximately

150 – 200 Viscri Saxons and their children. They are well connected to the community in Romania through a booklet that is released at the beginning of each year and contains the names, addresses and phone numbers of all Viscri Saxons (including the ones in Romania), and the events that will take place throughout the year in Germany and Romania.

The village of Viscri used to be divided in neighborhoods until 1993. Viscri Saxons inhabited four neighborhoods in the center of the village, while ethnic Romanians and Roma each had their own neighborhood at opposite margins of the village. The three ethnic groups had barely any contact to one another due to this separation of the village into neighborhoods designated for the different groups. My consultants report that ethnic Roma used to be hired for help around TrSax households in the past, and that most of them would learn a bit of TrSax to communicate with members of the household. Thus, Viscri Saxons would not use Romanian to communicate with the Roma they would hire. As Table 2 indicates, there has been a reversal of demographics in Viscri: Viscri Saxons, the former dominant population, are currently a minority, and Roma, formerly a minority, are the dominant population in Viscri. Romanian is currently the dominant language in Viscri, and Viscri Saxons use Romanian to communicate with the other ethnic groups in the village.

In the past, before the mass migrations, the spheres of usage for TrSax, German, and Romanian among Viscri Saxons were separated in a way consistent with triglossia: TrSax was used in the home and the TrSax community, German was used in school and in church, and Romanian was used to a limited extent in school (it was offered as a foreign language) and in interactions outside of the TrSax neighborhoods. German was well represented in the village through a German kindergarten and school (up to 5th grade) and through weekly church service in the Lutheran church. The kindergarten serves only as a museum today and the German school transitioned from a German school to a German-Romanian mixed school in the early 90s, and eventually to a monolingual Romanian school. There is currently no pastor in the village, and mass in German is held only on rare occasions in Viscri, if a pastor from a different community visits.

The relationships between ethnic Romanians and Viscri Saxons improved gradually in the 1950s due to cultural events that involved both ethnic groups, and the first TrSax – Romanian mixed families were formed in Viscri in the 1960s (van Haegen and Niedermaier 1997:205-209). While such marriages were rare and frowned upon in the TrSax community at the time, they are

currently very common. Furthermore, the use of Romanian by Viscri Saxons is also very common and has extended to the home domain through mixed marriages. There were no mixed marriages between Viscri Saxons and Roma at the time of my investigation.

Most of my consultants (both in Romania and in Germany) learned Romanian in German school as a foreign language (2 – 4 hours of instruction/ week). However, there were exceptions. For example, one of my consultants lived at the edge of the TrSax neighborhood and started speaking Romanian before she learned it in school by playing with her Romanian neighbors. A younger consultant also learned Romanian early on playing with Romanian children, because there were barely any TrSax children left in Viscri at the time she was growing up in the village. The neighborhoods started to disappear after 1989, currently ethnic Romanians and Roma live in the center of the village as well, and there is daily contact between the three ethnic groups in the village.

This drastic decrease in the Viscri Saxon population affected not only the degree to which TrSax is used in the village, but also the way Romanian and German are used by Viscri Saxons (and to some degree the use of TrSax by Roma). Even though the German school and the church are not active anymore, the remaining TrSax speakers still have use for German through tourism. Many tourists come from Germany and German can be heard in the village on a daily basis during the busy summer months.

Viscricri has been able to attract funds and build on its identity as a TrSax village through a process of heritagisation promoted by three key supporters: UNESCO, a British non-profit foundation (the Mihai Eminescu Trust), and a local TrSax resident (Corsale and Iorio 2014). Thus, Viscricri Saxons remained at the top of the socioeconomic hierarchy in Viscricri, attracting tourists and providing economic opportunities for the other inhabitants. Even though ethnic Roma are among the inhabitants benefiting from these opportunities, there is no need for them to use TrSax anymore.

Currently, among Viscricri Saxons in Viscricri, the spheres of usage for TrSax, German, and Romanian are intertwined, and there are no specific spheres of usage for the three languages, as was the case in the past. The main function for TrSax is to communicate with other Viscricri Saxons in the community or with family members. While TrSax is still used as a home language, only two of the speakers I interviewed in Romania had TrSax partners and were using TrSax with their children (and grandchildren). However, all Viscricri Saxons I interviewed, with the

exception of one, had TrSax parents and grandparents. Furthermore, there were no young children in Viscri learning TrSax at the time of my initial investigation (in 2015). The youngest speaker in the community was 30 years old at that time.

In contrast, consultants from the immigrant community in Germany report an increased use of German in the past 30 years, and very little to no use of Romanian. Furthermore, all consultants I interviewed in Germany have TrSax partners, and, with some small exceptions, they use TrSax at home with their partners and children. Some consultants report that they also use German with their children, and that most Viscri Saxon children who were born in Germany have only passive knowledge of TrSax.

As a general trend I observed in both communities, the last fluent speakers of TrSax seem to be the ones who were born in Romania, and share a similar linguistic background. Not only are Viscri Saxons in Nuremberg well connected to each other and have strong ties to the homeland, but most of them also have the same linguistic background to Viscri Saxons in Romania. Thus, as these TrSax speakers were growing up in Romania, they used TrSax, German, and Romanian in the same way as speakers who are still in Romania did. The linguistic ecology in both communities changed, as I described above, and TrSax speakers in Romania increased their use of Romanian, while speakers in Germany increased their use of German. At the same time, the mass migration of Transylvanian Saxons from Viscri to Germany resulted in more speakers of Viscri Saxon currently residing in Germany than in Romania.

Viscric Saxons from the two communities are similar to each other in that they still use TrSax actively, they find it important to use and preserve TrSax, and they identify strongly with their TrSax heritage. The homeland community has the advantage of living in a small village, where Viscric Saxons are at the top of the social hierarchy, thus it is not only easier for them to interact and connect with each other, but their social status gives them the advantage of preserving their TrSax identity. The immigrant community, while more scattered in the Nuremberg area, has a better numerical representation and they are still closely connected, which allows them to interact with each other and promote a positive image of their TrSax identity to the generations to come. However, TrSax children who were born in Germany seem to shift towards German due to their desire for integration in the wider community.

Summing up the current section, the languages used by Viscric Saxons are TrSax, German, and Romanian. These three languages were present in the village for as long as my

consultants (both in Viscri and in Nuremberg) can remember, and their parents and grandparents used all three languages in a specific way: TrSax was the first language of all Viscri Saxons, transmitted in the family and used orally at home and in the community, German served as a literary language and for religious service, while Romanian had limited function with other villagers that were not part of the TrSax community. The spheres of usage for the three languages have changed since 1989, and there are three major changes in the way the languages are used: 1) TrSax is used in limited interactions in Viscri due to a small number of TrSax speakers, and there were no children learning TrSax in 2015; 2) German is still used by Transylvanian Saxons in Viscri for writing and reading, and more recently for work purposes through tourism, but the German school was dissolved and church service is sporadic; Romanian is widely spoken by Viscri Saxons and used in different domains of their lives. This is perhaps the most important change, as Romanian used to have limited function in the TrSax community. However, the Viscri Saxon immigrant community in Nuremberg has limited to no use of Romanian, and overall TrSax is still used actively in the family and with the wider community.

3.5 Summary

The evidence I presented in this chapter indicates that Transylvanian Saxon was formed about 800 years ago on Romanian territory. There were several West Germanic varieties that were brought to Romania by settlers from different regions that contributed to the formation of TrSax. These settlers came in several waves to Transylvania, but once they arrived they organized themselves into three main regions and established a main administrative center in Sibiu. The colonization of the Transylvanian regions prompted settlers to work and live closely together, and this led to the formation of a more uniform language, currently known as Transylvanian Saxon. There are many indices that the different dialects can be traced back to Moselle Franconian and Luxembourgish, and dialects from the different regions display many similarities to each other until present days.

TrSax has been transmitted orally over the centuries, and has been used as the main language for communication in the home and the community. Even though TrSax has been actively used by Transylvanian Saxons, it did not serve as an official language for administrative, legal, educational, or religious purposes. German served as the official language for documents, instruction in schools, and in church starting as early as the 16th century, and this tradition persists to the present day. Transylvanian Saxons also used Romanian and/or Hungarian with the

wider community, depending on which ethnic group was in close proximity to or residing in TrSax localities. While the use of Romanian was uneven and limited over the centuries, the use of Romanian among Transylvanian Saxons increased after the 1970s. Romanian is one of the languages actively used in the Viscri Saxon community, but only among speakers who still reside in Romania. Speakers who reside in Germany report increased use of German and limited use of Romanian.

There are currently 248 localities in Romania where dialects of TrSax are spoken and they exhibit variation at the phonological, lexical level, and morpho-syntactic level (Sift 2015). At the same time, dialects display sufficient similarities to each other to be mutually intelligible. Thus, data from different dialects can be used as guidelines for what is possible in TrSax, but specific features that are encountered in a specific dialect will not necessarily be present in another. However, focusing in more detail on one dialect, and understanding how dynamics of language contact in a community can shape a dialect, will further our understanding of features that are prone to contact effects and features that tend to remain more stable. I will explore this further in two case studies on variation in Viscri Saxon in Chapters 5 and 6. The following chapter provides a detailed overview of the participants I interviewed in Romanian and in Germany and lays out the general methodologies I used in the two case studies.

Chapter 4

Data Collection And Methodologies

The present chapter provides information on the two groups of participants (from Romania and Germany), the data collection process in each site, and the general methodologies used in each case study. The data were collected on two separate occasions. I conducted an initial investigation in Viscri, Romania in 2015. There were only 15 TrSax speakers left in Viscri at the time of my initial fieldwork. During that time, I learned that about 150 Viscri Saxon speakers had been residing in the Nuremberg area in Germany for at least 25 years and that the two groups were still strongly connected to each other. I recruited and recorded seven participants in Viscri, Romania in 2015. I established a few contacts in the Viscri Saxon group in Germany after my initial fieldwork. I conducted a second investigation in the Nuremberg area in 2017 where I recruited and interviewed seven Viscri Saxon speakers. In both cases I used a ‘snowball’ technique to identify potential participants. I established an initial contact in each site, a member of the Viscri Saxon community, who identified other speakers of Viscri Saxon, who in turn identified more speakers. The deciding selection criteria were that participants were native speakers of the Viscri Saxon dialect, that they were originally from Viscri, and had spent at least a few years of their lives in Viscri. This latter requirement applied more specifically to participants recruited in Germany. Once participants were identified, I approached them directly or with the help of a research assistant in each site. The research assistants I worked with in Romania and Germany were native speakers of TrSax¹⁴ and they were also the ones who conducted the interviews with the Viscri Saxon speakers. This study received IRB exemption,

¹⁴ I worked with two research assistants in Germany, who were native speakers of Viscri Saxon. The research assistant I worked with in Romania was a speaker of the TrSax dialect from Saschiz, a village close to Viscri. There were some noticeable dialectal differences between his dialect and the Viscri Saxon dialect. For example, he used *sche* [ʃɛ] for ‘yes’, while speakers of Viscri Saxon use *ja* [ja]. He also used only one coordinating conjunction – *och* ‘and’, while speakers of Viscri Saxon use two conjunctions – *end* and *och*. It is beyond the scope of this dissertation to explore how such dialectal differences may have affected target structures in Viscri Saxon among speakers, who were interviewed by this RA.

thus no special measures needed to be taken in recruiting or recording the participants. The chapter is structured as follows: I will first give detailed information on the participants' background. I show that the two groups are similar in many aspects, such as (mean) age, language acquisition background, attitudes towards the languages they speak, etc. At the same time, the two groups are different when it comes to language dominance in German and Romanian. On average, participants in Germany are more German-dominant than participants in Romania, who in turn are more Romanian-dominant than participants in Germany. I then discuss the data collection process and procedures for handling the data. I conclude the chapter with a description of the general approach to analyzing variation in both case studies and the social factors that I considered to be relevant for the analyses of variation.

4.1 Participants

Seven Viscri Saxon speakers ages 30 – 78 were recorded in Romania and 7 speakers ages 30 – 75 were recorded in Germany using a sociolinguistic interview technique (cf. Labov 1981, Tagliamonte 2006). All participants had acquired Viscri Saxon from birth and (with the exception of one) were able to have a conversation in German and Romanian as well. While this was not the intended purpose, these criteria allowed a sample that would include various types of multilingual Viscri Saxon speakers, as I will discuss in more detail shortly. Viscri Saxon speakers, who were recruited in Germany, had lived there for at least 25 years.

In general, sociolinguistic research on synchronic language variation aims to capture a corpus of data from different age groups and socio-economic classes, and the corpus is ideally balanced for gender (cf. Otheguy et al. 2007). The main purpose of such a procedure is to capture the vernacular of a speech community. Because Viscri Saxon (and TrSax in general) is used only as a vernacular and there is no standard or prestige variety, there are no ways of speaking Viscri Saxon that would be indexical of a specific social class. As I pointed out in Chapter 3, dialects of TrSax are associated with the specific TrSax speech communities that use them, and speakers of a specific dialect seem to be aware of the features that make their dialect distinct from others. Thus, social class is not a relevant factor in this study. Furthermore, collecting data from a wide

range of speakers was not possible given the small number of Viscri Saxon speakers that still reside in Viscri.

I used a random sampling technique for participants in each location (cf. Tagliamonte 2006), and this procedure resulted in two groups of participants that are very cohesive in many ways as revealed by the extensive background information I collected in addition to the Viscri Saxon production data. The main difference between the two groups, as I will discuss in more detail in section 4.2 of this chapter, is in the use of German in Romanian: participants in Romania use more Romanian than participants in Germany, while participants in Germany use more German than participants in Romania.

I used the Bilingual Language Profile questionnaire (BLP; Birdsong et. al 2012) to collect data on the participants' background, their experience with each of the languages they speak, as well as their attitudes towards each of the languages they speak. The BLP is designed to assess language dominance based on four modules: language history, language use, language proficiency, and language attitudes. Participants answer questions related to their language acquisition history (e.g. age when acquisition started, years of schooling in each language), proficiency in each language (rated by participants on a 6 point Likert-scale based on self-perceived reading, listening, and writing skills), language use (based on percent each language is used on a weekly basis at home, at work, etc.), and language attitudes (rated by participants on a 6 point Likert-scale in terms of how much they agree with statements pertaining to language attitudes).

Table 3 and Table 4 below comprise the background data collected through the BLP questionnaire. The tables provide information about participants' age (at the time of data collection), the time they spent living in Germany (in years), the languages they speak, and the age at which they started acquiring each language. The last column in each table indicates the language the participants use at home. Participants in Romania are coded with RO and participants in Germany are coded with GE. Romanian is abbreviated with 'Ro' and German with 'Germ'. Participants are listed in ascending order based on age, so that RO 1 is the youngest participant in the Romania group, and GE 1 is the youngest participant in the Germany group¹⁵.

¹⁵ These participant codes and some of the background information will be relevant in the broader discussion of the case studies, especially in Chapter 5 where I discuss individual patterns of variation in connection with participant background information.

Participants in Romania			Years in Germany	Languages: Age when acquisition started			Home Language
Part	Age	Gender		TrSax	Germ	Ro	
RO1	30	F	6	Since birth	3	6	TrSax/ Ro
RO2	40	M	0	Since birth	3	7	TrSax/ Ro
RO3	47	F	12	Since birth	5	7	TrSax/ Germ
RO4	58	F	0	Since birth	7	7	TrSax
RO5	60	F	0	Since birth	6	7	Ro
RO6	60	M	3	Since birth	35	Since birth	Ro
RO7	78	F	0	Since birth	8	9	TrSax

Table 3. Overview of participants residing in Romania

Participants in Germany			Time in Germany	Languages: Age when acquisition started			Home Language
Part	Age	Gender		TrSax	Germ	Ro	
GE1	30	F	25	Since birth	3	28	TrSax
GE2	44	M	26	Since birth	3	7	TrSax/ Germ
GE3	49	F	32	Since birth	3	5	TrSax/ Germ
GE4	55	F	28	Since birth	5	7	TrSax/ Germ
GE5	58	M	28	Since birth	7	7	TrSax
GE6	65	M	31	Since birth	7	5	TrSax/ Germ
GE7	75	F	35	Since birth	7	7	TrSax

Table 4. Overview of participants residing in Germany

Participants share a very similar language acquisition background as a result of their upbringing in Viscri, Romania. All participants acquired TrSax from birth, German was acquired as early as the age of 3 in a kindergarten or a school where German was the language of instruction, and Romanian was mainly acquired once speakers started school.¹⁶ There is, however, an outlier in each group: RO 6 (Romania group) and GE 1 (Germany group). RO 6 learned both Viscri Saxon and Romanian from birth and he never learned German in a formal

¹⁶ As mentioned in Chapter 3, Transylvanian Saxons are considered a German minority in Romania, and it is very common for them to attend schools where the language of instruction is Standard German. Romanian is offered as a foreign language in such schools and instruction in Romanian is available 2-4 hours/ week.

setting. He comes from a mixed family, his mother was TrSax and his father was Romanian. He learned German at the age of 35 when he went to work in Germany. He spent 3 – 6 months per year in Germany over a period of 10 years and picked up enough German to feel comfortable in a conversation. At the time I conducted fieldwork in Romania, RO 6 had not worked in Germany for 15 years and his use of German had been limited to a few occasions per year ever since.

GE 1, the youngest participant in the Germany group, was immersed in a German-speaking country at age 6, much earlier than other participants, and, unlike the other participants in her group, she had very sporadic contact with Romanian throughout her life. She never learned Romanian in a formal setting, and her exposure to Romanian was limited to her yearly visits to Viscri while growing up, and the occasional conversations her parents had with Romanian friends in Germany. Her partner is a Romanian native speaker, but they use English to communicate with each other. Despite her more current efforts to learn Romanian through her partner, she did not feel comfortable enough to hold a conversation in Romanian.

There are some differences between the two groups in terms of the language the participants use at home, indicated in the last column of each table. First, some of the Viscri Saxons who reside in Romania, i.e. RO 5 and RO 6, have replaced TrSax with Romanian in this domain, while two other speakers from this group, RO 1 and RO 2, use Romanian as a home language along TrSax. Note that none of the Viscri Saxon speakers who reside in Germany use Romanian at home and all of them use TrSax as a home language, even if some participants use German as well for this domain. These latter participants report that their children, especially the ones that were born in Germany (i.e. after immigration), prefer to use German with them, even if they are addressed in Viscri Saxon.

The most prominent difference between the participants in the two groups is in the time they spent in Germany. On average, participants in Germany resided in Germany for 29 years. Note that some of the participants in Romania also spent some time in Germany (hence the 3 year average time spent in Germany among such participants), but some of them did not spend any time in Germany. As mentioned earlier, RO 6 spent 3 – 6 months at a time working in Germany over a period of 10 years. RO 1 resided in Germany for 6 years. She received her higher education (MA level) in Germany and spent four years working there. RO3 was among the Viscri Saxons who left Viscri after 1989 to settle in Germany, but she returned to Viscri after living in Germany for 12 years.

I will discuss differences and similarities among the participants in more detail in the following section (see Table 5), once I describe the information I gathered through the BLP in more detail. To determine whether there are significant differences between the two groups based on their sociolinguistic background characteristics, I conducted additional statistical analyses (i.e. t-tests) to compare group averages for several factors that were captured through the BLP.

4.2 Group comparison based on sociolinguistic background information and the BLP scores

The BLP questionnaire was translated from English into Romanian and modified to include three languages instead of two as the questionnaire was originally designed. By default, the different questions in the BLP have three answer options: one for each of the languages a bilingual speaker uses, and a third option for ‘Other languages’ speakers might use. I changed the ‘Other languages’ category to ‘Romanian’ in the questionnaire, so that the answers options would capture three languages instead of two. I administered the BLP to the participants during an interview conducted by myself. This allowed me to clarify any questions participants had about the instructions for completing each module of the questionnaire, and to control for potential errors in filling out the questionnaire by recording the answers and asking follow-up questions where necessary.

The BLP is set up to calculate a global language dominance score for each language by weighing in each module of the questionnaire (the different modules have different weights in the global score), and individual module scores for language history, language use, language proficiency, and language attitudes are provided as well. Language proficiency is one of the components of language dominance, but it is not the only component of language dominance. For example, one does not need to be bilingual to be proficient in a language. Bilinguals may be more dominant in one language than another across the board, hence the questions on language history (that include information about a bilingual’s education and time spent in a region where the language was the norm), and language use in varying settings (Gertken et al. 2014).

Table 5 below provides an overview of several relevant characteristics of the two groups of participants for comparison purposes. Age of acquisition for TrSax is not included as all the participants acquired TrSax from birth. Each number in the ‘Romanian participants’ and ‘Germany participants’ columns represents group averages and the numbers in the SD columns

represent the standard deviations from those averages. The last three rows show the global language dominance scores for each language.

	Romania participants	SD	Germany participants	SD
Age	53	15.59	53.7	14.6
Age of Acquisition German	9.14	11.52	5	2
Age of Acquisition Romanian	6.14	2.85	9.71	8.99
Years spent in Romania*	50	18.08	24.57	11.60
Years spent in Germany*	3	4.58	29.14	3.76
Language use score: German*	10.43	9.05	28.34	15.20
Language use score: Romanian*	18.84	16.64	0.47	0.53
Language use score: TrSax	23.98	11.11	24.29	13.24
Proficiency score: German	50.26	3.29	51.56	1.50
Proficiency score: Romanian*	52.21	1.53	41.51	3.15
Proficiency score: TrSax	37.94	5.09	30.16	1.98
Attitudes: German	42.16	5.53	50.26	1.68
Attitudes: Romanian	44.43	4.89	38.91	4.32
Attitudes: TrSax	52.86	1.89	53.18	0.95
Dominance score: German*	128.5	35.63	167.72	20.83
Dominance score: Romanian*	147.45	29.26	103.20	14.08
Dominance score: TrSax	144.61	21.06	135.07	15.95

Table 5. Characteristics of the participants

Asterisks indicate that there are significant differences between the Romania-participants and the Germany-participants for a specific characteristic and these differences were established by comparing group averages via t-tests in R. The t-tests confirm that the two groups are very cohesive in terms of age and age of acquisition of the different languages they speak. Participants in Germany spent significantly more time in Germany than participants in Romania ($t = -11.67$, $p < 0.001$), and significantly less time in Romania as compared to participants who reside in Romania ($t = 3.13$, $p = 0.01$). There are no significant differences between the two groups in terms of language use for TrSax, but there are significant differences when it comes to use of German and Romanian. German is used significantly more by participants in Germany than by participants in Romania ($t = -2.46$, $p = 0.03$). Romanian is used significantly more by participants in Romania than by participants in Germany ($t = 2.95$, $p = 0.02$).

Turning to self-rated proficiency, no significant differences were detected between the two groups for TrSax and German, but participants in Germany rate themselves as (significantly) less proficient in Romanian than participants in Romania ($t = 3.57, p = 0.006$). When comparing proficiency scores (as shown Table 5) for the three languages, it becomes evident that participants in both sites score lowest for TrSax in terms of proficiency. The overall lower scores for TrSax are due to fact that the questionnaire incorporates literacy in each language as an indicator of proficiency, and none of the participants are literate in TrSax (as it is only used as a spoken language). Note also that participants in Germany have lower self-assessed proficiency scores for TrSax. This might be connected to their ideologies about how the language should be spoken rather than their actual level of proficiency. Some of the participants in Germany would claim that they do not speak TrSax as well as it is spoken in the homeland, despite the fact that all of them use TrSax regularly at home and with the wider Viscri Saxon community in Germany, which is numerically stronger than the community in Romania.

In terms of language attitudes, participants from both groups are very similar in how they rate their attitudes towards each language; overall attitudes are positive towards all three languages and attitudes towards TrSax are the most positive in both groups. Participants in Romania have very positive attitudes towards both German and Romanian, and this indicates that Romanian as a language is now a part of the TrSax community just as much as German is. Even though participants in Germany rank Romanian lower than German, they still have positive attitudes towards Romanian as it is one the languages they know and a language they associate with the homeland.

The last three lines in Table 5 represent the language dominance scores for each language. The higher the average score is for a given language, the more dominant the group is in the respective language. Participants in Germany have significantly higher dominance scores for German and significantly lower dominance scores for Romanian than participants in Romania. However, there is no difference between the groups in terms of dominance for TrSax.

To sum up the participant characteristics discussed so far, there are two groups of multilingual participants who acquired TrSax as their first language and who have been exposed to and used German and Romanian to different extents in the past 25 years. There is a significant difference between the two groups of participants in terms of language dominance in German and Romanian, and it remains to be established if language dominance plays a significant role

when examining variation in TrSax. Having described the participants, I will turn to discussing the data that was used in the two case studies in the following section.

4.3 Procedure

Data collection. Each participant was recorded in an informal interview setting by a native TrSax speaker. I had a different research assistant (RAs) in each location. When I recruited participants, I was helped by the RAs and we used the ‘friend-of-a-friend’ technique (Milroy and Gordon 2008:75), by mentioning the name of the person who recommended them as good candidates for the study. I informed each participant that I would be recording the conversations in order to find out more about the Viscri Saxon dialect in particular and TrSax in general. We met with each of the participants on separate occasions in the participant’s home or at their work place. Each session was designed as a sociolinguistic interview, using the methodology described in Labov (1981) and Tagliamonte (2006). Sociolinguistic interviews are meant to create an informal space for a conversation in order to capture the vernacular speech style of a participant. The interviewer starts with general questions about community demographics and the participants’ background and progresses into more personal questions about the participants’ lives, tapping into topics such as a funny encounter or a time they got in trouble (Labov 1981: 32-34, Tagliamonte 2008:39). While the RAs had a set of questions ready for each session, I instructed them to let the conversation flow if it turns into a friendly, informal conversation. Participants and RAs were familiar with each other in both locations as it is a small community. Each of the interviews lasted between 45 minutes – one hour, totaling up to about 12 hours of recordings.

Transcription conventions. The recordings were taken with a Zoom H4N recorder and were then transcribed and translated into German using ELAN¹⁷ (Wittenburg et al. 2006). The transcription and translation were done with the help of the RAs who conducted the interviews, and two additional native speakers of TrSax. Since TrSax does not have a conventionalized writing system, we used the orthography guidelines proposed by Markel (2008) for writing TrSax. These guidelines recommend using German orthography with a few modifications in order to represent sounds or pronunciations that differ from German. For example, the high central vowel /i/ is represented with the letter ‘y’ in writing. Words in TrSax should be spelled as

¹⁷ ELAN is an annotation tool developed by the Max Planck Institute for Psycholinguistics, in Nijmegen, The Netherlands. ELAN is well suited for sociolinguistic research as it allows for transcription, coding, and preparation for statistical analyses (see Nagy and Meyerhoff 2015 for more detail).

close as possible to words in German so that they are easy to recognize (this applies mainly to cognates). The Eifler rule¹⁸ is observed in writing as it is in fluent speech. The Eifler rule is a phonological rule of TrSax according to which word final [n] is deleted (in fluent speech) when the following word starts on a consonant, unless the consonant is [d], [t], [h] or [ts] (Capesius 1966:97).

Methodologies. Once the transcripts were completed, I used the data to identify the target variables. There are two areas of structural variation that are analyzed in this study: two-verb clusters (in subordinate and main clauses), and coordinating conjunction choice (between *end* and *och*). The coding protocols, as well as the methodologies and statistical analyses I used are described in more detail in each case study. Keeping in line with sociolinguistic research methods, I used mixed effects models (the lmer package in R) to test the effect of social and linguistic factors on variation.

The language dominance scores obtained through the BLP were included as a continuous variable in the models as they were considered to be one of the main predictors for contact effects in both studies. Because the language dominance scores already contain information about a participant's history, i.e. about age, age of acquisition of the different languages, time spent in a region where the language was spoken, these variables were not included separately in the models.

The BLP, apart from the questionnaire portion, is an instrument that measures language dominance and computes it into a score. When assessing bilingual language dominance, as the questionnaire was meant to do, the global language dominance score is obtained by subtracting the dominance score for language B from the dominance score for language A. A score of zero would mean that the participant is equally dominant in both languages. A negative score would indicate higher dominance in language B (i.e. the score for language B was higher than the score for language A) and a positive score would mean higher dominance in language A. Because there were no significant differences in the TrSax dominance scores between the groups, and participants differ mostly when it comes to their use of and exposure to German and Romanian, the language dominance score was calculated based on German and Romanian dominance only. The dominance scores were calculated by subtracting the Romanian score from the German

¹⁸ The Eifler rule is also discussed in Chapter 3. I direct the reader to Capesius 1966 for a detailed discussion of the rule in TrSax.

score for each participant. I omitted TrSax scores from the measure, first to ensure a more accurate score calculation as the BLP is set up for two languages, and second because some of the questions in the BLP are not relevant for TrSax. For example, participants could not rate their proficiency in TrSax in the same way they did for German or Romanian due to the literacy questions.

4.5 Secondary source of data

The majority of the data analyzed in this dissertation come from the fieldwork I conducted in Romanian and in Germany. A secondary source of data is available through a digitized corpus of TrSax recordings collected in Romania between 1960-1975, stored in a database currently under the administration of the Ludwig Maximilian University in Munich. The database is called *Audioatlas Siebenbürgisch-Sächsischer Dialekte* “Audio-Atlas of Transylvanian Saxon dialects’ and abbreviated to ASD. The corpus contains elicited data, in the form of Wenker sentences¹⁹, and spontaneous speech data. The main purpose of the recordings was to build a dictionary of the TrSax dialects and an archive of speech samples from different dialects (Klaster-Ungureanu 2015:18-21). All TrSax Wenker sentences available in the corpus are accompanied by an IPA transcription, but only part of the spontaneous speech data are transcribed, and even less is translated into German. In showing the examples from the ASD corpus I am following the citation format recommended on the ASD website: *ASD |town name| age [m/f]| file number |interval number|* ([m/f/] stands for gender). This format provides information about the town/locality where the dialect is from, and biographical data about the participants. The file numbers are unique to each speaker, making it possible to determine if two different recordings come to the same speaker. Note that the exact date when a recording was made is not available with the recordings, but they were made between 1960 and 1975.

4.6 Summary

The present chapter provided an overview of the data sources that are used in the two case studies on variation, gave relevant background information on the participants, and described the broader social factors that will be used to analyze the areas of variation. I have shown that the two groups are similar in many ways, but they differ mainly when it comes to their use of and exposure to German and Romanian. The two groups are thus well suited to

¹⁹ Wenker sentences are a set of 42 sentences, designed by William Wenker in 1880 with the purpose of capturing differences among German dialects (a more detailed description is available in Ewerth 2015).

analyze the effects German and Romanian might have on structural variation in Viscri Saxon. I expect language dominance to be a strong predictor for contact effects as follows: speakers who are German-dominant (positive scores) should show more German influence in their Viscri Saxon and speakers who are Romanian-dominant should show more Romanian influence in their Viscri Saxon. I am targeting two specific structural areas that display variation and variants in each case have overlap with German and Romanian. Thus, contact effects from German should be present as a preference for German-like variants, and contact effects from Romanian should manifest as a preference for Romanian-like variants. I discuss the two case studies in more detail in Chapter 5 and Chapter 6.

Chapter 5

Case Study 1: Word Order Variation In Two-Verb Clusters

The present chapter presents the first case study on variation in Viscri Saxon; more specifically, I focus on word order variation in two-verb clusters. As shown in Chapter 1, two-verb clusters consist of a finite auxiliary/ modal (Aux/M) and a lexical non-finite verb (V) that are strictly adjacent and occur in the right periphery of a clause. I use a common notation throughout this dissertation when describing verb clusters: the finite verb is always indexed with 1 and the non-finite verb is indexed with 2. For example, when the non-finite verb precedes the finite verb, it results in the 2-1 order. Up to 4 verbs can cluster in a subordinate clause. If there are more than two verbs in a cluster, subsequent non-finite verbs are indexed with 3 and 4, where applicable.

In a previous study, Bancu (2019), that focused on Viscri Saxon data from participants in Romania, I found that both the 1-2 and the 2-1 orders are present in Viscri Saxon (as in examples 1 and 2 in Chapter 1), that the two orders occur to a similar degree in the data, and that both orders were possible with different auxiliaries and modals. Thus, word order variation in two-verb clusters was not conditioned by linguistic factors such as type of construction or the presence of a particle verb in a construction, but the extent to which participants used German had an effect on word order: participants who used more German in their daily lives were significantly more likely to use the 2-1 order, the order that is required in German subordinate clauses. Conversely, participants who used more Romanian were more likely to use the 1-2 order, the order that is required in Romanian.

In Standard German subordinate clauses, the finite Aux/M follows the non-finite verb resulting in the 2-1 order (as in 17) and this rule is invariable (Sapp 2011:1).

- (17) sie sagt [dass er ein Buch ge-lesen₂ hat₁] 2-1
she says that he a book PTCP-read.PTCP have.3SG.PRS
'She says that he read a book.'

Standard German

While Romanian is not a verb-clustering language, it could still serve as a source of transfer, because Aux/M-V constructions in Romanian have some shared properties with verb clusters. The Aux/M and the non-finite verb are strictly adjacent and cannot be separated by other constituents (Dobrovie-Sorin 1994:9)²⁰, a property that Romanian shares with Germanic languages and not with other Romance languages (Monachesi 2005:138). The example in (18) below shows the invariable rule in Romanian subordinate clauses, with the auxiliary/modal preceding the lexical verb:

- (18) ea zice [că el a_{AUX(1)} citit_{V(2)} o carte Aux-V (1-2)
 she say.3SG.PRS that he have.3SG.PRS read.PTCP a book
 ‘She says that he read a book.’ Romanian

Given the lack of diachronic data and the small number of participants, it was not possible to establish in Bancu (2019) whether there was a norm in Viscri Saxon verb clusters, or what exactly the effect of Romanian was. For example, it could not be established if speakers who used the 1-2 order more had less influence from German or were simply more faithful to TrSax constructions, since the 1-2 order is different from the norm in German and thus more TrSax. As I will show in Section 5.1, there are studies that suggest that 1-2 is the native order in TrSax and 2-1 is derived from German.

Another area of word order variation in Viscri Saxon is the ordering of two-verb clusters in the right periphery of a main clause. Because the finite verb is fixed in main clauses and occurs in the second position in the clause, only non-finite verbs occur in the right periphery of the clause (Olthof et al. 2017:2). The main difference between subordinate and main clause clusters is that subordinate clause clusters contain a finite verb (always indexed with 1 in examples) while main clause clusters do not. They are therefore also referred to as non-finite clusters in the literature (cf. Pots 2017). When I refer to the 1-2 and the 2-1 orders throughout the dissertation, I refer to subordinate clause clusters. Variation in main clause clusters is between the 2-3 and the 3-2 order. I include these clusters in my analysis because they share some

²⁰ Dobrovie-Sorin (1994:11-15) argues that Romanian auxiliaries are clitic elements that are strictly adjacent to the lexical verb or to clitic elements adjacent to the verb. Such clitic elements are constrained to a very small class of monosyllabic adverbs or floating quantifiers that can intervene between the auxiliary and the lexical verb: *mai* 'again', *și* 'also/ already', *cam* 'a little', *prea* 'too much', and *tot* 'still'. Thus, Aux-V adjacency in Romanian is syntactically motivated by the clitic properties of auxiliaries (unlike in Germanic languages where sentence final verb clusters are motivated by head-final adjacency), and is not restricted to subordinate clauses, as in Germanic languages.

commonalities with subordinate clause clusters in TrSax, i.e. variation is between constructions that pattern either like constructions that are the norm in German (3-2 order) or in Romanian (2-3 order). Thus, to increase the statistical power of my analysis and test the strength of my predictions, I present results from an additional statistical model I ran with main and subordinate clusters combined. In this model, word order is included as a dependent variable with two levels: like German (i.e. 2-1 and 3-2 clusters) and like Romanian (i.e. 1-2 and 2-3 clusters).

To better understand the effect of each language on word order variation in Viscri Saxon, I compare speakers from Romania to speakers from Germany in this case study. In doing so, I revisit the analysis I used in Bancu (2019) to establish whether there are any structural factors conditioning the variation, given that I am analyzing a larger number of tokens. In doing so I use language dominance (assessed through the Bilingual Language Profile questionnaire) as a social variable that could have an effect on word order. Language dominance, as explained in more detail in Chapter 4, encompasses 4 modules: language history (i.e. age of acquisition, education received in a language, time spent in a region where the language is spoken), language use (with family, friends, for work), language proficiency (self-assessed on Likert scales based on speaking and literacy skills) and language attitudes (self-assessed on Likert scales). Therefore, the global language dominance score already factors in the impact of other social factors such as age, age of acquisition of the different languages, time spent in Germany or Romania, level of education on language dominance and such factors do not need to be considered separately. I predict that speakers who are German dominant will be more likely to use the 2-1 order and speakers who are more Romanian-dominant will be more likely to use the 1-2 order. At the same time, speakers from both groups whose variation patterns are similar to each other and the distributions of the different orders do not correlate to their language dominance scores could reflect what the norm is in Viscri Saxon.

The chapter is organized as follows: in section 5.1 I present an analysis of two-verb clusters in TrSax and related Germanic languages to establish the potential linguistic factors that condition variation. Section 5.2 discusses main clause verb clusters and section 5.3 sums up the evidence and lays out the hypothesis for this case study of variation. In section 5.4 I discuss the methodology used in analyzing two-verb clusters in Viscri Saxon based on data from 7 speakers in Romania and 7 speakers in Germany. Sections 5.4 - 5.6 present the results, a discussion, and the conclusions of my analysis.

5.1 Two-verb clusters in TrSax and related languages

A central issue in Germanic syntax is the ordering of verbs in a cluster, because many languages and dialects allow for order variation without leading to obvious semantic or pragmatic effects (Abels 2016:180). For instance, Seiler (2008) shows that there is considerable variation among dialects of Swiss German and word order preferences can be arranged along an areal continuum: dialects in the West have a strict 1-2 ordering of elements, dialects in the East have a strict 2-1 ordering of elements, while central dialects allow both orders. There are, however, still open questions around why verbs cluster, or what exactly motivates movement (Wurmbrand 2017). Thus, most of the studies analyzing two verb-clusters focus on the syntactic properties of these constructions (e.g. Zwart 1996, Abels 2016, Wurmbrand 2017), the regional distributions of encountered variation patterns (e.g. Seiler 2008), and on the linguistic features that condition variation (e.g. Sapp 2011). A few studies (e.g. Olthof et al. 2017) also analyze the effect of social factors, such as generation of the speakers, on variation.

A syntactic characteristic that many West Germanic languages share is the clustering of two or more verbs in constructions that do not display a rigid word order pattern, i.e. verbal elements can undergo reordering (Wurmbrand 2017:5). A shared property of verb clustering languages is that they are OV languages (but see Kiss and van Riemsdijk 2004 for a discussion on verb clusters in Hungarian). Thus, assuming a head-final base structure with the verb generated to the right of its complement, the standard approach is to consider the 2-1 order the basic structure and the 1-2 order as the derived structure through syntactic movement. Consider the examples in (1) and (2) below, which show the possible word orders in Viscri Saxon two-verb clusters. Both examples were produced by the same participant, and show the same auxiliary (have) and participle verb (drank) with the 1-2 order in (19) and the 2-1 order in (20):

- | | | | | | |
|------|---|----------------------------|--|--|-------------------|
| (19) | wot de
that the | Guoiss-malsch
goat-milk | hu ₁
have.3PL.PRS | ge-dreank-en ₂
PTCP-drink-PTCP | 1-2 |
| | (There were families) that drank the goat milk. | | | | Viscri Saxon (P5) |
| (20) | datt se
that she | Wasser
water | ge-dreank-en ₂
PTCP-drink-PTCP | hat ₁
have.3SG.PRS | 2-1 |
| | ‘(It was her bad luck) that she drank the water.’ | | | | Viscri Saxon (P5) |

No movement is required for the 2-1 order, while the 1-2 order is derived through movement of the verb *gedreanken* ‘drank’, as illustrated in Figure 3 below. For simplicity’s sake, I assume that

to remain as one unit in a two-verb cluster and to be placed before the Aux/M. The example in (22) shows the Standard German equivalent of the construction shown in (21):

- (22) wie sie **fort_P-ge-laufen₂** waren₁ P-2-1
 as they away- PTCP-run.PTCP be.3PL.PST
 ‘...as they ran away’ Standard German

While Sift does not show any examples of such German-type constructions, the Viscri Saxon recordings from the ASD corpus contain such an occurrence. The example shown in (23) comes from the same recording as the examples shown in the Introduction (Chapter 1).

- (23) datt em et **af_P-ge-woick-t₂** heut₁ P-2-1
 that one it up- PTCP-wake.PTCP have.3SG.PRS
 (The King was very happy) that someone woke her up from her sleep.
 Viscri Saxon (ASD|Deutsch-Weisskirchl 23f11709b-151122)

Current Viscri Saxon data shows that German-type constructions are used in the area of particle verbs as well, and this change may have been triggered as the 2-1 order became more common (see Bancu 2019 for more details). Diachronic data from other TrSax dialects show that the 1-2 order was the preferred order and it has been argued that the 2-1 order is a Standard German rule that transferred into TrSax.

For example, McClure (1973:340) points out that in Vingard Saxon the finite Aux/M always precedes the non-finite verb (i.e. 1-2 order), unlike in Standard German where the Aux/M always follows the verb (i.e. 2-1 order). Example (24) shows a subordinate clause construction as exemplified by McClure for Vingard Saxon, where the auxiliary *hu* ‘have’ precedes the participle verb *gesan* ‘seen’:

- (24) det Mädchen dot iach hu₁ ge-san₂ 1-2
 the girl that I have.1SG.PRS PTCP-see.PTCP
 ‘The girl that I have seen.’ Vingard Saxon (McClure 1973:332)

Based on McClure’s (1973) analysis and examples it seems that the 2-1 order did not occur in Vingard Saxon subordinate clauses and rightward movement of the non-finite verb was obligatory. This may be due either to the fact that McClure worked with elicited data, or it could be that Vingard Saxon speakers had a strong preference for the 1-2 order. Anecdotally, when I consulted an older speaker from Viscri (who was also involved in TrSax language documentation in the 70s) about when it is appropriate to use the 1-2 order and the 2-1 order, he pointed out that the 1-2 order is viewed as the ‘correct’ order in Viscri Saxon, but people use the 2-1 order because they want to display their Standard German skills.

It has been argued in previous work that verbal constructions that are attributed to be typical for German (i.e. 2-1 order) have entered various dialects of TrSax through speakers who were in close contact with German and that such constructions are commonly encountered in the city varieties, but less in the villages (Holzträger 1912, Isbăşescu and Mantsch 1975). Studies on TrSax suggest that in general TrSax dialects in the cities exhibit more German influence than dialects in the countryside where Transylvanian Saxons rely mainly on their dialect for communication and use German for limited purposes only (Custred 1989).

Holzträger (1912) offers a syntactic analysis of several dialects from the Bistrița area (northern Romania). He reports on data he collected through surveys and data from documents written in TrSax from the 15th and 16th century. He found that in subordinate clauses the auxiliary or modal would always precede the participle/infinitive verb when looking at the written documents and suggests that this was the original order in TrSax subordinate clauses at least until the 16th century. Holzträger (1912:27-28) noted that such constructions (i.e. Aux/M-V) were very common in the dialects spoken in the countryside in the survey data, but points out that Standard German order was also possible and present predominantly in the city varieties, where people had more contact with German. However, Holzträger does not show any examples of German-type constructions in his data.

Isbăşescu and Mantsch (1975:181) also suggest that in TrSax subordinate clauses that contain more than one verb the finite Aux/M does not come last, as in German, but is placed before the non-finite verb (thus resulting in the 1-2 order). They argue that the 1-2 rule in subordinate clauses has changed in TrSax under the influence of German, so that the finite Aux/M can occur both before and after the non-finite lexical verb to the same extent. Again, concrete examples of the 2-1 word order in subordinate clauses are not provided.

While it is difficult to determine when exactly the 2-1 order became possible in TrSax dialects, or whether it has coexisted in some dialects with the 1-2 order all along, it is worth noting that TrSax and (different stages of) German have been in prolonged contact. The 2-1 order did not become the only grammatical order in German until Modern Standard German (Sapp 2011:102). However, the 2-1 order has been the dominant order in varieties in contact with TrSax such as MHG and ENHG. Sapp (2011) investigated verb clusters in subordinate clauses in a corpus of MHG prose texts and determined that the 2-1 order was favored, but the 1-2 order was present in close to 30% of the subordinate clauses. Sapp (2011:21-22) also points out that

the trend was for the 1-2 order to occur more frequently in MHG in constructions with infinitives, and for the 2-1 order to occur when participles were involved. These trends were fairly similar in ENHG texts (15th - 17th century), with the 1-2 order occurring at about 27% and the 2-1 order 73% (Sapp 2011:52-54).

Furthermore, other West-Germanic varieties that are related to TrSax such as Moselle Franconian, Luxembourgish, and West Flemish display variation in the use of the 2-1 and the 1-2 order based on construction type. Moselle Franconian allows both the 2-1 and the 1-2 order in auxiliary + participle constructions and modal + infinitive constructions, though 2-1 order is used more commonly overall (Dubenion-Smith 2008:147). Luxembourgish allows both the 2-1 and the 1-2 order in auxiliary + participle constructions, but requires the 1-2 order in modal + infinitive constructions (Bruch 1973: 92-94). West Flemish allows only the 2-1 order in auxiliary-participle constructions and the 1-2 order in modal + infinitive constructions (Wurmbrand 2017:10). Table 6 summarizes the options available in the languages and varieties discussed so far for each type of construction and includes the Standard German options as well.

Language	Auxiliary-Participle	Modal-Infinitive
Middle High German	2-1/ 1-2	2-1/ 1-2
Luxembourgish	2-1/ 1-2	1-2
Moselle Franconian	2-1/ 1-2	2-1/ 1-2
West Flemish	2-1	1-2
Standard German	2-1	2-1

Sources

- Middle High German: Sapp (2011:21)
- Moselle Franconian: Dubenion Smith (2008:78-79)
- Luxembourgish: Bruch (1973: 92-94)
- West Flemish: Wurmbrand (2017:10)
- Standard German: Sapp (2011:1)

Table 6. Word orders based on construction type in West Germanic two-verb clusters

Summing up the verb cluster distributions in Table 6, the languages discussed above can be classified in four categories: languages with optional reordering (or syntactic movement) regardless of construction, languages with optional reordering in auxiliary-participle clusters, but obligatory reordering in modal-infinitive clusters, languages with no reordering in auxiliary-

participle clusters, but obligatory reordering in modal-infinitive constructions, and languages with no reordering regardless of construction.

5.2 Main clause two-verb clusters

Two non-finite verbs can also cluster in the right periphery of a main clause as will be shown in the present section. I will give a brief overview of such clusters²², because word-order variation is present in Viscri Saxon in this case as well, and there are shared properties between subordinate and main clause clusters. First, variation in word-order is between an Aux/M and a lexical verb, and the same two types of constructions that occur in subordinate clauses occur in main clauses as well, i.e. auxiliary + participle and modal + infinitive. Second, when a participle verb is used in such a cluster, participle and verb are split by an intervening Aux/M similarly to subordinate clause two-verb clusters (e.g. example 21 in Section 5.1). Lastly, Standard German and Romanian do not allow for variation in this verbal domain, and the same predictions that can be made for contact-effects on the word order in Viscri Saxon two-verb clusters from either language, can be made for main clusters as well.

There is very little discussion of main clause clusters in TrSax in the literature. The most explicit description of the ordering of verbal elements in a main clause in a TrSax dialect comes from McClure (1973) and is based on the Vingard dialect. According to McClure (1973:336-337), the tense-bearing Aux/M occupies the second position in a main clause and the non-finite verbs are shifted to the end of the clause, with the non-finite auxiliary surfacing before the non-finite lexical verb. Example (24) shows the resulting sequence in Vingard Saxon, where the non-finite modal *wallen* ‘want’ (indexed with 2) is placed before the infinitive lexical verb *san* ‘help’ (indexed with 3):

(24)	iach	hun	dich	walle ₂	sahn ₃	2-3
	I	have.1SG.PRS	you	want.INF	see.INF	
	‘I have wanted to see you’				Vingard Saxon	(McClure 1973:337)

The example in (25) shows the same ordering with the auxiliary *hu* ‘have’ preceding the lexical verb *freysen* ‘eat’ in the participle form:

(25)	der	Wauelf	muoss ₁	den	Deich	hu ₂	frëisen ₃	2-3
	the	wolf	must.3SG.PRS	the	dough	have.INF	eat.PTCP	
	‘The wolf must have eaten the dough.’							
								Vingard Saxon (McClure 1973:308)

²² For a more detailed overview of main clause verb clusters in different Germanic languages I direct the reader to Dubenion-Smith (2008, 2010)

Example (30) shows a main clause with the auxiliary *fi* ‘be’ preceding the lexical verb *citit* ‘read’:

- (30) el va fi_{AUX(2)} citit_{V(3)} totul Aux-V (2-3)
 he will.3SG.PRS be.INF read.PTCP everything
 ‘He will have read everything.’ Romanian

Evidence from current Viscri Saxon data shows that variation occurs between the 2-3 and the 3-2 order as in (31) and (32) below. Both examples contain clusters of a non-finite modal and a non-finite lexical verb:

- (31) deh hun ech mer niet Moh mohsse₂ göhin₃ 2-3
 there have.1SG.PRS I REFL.1SG not effort must.INF give.INF
 ‘I didn’t have to try hard there/ I didn’t have to try hard to achieve that.’
- (32) deunn heut ea daut z-er Reperatur brunje₃ mohssen₂ 3-2
 then have.3SG.PRS he that to-the repair bring.INF must.INF
 ‘Then he had to bring that (the car) to the repair service.’ Viscri Saxon

The extent to which such variation is present in main clauses, as well as in subordinate clauses, and the effect the languages in contact with Viscri Saxon have on verb clusters will be established in the following sections. Next, I will summarize the evidence presented so far, discuss variation in verb clusters from a language contact perspective, and lay out the hypothesis for this case study.

5.3 Verb clusters and language contact effects

Table 7 below illustrates the word orders that are possible in Viscri Saxon in main and subordinate clauses and their equivalents in the languages in contact with Viscri Saxon. Because Romanian does not have verb clusters I am showing the order in which the Aux/M and the verb occur and their equivalent to verb cluster orders in parenthesis.

Language	Subordinate clause clusters	Main clause clusters
Viscri Saxon	2-1/ 1-2	3-2/ 2-3
Standard German	2-1	3-2
Romanian	Aux/M –V (1-2)	Aux/M –V (2-3)

Table 7. Word orders in subordinate and main clause clusters in the three languages in contact

One of the conclusions that can be reached based on Table 7 is that there is word order variation in TrSax between the placement of the Aux/M and the verb in main and subordinate

clause two-verb clusters, and that in each case they overlap with constructions in German or Romanian. Thus, word-order variation in TrSax verb clusters is between German-like and Romanian-like constructions.

To my knowledge, there are very few studies that explore verb clusters in a language contact context. One such study is from Hoekstra and Verlsoot (2016), who analyzed three-verb clusters in Interference Frisian (IF), a variety of Frisian heavily influenced by Dutch, attributed mostly to young speakers. Based on a grammaticality judgment questionnaire administered to a group of 33 Frisian-Dutch bilingual students from secondary school, Koeneman and Postma (2006) established that IF allows for six possible word orders in three verb clusters (i.e. 1-2-3, 3-2-1, 2-3-1 etc.). Hoekstra and Versloot (2016) revisited their data and found that the most frequently encountered orders in IF were 1-2-3 and 3-2-1, the orders that correspond to the norms in the input languages: 3-2-1 is the norm in Standard Frisian and 1-2-3 is the norm in Dutch. While they did not set out to investigate contact effects in IF, they found that the languages that served as an input for IF also influenced the frequency distributions of three-verb clusters in IF. These findings fall in line with findings from the priming studies discussed in Chapter 2 that show how the experience with a contact language can influence the distribution of shared constructions in a target language. The more dominant bilinguals become in the contact language, the more they start using the constructions that are shared between the target and contact language (cf. Kootstra and Dodens 2016, Kootstra and Şahin 2018).

Given the overlap between TrSax, German, and Romanian word orders in Aux/M + V constructions, I hypothesize that speakers who are more German dominant will use more German-like constructions and speakers who are more Romanian dominant will use more Romanian-like constructions in their Viscri Saxon. In the following sections, I discuss the data, analysis and results.

5.4 Methodology

The data analyzed in this case study come from the sociolinguistic interviews conducted in TrSax by native speaker RAs with 7 participants in Viscri, Romania and 7 participants in Nuremberg, Germany. The transcribed interviews were used to detect all subordinate clauses that contained two-verb clusters and were introduced by a subordinating conjunction or a relative pronoun. This resulted in a total of 395 tokens, 188 tokens from participants in Romania and 207 tokens from participants in Germany. I first conducted some descriptive statistics for subordinate

clause verb clusters by calculating the distribution of each word order by type of construction in each group, then distributions of each word order for each participant, and distributions for each word order by type of auxiliary and modal. Main clause two-verb clusters were also selected, but only 50 tokens were available for all 14 participants. Due to this limited number of main clause two-verb cluster tokens, I conducted limited descriptive statistics in this case, i.e. I calculated the distribution of each order by construction type only.

All clusters were coded for linguistic factors that might explain the variation between the 1-2 and the 2-1 word order, and the 2-3 and 3-2 orders in the case of main clause clusters. Generalized mixed effects models were performed in R (using the lmer package) to test the effect of several linguistic and social factors on word order. The dependent variable was word order with two levels, 0 and 1, where 0 corresponded to German-like orders (i.e. 2-1 and 3-2) and 1 corresponded to Romanian-like orders (1-2 and 2-3). I included the following grammatical factors as fixed effects based on previous work analyzing such variation:

- Type of construction: in some languages modal-infinitive constructions require 1-2 order, while auxiliary-participle constructions show more variation
- The presence of a particle verb in a cluster was included as it seemed to favor the 1-2 order in TrSax based on previous studies (Sift 2015) and in MHG (Sapp 2011)

The following factors were also included as fixed effects in the analysis:

- Language dominance scores (calculated based on responses from the BLP questionnaire)
- Site: Germany versus Romania

The language dominance scores are calculated as the difference between the score obtained for German and the score obtained for Romanian. Scores that are close to 0 would indicate balanced language dominance, scores that are higher than 0 indicate German-dominance and negative scores indicate Romanian-dominance. The individual speaker was included as a random effect in each model, so that any speaker whose performance is dissimilar from the other speakers will not skew the distribution. I started out with a fully specified model including word order as the dependent variable and the fixed and random effects mentioned above. Model comparisons were conducted in order to understand the impact of individual factors where applicable. The main analysis was run for the subordinate clause clusters only. An additional model was run including all clusters to enhance the statistical power of the initial model and strengthen the findings, as three of the individual speakers provided significantly less tokens for subordinate clause clusters

than other speakers. By including main clause clusters, I was able to add between 4 – 7 tokens for those three speakers and between 2 – 8 tokens/ participant.

5.5 Results and discussion

I will first present the general patterns encountered in the data and then the results of the mixed effects analyses. Both the 1-2 and the 2-1 order could be identified in subordinate clauses containing two-verb clusters in Viscri Saxon, and both orders were used in the Romania and the Germany group. Each word order was possible in auxiliary-participle and modal-infinitive clusters. Table 8 sums up all the subordinate clause verb clusters encountered in the data and shows the distribution of each word order for each participant by Site. Participants in Romania are labeled with *RO* and participants in Germany are labeled with *GE*. The numbers correspond to age in that the youngest participant is indicated with 1 and the oldest with 7 in each group.

Participants in Romania				Participants in Germany			
	N ^o OF TOKENS	1-2 ORDER	2-1 ORDER		N ^o OF TOKENS	1-2 ORDER	2-1 ORDER
RO 1	24	42%	58%	GE 1	44	0%	100%
RO 2	14	36%	64%	GE 2	32	16%	84%
RO 3	34	47%	53%	GE 3	18	17%	83%
RO 4	45	22%	78%	GE 4	41	46%	54%
RO 5	29	72%	28%	GE 5	33	58%	42%
RO 6	27	96%	4%	GE 6	15	7%	93%
RO 7	15	33%	67%	GE 7	24	42%	58%
N^o tokens	188	93	95		207	57	150
Total in %	100	49	51		100	28	72

Table 8. Two-verb clusters in subordinate clauses

The final row in Table 8 shows that both the 1-2 and the 2-1 order are used to a similar degree in the data from the participants in Romania; 49% of all subordinate clauses with two-verb clusters contain the 1-2 order and 51% contain the 2-1 order (based on 188 tokens). The 1-2 order occurs in 28% of the examples provided by participants in Germany, and the 2-1 order occurs in 72% of the examples (based on 207 tokens). Table 8 does not reveal a distribution of each order for the combined data, but it would break down as follows: the 1-2 order occurs in 38% of the examples and the 2-1 order occurs in 62% of the examples, based on a total of 395 tokens. There are three participants highlighted in grey in Table 8, RO 6, GE 1, and GE 6. These three participants that

had very few or no instances of one of the two constructions: GE 1 uses only the 2-1 order in her utterances, GE 6 uses the 2-1 order in 93% of his utterances, and RO 6 displays an overwhelming preference towards the 1-2 order (96%) in his utterances.

These results can be further broken down by type of construction. Figure 4 below shows the distribution of the two possible word orders in two-verb clusters categorized by type of construction for each group. The distributions are shown in percent, the light-grey blocks represent the 2-1 order and the dark-grey blocks represent the 1-2 order. The percentages are calculated based on the total number of tokens provided by each group for each type of construction. The stacked columns add up to 100% for each type of construction.

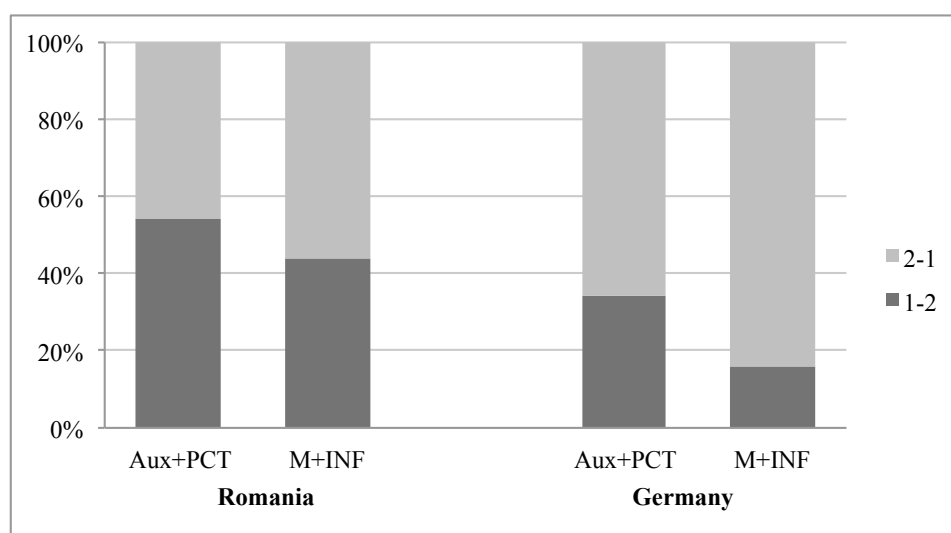


Figure 4 – Two-verb clusters by type of construction

As Figure 4 indicates, the 2-1 order is favored by participants in Germany in auxiliary + participle constructions – 66% of the tokens occur with the 2-1 order and 34% of the tokens with the 1-2 order (based on 156 tokens) – and in modal + infinitive constructions – 84% of the tokens occur with the 2-1 order and 16% of the tokens with the 1-2 order (based on 48 tokens). Among participants in Romania, auxiliary + participle constructions occur to comparable degrees with both orders: 46% of the tokens are used with the 2-1 order and 54% with the 1-2 order (based on a total of 119 tokens). Modal + infinitive constructions occur with the 2-1 order in 56% of the tokens and with the 1-2 order in 44% of the tokens (based on 72 tokens).

Across both groups, auxiliary + participle constructions are used with the 2-1 order in 58% of the examples and with the 1-2 order in 42% of the examples (based on 275 tokens),

while modal + infinitive constructions are used with the 2-1 order in 68% of the examples and with the 1-2 order in 32% of the examples (based on 120 tokens). Whether one of the orders is preferred with a specific type of construction to a significant extent is further explored in a generalized mixed effects linear model with word order as a dependent variable, type of construction (Aux or M), presence of particle verb, site, and dominance scores as fixed effects, and the individual speaker as a random effect. The results of the generalized mixed effects model (glmer) are shown in Table 9 below:

Fixed effects	Estimate	SE	z Value	p Value
(Intercept)	-0.293	0.503	-0.582	0.561
Aux or M	0.808	0.288	2.807	0.005
Particle verb	0.224	0.339	0.661	0.509
Site (R)	-0.525	0.576	-0.911	0.362
Dominance	-0.025	0.005	-4.569	0.000005
Random Effect: Speaker	Variance: 0.438		Std. deviation: 0.662	
N=395, Speakers = 14				

Table 9. Results of generalized linear mixed effects model for word order in subordinate clauses

The results in Table 9 show that across the two groups the 2-1 order is more likely to occur if an auxiliary is present in the construction, i.e. in auxiliary + participle constructions ($p = 0.005$). However, what becomes clear from Figure 4 is that both orders are possible in either type of construction in both groups and this effect is indicating a preference for the 2-1 order in auxiliary + participle constructions, rather than a grammatical constraint (such as in West Flemish where the 2-1 order is required in auxiliary + participle constructions and the 1-2 order in modal + infinitive constructions). Another grammatical variable that was included in the analysis to test whether it has an effect on word order in two-verb clusters is the presence of a particle verb (cf. Sapp's 2011:30 findings for MHG). Results indicate that the presence of particle verbs in a cluster has no effect on word order ($p = 0.509$).

Turning to the other sociolinguistic factors, site (reference is set to Romania in the glmer output) does not have an effect on word order, but language dominance has a significantly strong effect ($p = 0.000005$): a decrease in language dominance score, which corresponds to less German dominance and conversely more Romanian dominance, increases the odds for the 1-2

order. However, there is a significant correlation between the dominance scores and site (Pearson's $r = 0.615$), i.e. the higher dominance scores are (more German dominant), the more likely it is that participants are in Germany. An additional model that excludes the language dominance scores shows that site would have a significant effect on word order in such a case. The results are shown in Table 10:

Fixed effects	Estimate	SE	z Value	p Value
(Intercept)	-2.030	0.615	-3.300	0.001
Aux or M	1.586	0.791	2.006	0.006
Particle verb	0.209	0.338	0.619	0.536
Site (R)	1.586	0.791	2.006	0.045
Random Effect: Speaker	Variance: 1.849		Std. deviation: 1.36	
N=395, Speakers = 14				

Table 10. Results of generalized linear mixed effects model for word order in subordinate clauses without dominance scores

The results of the analysis shown in Table 10 indicate that site has a significant effect on word order choice: speakers in Romania are more likely to use the 1-2 order than speakers in Germany ($p = 0.045$). Conversely, speakers in Germany are more likely to use the 2-1 order. The linguistic factors have the same effects as in the first model: the 2-1 order is favored in auxiliary + participle constructions, and the presence of a particle verb does not have an effect on word order. Note that once the dominance scores are removed from the model, the Intercept also becomes a significant predictor for word order ($p = 0.001$), indicating that part of the variance in the data could be accounted for through the individual speaker. This is not surprising, as some of the speakers, such as RO 6, GE 1, and GE 6 tend to strongly prefer one word order to the other (these speakers are highlighted in Table 8). However, once the language dominance scores are included in the model, they account for the variance in the data that is otherwise attributed to the random effects and the residuals. This might be due to the fact that there are speakers in Romania that are German dominant, because they received their education in German, some of them have spent time living and working in Germany, and most of them use German regularly.

To evaluate the effect of the dominance scores on word order variation more broadly, I ran an additional analysis that included main and subordinate clause clusters. First, I present an overview of how main clause clusters pattern in Table 11 below. Because there were only 50

tokens of such clusters among all the participants, I am showing the patterns of distribution by group only, without going more into the different types of constructions such clusters occur in.

Site	N ^o OF TOKENS	2-3 ORDER	3-2 ORDER
Romania	22	55%	45%
Germany	28	29%	71%
N^o tokens	50	20	30
Total in %	100	40	60

Table 11. Main clause two-verb clusters

Variation between the 2-3 and the 3-2 orders is present in main clause clusters as well, and the 3-2 order seems to be preferred in the Germany group. Overall in the data, the 3-2 order (German-like) occurs in 60% of the examples and 2-3 order (Romanian-like) occurs in 40% of the clauses. Main clause and subordinate clause clusters add up to 445 tokens. The results of the generalized mixed effects model are shown in Table 12 below. The dependent variable, word order, was set to two levels: 0 – German-like (3-2 and 2-1 order) and 1– Romanian-like (2-3 and 1-2 order):

Fixed effects	Estimate	SE	z Value	p Value
(Intercept)	0.092	0.478	0.192	0.848
Aux or M	0.522	0.257	2.033	0.042
Particle verb	0.183	0.323	0.566	0.571
Site (R)	-0.712	0.560	-1.271	0.204
Dominance	-0.027	0.005	-4.919	0.000001
Random Effect: Speaker	Variance: 0.375		Std. deviation: 0.613	
N=445, Speakers = 14				

Table 12. Results of generalized linear mixed effects model for word order in main and subordinate clauses

The effects of the fixed variables do not change as compared to the model presented in Table 12. Romanian-like order is more likely to occur in auxiliary + participle constructions than in modal + infinitive constructions ($p < 0.05$) and the presence of particle verbs in a cluster has no effect on word order ($p > 0.05$). Site does not have an effect on word order ($p > 0.05$), and

language dominance still has a strong effect ($p < 0.001$): a decrease in language dominance score increases the odds for Romanian-like order.

To sum up the results presented so far, Viscri Saxon displays variation in word order in main and subordinate clause clusters, alternating between German-like and Romanian-like orders. While German-like order is more likely to occur when an auxiliary is part of a cluster, this is not a requirement for the 2-1 order to occur. The variable that accounts most reliably for word order variation is language dominance: speakers who are more German-dominant are more likely to use German-like order than speakers who are more Romanian-dominant. The latter are more likely to use Romanian-like order. However, there are noticeable differences in how individual participants use each construction, and I will discuss how these usage patterns connect to speakers' language dominance scores in the following section.

5.6 Differential outcomes among speakers

Figure 5 below gives an overview of how the available constructions pattern among the individual speakers and shows the language dominance scores under the label for each participant. The closer the score is to 0, the more balanced is the speaker's language dominance between German and Romanian.

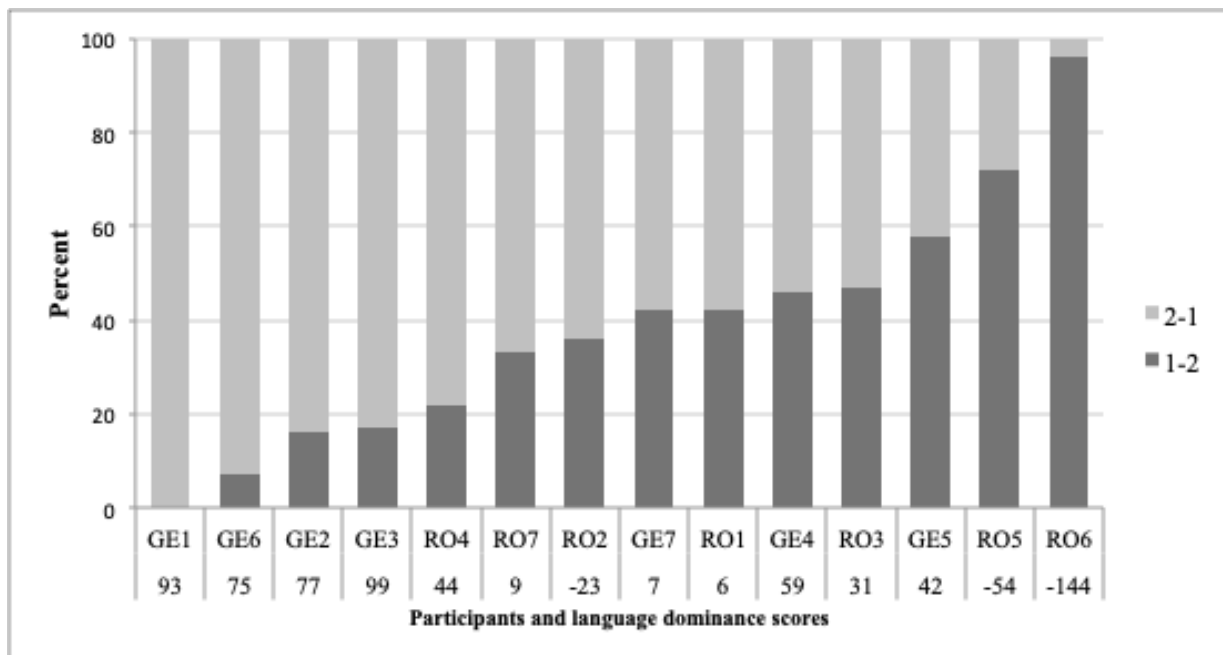


Figure 5 – Combined word order distribution among all participants and dominance scores

A broad generalization can be made when combining the different distributions of word orders across speakers. It appears that speakers with positive scores over 70 use the 2-1 order in more than 80% of their utterances, while speakers with high negative scores (over 50) use the 1-2 order in more than 70% of their utterances. GE 1 is the only speaker who does not use the 1-2 order (or the 2-3 order for that matter) in subordinate clauses and GE 1 is also the only participant who spent most of her life in Germany, learned Romanian after the age of 20, and is not a fluent speaker of Romanian. Thus, it appears that her Viscri Saxon constructions are heavily influenced by her German, and in her case the contact effects of German involve the overgeneralization of one structure across two languages, Viscri Saxon and German. In contrast, RO 6 is at the other end of the continuum shown in Figure 5 and barely uses German-type constructions. He acquired Romanian from birth, German after the age of 20 and uses German only on limited occasions (only a few times per year), e.g. the 2-1 order and P-2-1 constructions. This is also reflected in his low dominance score, the lowest out of all participants. The results for these two participants could be compared to the findings in Otheguy et al. (2007). In that case, Spanish-English bilinguals who learned English before the age of three had a high rate of overt pronouns in Spanish as compared to speakers who learned English later in life. The results from Otheguy et al. (2007) indicate that contact-induced language changes can occur in the form of enhancement of shared features in a receiving language under the influence of a source language. The same sharing of features is also involved in language creation, as in the case of creolization (Baptista et. al 2014). Both the 1-2 and the 2-1 order were present in the language as all participants acquired Viscri Saxon, and what we see is an increased use of the 2-1 order in speakers who are German dominant, and an increased use of the 1-2 order for speakers who are Romanian dominant.

I expected speakers whose variation patterns occur in the middle of the continuum to have low dominance scores (i.e. have balanced language dominance) and use each word order to a similar degree. This is true in the case of RO 1, RO 7, and GE 7, but there are participants such as RO 4 and GE 5 with comparable dominance scores but contrasting patterns of variation. Because dominance scores are calculated based on a self-reported questionnaire, some of these scores might be more reflective of participants' ideological views on their language, rather than actual occurrences, and that might explain some of the discrepancies in Figure 5. Some participants may report that they use Viscri Saxon more than they actually do. For example, one

of the participants in the Romania group does not have family in the village and only uses Viscri Saxon on limited occasions with other members of the community if they happen to meet. When asked what languages he uses with friends and family in a typical week, the answer was Viscri Saxon for both. His communication with friends and family might be very limited, but the questionnaire cannot capture the extent to which participants actually use the languages. There are further limits to what the questionnaire can capture. For example, one of the participants from the Germany group (GE 7) reported that she never uses German or Romanian in any of the communication domains included in the questionnaire (i.e. with family, friends, professional setting, talking to yourself, counting). Surely, she must use German on occasions since she lives in Germany, but this is not captured by the questionnaire and thus not reflected in her dominance scores.

In general, increased use of the 2-1 order in speakers with high language dominance scores (German-dominant) can be explained as the enhancement of a shared feature between Viscri Saxon and German (cf. Baptista 2006, Baptista et al. 2014, Kootstra and Dodens 2017). This would be a likely outcome in this intense language contact situation between German and Viscri Saxon, facilitated also by the typological similarity between the two languages. Increased use of the 1-2 order could be explained in two ways. On the one hand, it could be the result of feature enhancement, as Romanian requires the Aux/M to precede the verb and the overlap in patterns between TrSax and Romanian could lead to the same outcomes as the overlap in patterns between German and TrSax, i.e. enhanced shared features. On the other hand, increased use of Romanian means a decreased use of German and this might translate into less influence from German in Viscri Saxon, i.e. less use of the 2-1 order. There is anecdotal evidence that speakers have a meta-awareness of the 1-2 order being the native TrSax order, and it could be hypothesized that they are using it to mark their TrSax identity or their knowledge of TrSax. As mentioned earlier, a Viscri Saxon speaker I consulted on this topic reported that the 1-2 order is viewed as the ‘correct’ order in Viscri Saxon, but people use the 2-1 order because they want to display their Standard German skills. This falls in line with the observation made by Holzträger (1912) and Isbășescu and Mantsch (1975) about German-like constructions (i.e. the 2-1 order) used in subordinate clauses as a marker of advanced German knowledge.

For speakers such as RO 5 and RO 6 either scenario would be valid, as both of these speakers have Romanian partners, use Romanian as a home language, and are clearly Romanian-

dominant. Thus their dominant language could have a strong effect on their increased use of the 1-2 order. At the same time, they are the two members of the TrSax community that would be most motivated to mark their TrSax identity through language, as they both married outside of the TrSax community. This issue has occasionally come up in my conversations with other members of the Viscri Saxon community and they reported that these marriages were viewed negatively in the community. The latter scenario, though, would also apply to speakers with high dominance scores, e.g. GE 4 and GE 5, who live in Germany but use the 1-2 order more than the 2-1 order. Such speakers might be more resistant to contact effects from German. As diachronic data is scarce, the effect Romanian has on Viscri Saxon is not entirely clear. Thus, further areas of the language need to be examined.

5.7 Conclusions of the case study

The variable that had the most significant effect on word order is language dominance, and results showed that increased dominance in German increased the likelihood of the 2-1 order. Furthermore, the German-type 2-1 order occurred in 62% of the data showing that it is now a well-established order in Viscri Saxon two-verb clusters. I have also shown that variation is present in main clause verb clusters as well, and that variation is between German-like and Romanian-like constructions. The distributions reflected by German-dominant speakers versus Romanian-dominant speakers can be used as an indication of the role each of the languages in contact with Viscri Saxon plays in conditioning how the 1-2 and the 2-1 orders are used. It remains though to be seen if the increased use of Romanian in the Viscri Saxon community simply decelerates the change of Viscri Saxon under the influence of German or whether Romanian is a source of transfer in Viscri Saxon. This will be further explored in the following chapter.

Chapter 6

Case Study 2: Variation In Conjunction Choice

The present chapter provides a second case study on structural variation in Viscri Saxon in order to further evaluate the effects German and Romanian have on the structure of the language. Because structural changes rarely occur in isolation, if contact effects from a donor language are present in one structural subsystem of the recipient language, it is likely that other structural subsystems of the recipient language have been affected as well (Thomason and Kaufman 1988:60). More specifically, I am analyzing variation between two coordinating conjunctions that share similarities with German and Romanian, *end* and *och*, both corresponding to English ‘and’. Examples (33) and (34) below illustrate the variation between these two conjunctions based on data I collected from a speaker in Romania. Both examples show the coordination of two finite clauses (TP), first with *end* in (33) and with *och* in (34):

(33) deu [luadje mer meat allen drea Glöcken]_{TP}
then ring.3PL.PRS we withall three bells

end [biaden uist fuar en]_{TP}
and pray.3PL.PRS once for him
‘Then we ring all three bells and pray for him.’

(34) [döhi heut droh Kandj ha geheut]_{TP}
that.M.SG have.3SG.PRS three children here have.PCT

och [uint hatte se vu Russleund sich meat-braeuicht]_{TP}
end one have.3SG.PST they from Russia REFL.3SG with-bring.PCT
‘He had three children here and they brought (themselves) one from Russia.’

Viscri Saxon

The few mentions of conjunctions in TrSax (i.e. Kisch 1900, McClure 1973) indicate that *end* is used to conjoin clauses, and *och* is used to conjoin words or phrases²⁴. Kisch (1900), for instance, illustrates the use of the two conjunctions based on the following two examples:

²⁴ Kisch (1900) uses the term ‘words’, and McClure (1973) uses the term ‘phrases’ when they discuss how *och* is used. In both cases, the purpose of the authors is to indicate that *och* is not used to conjoin sentences.

(35) [eich gô tort]_{TP} **ant** [dau bleifst hâi]_{TP}
 I go.1SG there and you stay.2SG.PRS here
 ‘I go there and you stay here.’

(36) **eij och** dau
 I and you
 ‘I and you.’

Nösner TrSax dialect (Kisch 1900:12)

The example in (35) shows two finite clauses conjoined with *end* (pronounced *ant* in this dialect), and (36) shows two pronouns (NPs) conjoined with *och*.

An in-depth analysis on the two conjunctions in the ASD corpus based on data collected in the 1960s and 1970s confirms that each conjunction strongly prefers to conjoin the specific categories mentioned above (Shinohara 2016). The data analyzed in Shinohara (2016) come from different dialects of TrSax, and her conclusions are based on the general trends observed among those dialects. There is currently no corpus study of just one dialect, and there are no analyses of these conjunctions in a given language contact scenario. Thus, I first seek to describe the conjunctive system of TrSax by gathering available evidence from outside sources, and then proceed to account for particular aspects of variation between the two coordinating conjunctions in Viscri Saxon.

The examples I have shown in (33) and (34) above indicate that both *end* and *och* can be used to conjoin two clauses in Viscri Saxon, but the extent to which both conjunctions can be used with other categories still needs to be established. In this case study on Viscri Saxon synchronic variation, I apply a ‘reversed’ sociolinguistic analysis of variation (cf. Meyerhoff 2015:79) by first establishing whether there are specific environments where both conjunctions can occur in Viscri Saxon based on what we know from previous work, and then proceeding to a quantitative exploration of possible social and structural factors that account for the variation. Contact effects from German and Romanian are evaluated by comparing data from the Viscri Saxon speakers in Germany to data from the Viscri Saxon speakers in Romania, and by including the language dominance scores in the quantitative analysis.

Standard German has only one coordinating conjunction that is used to conjoin finite clauses and all kinds of categories (e.g. nouns, verbs, adjectives) – *und* ‘and’; Romanian also has only one coordinating conjunction used with all types of coordinands – *și* ‘and’. In this respect, both languages are different from Viscri Saxon. Viscri Saxon *end* and German *und* are cognates, they are derived from the same Proto-Germanic (PGmc) conjunction **inđi* (cf. Braunmüller

1978:104), and they both function as coordinating conjunctions in their respective language. The Viscri Saxon form *och* has a cognate in German – *auch* ‘also/as well’ – however, Standard German *auch* functions only as an additive particle (cf. Reis and Rosengren 1997).²⁵

The equivalent of (34) in Standard German can only be conjoined with *und* ‘and’. As indicated in (37) *auch* would be ungrammatical in this case:

(37) [der hat drei Kinder hier gehabt]_{TP} **und/ *auch**
 that.M.SG have.3SG.PRS three children here have.PCT and

[eines hatten sie von Russland mit-gebracht]_{TP}
 one have.3SG.PST they from Russia with-bring.PCT
 ‘He had three children here and they brought (themselves) one from Russia.’

Standard German

The Viscri Saxon particle *och* can be used as a conjunction as in (34) above, or as the additive particle ‘also/ as well’ as in (38) below:

(38) deu schlahssen mer **och** de Pensieunen
 then close.3PL.PRS we also the guesthouses
 ‘Then (in winter) we close the guesthouses as well.’

Viscric Saxon

The Standard German equivalent of (38) is shown in (39) below:

(39) dann schliessen wir **auch** die Pensionen
 then close.3PL.PRS we also the guesthouses
 ‘Then (in winter) we close the guesthouses as well.’

Standard German

There is, thus, overlap between the Viscric Saxon additive particle *och* and the German additive particle *auch*, but the German correspondent of the Viscric Saxon conjunction *och* would be *und* ‘and’. However, there are structural similarities between the conjunction *och* and the Romanian conjunction *și*: both *och* and *și* function as a coordinating conjunction and as an additive particle in their respective language. The Romanian equivalents of (33) and (35) are shown in (40) and (41) below. In (40) *și* is used as a conjunction (‘and’), while in (41) *și* is used as an additive particle (‘also’):

²⁵ There is some variability in the labeling of particles that correspond to ‘also’ in the literature I cite in this chapter, e.g. additive particle, adverb, focus particle. For uniformity purposes I will use the term ‘additive particle’ following Reis and Rosengren (1997:237), with some small exceptions if the studies I cite specifically use the term ‘adverb’. For space considerations, I direct the reader to Reis and Rosengren (1997) for further details on the properties of *auch* as an additive particle.

- (40) [el a avut trei copii aici]_{TP}
 that.M.SG have.3SG.PRS have.PCT three children here
 și [un-ul și-au adus din Rusia]_{TP}
 and one-DET.M.SG REFL.3SG-have.3SG.PRS bring.PCT from Russia
 ‘He had three children here and they brought (themselves) one from Russia.’
- (41) atunci închidem și pensiun-i-le
 then close.3PL.PRS also guesthouse-F.PL-DET.F.PL
 ‘Then (in winter) we close the guesthouses as well.’

Romanian

The examples of conjunctions and additive particles I discussed so far for TrSax, German, and Romanian, are summarized in Table 13 below:

Language	TrSax	German	Romanian
Conjunctions	end/ och	und	și
Additive particle (also)	och	auch	și

Table 13. Conjunctions and additive particles in TrSax, German, and Romanian

Given that TrSax conjunctions used to be (and perhaps still are) category-specific in many dialects, and German and Romanian have only one conjunction used with all kinds of coordinands in their respective language, I propose that contact effects from either language would first lead to the dissolution of cross-linguistic structural boundaries. This would not only follow Matras’ (2007, 2011) proposal on what transfer from a donor language into a receiving language entails, but it would also be in line with findings from the bilingualism studies discussed in Chapter 2. For example, Fernández et al. (2017) and Kootstra and Şahin (2018) showed that in the process of transfer bilinguals become more tolerant to constructions that were initially ungrammatical or dispreferred in a target language under the influence of a contact language, and are over time incorporated into the grammar of the target language. Kootstra and Doden’s (2016) and Travis et al. (2017) also showed that lexemes and structures tend to transfer together, and lexemes that are used with a specific structure in one language will be used with the same structure in the other language of a bilingual.

Due to the overlap between Viscri Saxon *end* and German *und*, and Viscri Saxon *och* and Romanian *și*, I hypothesize that both languages can have an effect on the frequency distributions of each conjunction in environments where either conjunction could occur. For example, *end*

will be used more by German-dominant speakers (as was the case for verb clusters), while *och* will be used more by Romanian-dominant speakers in contexts where either conjunction would be possible. However, if there are no differences among participants in how the two conjunctions are used, I will be better able to determine the structural properties of each conjunction and give an account of this unexplored area of Viscri Saxon grammar.

There is very little evidence or discussion on conjunctions in TrSax in general in the literature, and no discussion of Viscri Saxon conjunctions in particular. Therefore, this case study contributes to documenting a part of the grammar of Viscri Saxon, i.e. the two different coordinating conjunctions and their structural properties, and provides a broader discussion about this specific aspect of TrSax grammar. I show that TrSax grammar differs from other Germanic languages in that it has two coordinating conjunctions, *end* and *och*, that correspond to ‘and’. Furthermore, I show based on data available through the ASD corpus that each conjunction strongly favors specific categories. This characteristic of TrSax grammar constitutes a unifying element among TrSax dialects that allows us to establish the grammatical properties of these two conjunctions before contact with German and Romanian intensified, thus facilitating the identification of potential contact effects from either language. The empirical evidence on the two conjunctions I bring through the Viscri Saxon data gives a detailed overview of exactly what types of grammatical categories each conjunction favors. This adds to the broader discussion on the typology of coordinating conjunctions, and the pieces of knowledge that they categorize in discourse (cf. Matras 1996, Haspelmath 2004).

The present chapter is structured as follows: the first part of the chapter discusses conjunctions in general and TrSax coordinating conjunctions in particular, based on data available from various sources. I then compare conjunctions in TrSax to conjunctions in other Germanic languages, Standard German, and Romanian. I describe the data I use from Viscri Saxon and the steps I took in analyzing each conjunction in the ‘Methodology’ section, and present the analysis of the two conjunctions in the ‘Results’ section. I discuss the grammatical properties of coordinating conjunctions in Viscri Saxon, and whether German and Romanian have an effect on variation between available conjunctions in the ‘Discussion’ section. The chapter concludes with a summary of my findings in the ‘Conclusions’ section.

6.1 Coordinating conjunctions: basic properties

Cross-linguistically, coordination is realized through different strategies, some languages lacking any kind of overt coordination markers, while many others require lexical conjunctions to express syntactic coordination (Mithun 1988:336). Even languages that use overt coordination markers, such as English, can realize coordination in different ways. For example, a sequence of nouns can be coordinated by juxtaposition (Mary, John, Alice), or through conjunctions (Mary, **and** John, **and** Alice). The main coordination strategies are realized through intonation and overt conjunctions (Mithun 1988). As the focus of my investigation is on overt conjunctions with the meaning and function of ‘and’, i.e. coordinating conjunctions, I will not discuss other types of coordination in much detail.

As a class, conjunctions are regarded as functional categories as they mark grammatical relationships between constituents, playing an important role in the organization of the sentence (cf. Muysken 2008). The most common type of coordinating constructions involve coordinating particles that correspond to the English particles **and** (conjunction or conjunctive coordination), **or** (disjunction or disjunctive coordination), and **but** (adversative coordination) (Haspelmath 2004:5). Thus, conjunctions are not abstract functional categories serving solely syntactic functions, as they have different semantic qualities in addition to their structural properties.

Coordinating conjunctions may join individual words, phrases, or entire clauses, and the elements that are conjoined are also called conjuncts or coordinands (Rehbein et al. 2007:9). When two coordinands are of the same type, e.g. NPs, VPs, clauses (TPs), and have the same status in a coordinate construction, they are in symmetrical coordination. For example, in the sentence [*John read the book*] **and** [*Maria read the magazine*] both coordinands shown in square brackets are independent clauses with the same status. Coordination between different types of constituents, such as a clause and a noun phrase, is also possible, but both coordinands need to have the same semantic role (Haspelmath 2007:19). This can be illustrated by the examples shown in 42 (a – b) below, taken from Haspelmath (2007:19):

- (42) a. [His kindness]_{NP} **and** [that he was willing to write letters to me]_{TP} amazed me.
b. *I still smoked [last year]_{NP} **and** [cigarettes]_{NP}

The two coordinands in (42a) are different types of constituents, the first one being an NP and the second one a TP. However, the sentence is grammatical because both coordinands are themes for the verb ‘amazed’. In contrast, the coordinands in (42b) are both NPs but the coordination is

not felicitous because they have different semantic roles. Thus, it is not sufficient for two constituents to be of the same type to be in a felicitous syntactic conjunction, their semantic similarity plays a more important role.

In English, German, Romanian, and other European languages, the conjunctions corresponding to ‘and’ can link a diverse range of categories, such as noun phrases (NP), verb phrases (VP), clauses (TP), prepositional phrases (PP), adjective and adverb phrases (AP), etc. Cross-linguistically, however, there are many languages that have category specific coordinating conjunctions, and such languages show that the function of coordinating conjunctions extends beyond the linking of grammatical categories. Matras (1996:178), for example, points out that “(...) coordinating conjunctions assume functions which have to do with the *categorization* of pieces of knowledge in discourse.” His argument is based on evidence from languages such as Arabic and Romani that use two different expressions for ‘and’, each expression fulfilling a specific function in discourse. Haspelmath (2007:20) suggests that languages that have category specific conjunctions will most commonly differentiate between nominal and verbal (or clausal) conjunctions. He attributes this to differences in the semantic-syntactic types of the coordinands and shows that languages such as Korean and Turkish use different coordinating conjunctions to link NPs versus TPs. The Turkish examples below show that the suffix *-la* ‘and’ is used to coordinate two NPs (in 43) and the suffix *-ip* ‘and’ is used to coordinate two TPs in (44):

(43) Hasan_{NP}-**la** Amine_{NP}
 Hasan-and Amine
 ‘Hasan and Amine’

(44) [Çocuk bir kaşık çorba al]_{TP}-**ip** [iç-er]_{TP}
 child one spoon soup take-and eat
 ‘The child takes a spoon of soup and eats.’ Turkish (Haspelmath 2007:20)

It is not clear which conjunctions such languages would use for other types of phrases, as Haspelmath (2007) does not comment on that, or if the same conjunctions that are used for NPs are also used for other non-finite phrases such as PPs, APs, etc. However, additional examples from languages with category-specific conjunctions can reveal more about the types of constituents such conjunctions differentiate between. Cape Verdean Creole, for instance, has two coordinating conjunctions, *ku* and *y*, that correspond to ‘and’. *Ku* is used to conjoin NPs and *y* is used to conjoin all other categories, such as TPs, PPs, and APs (Baptista 2002).

A broad classification of category-specific conjunctions and their language-particular distributions is provided in Haspelmath (2004:11). This classification is replicated in Figure 6 below.

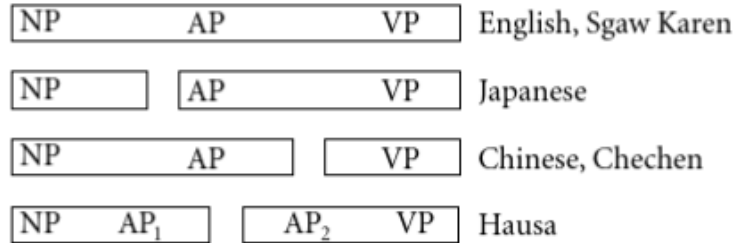


Figure 6 – Language-particular coordinating conjunction distributions
(Source: Haspelmath 2004:12)

Phrases that are in a contiguous segment in Figure 6 are coordinated with the same conjunction (e.g. NP, AP, VP²⁶ for English, Sgaw Karen or AP, VP for Japanese). The segments on the last line in Figure 6 show that in languages such as Hausa some adjectives (AP₁) are conjoined like NPs, and some adjectives (AP₂) are conjoined like VPs. Phrases other than APs are not included in the classification above as there is not sufficient cross-linguistic evidence on how such phrases are conjoined according to Haspelmath (2004). However, further examples from individual case studies show how conjunctions differentiate among categories, and what criteria are used in such differentiations.

In Chechen, phrases such as NPs and non-finite TPs are syntactically conjoined with the suffix *-i(i)*, while finite clauses and entities that are semantically unrelated are conjoined with the clitic *'a*. Conjunction with *-i(i)* is not limited to NPs and non-finite TPs, it extends to APs as long as the coordinands are related to the same event (Jeschull 2004:248). The following examples from Jeschull (2004) illustrate the two conjunctions. In (45) *-ii* is used to conjoin two NPs and in (46) *'a* is used to conjoin two TPs:

- (45) [...] san daa_{NP}-**i**-naan_{NP}-**ii** mila d-u
 I.GEN father-and-mother-and who D-be.PRS
 ‘[She wanted to know] who my parents are [...].’
Chechen (Jeschull 2004:246)

²⁶ Haspelmath (2004) distinguishes between clauses and VPs (clauses without expressed subjects) because some languages use different strategies for conjoining clauses than for conjoining VPs. He points out, however, that in many languages it is difficult to distinguish between clauses and VPs and such languages use the same coordination strategy in both cases.

- (46) [so hwuuna t'e 'a qeechi hwo gan]_{TP} 'a [gina suuna]_{TP}
 I you.DAT on andreach.PERF you see and see.PERF I.DAT
 'I reached you, and I saw you.'

Chechen (Jeschull 2004:253)

Jeschull (2004) shows that the suffix *-i(i)* is used only when the coordinands are semantically related in some sense, and seen as part of the same event, otherwise coordination is realized through compounding, juxtaposition, or with the conjunction 'a. The example in (47) below illustrates the conjunction of two NPs with the clitic 'a in the first glossed line of the utterance and the conjunction of two non-finite TPs with the suffix *-i(i)* in the second glossed line of the utterance:

- (47) iza dogovor-ca suuna francuzski_{NP} 'a nemecki_{NP} 'a
 he contract-INSTR me.DAT French and German and

 mott waamuo-i, d-errigie.'a wilmanash waamuo-i
 language teach.INF-and D-all science.PL teach. INF-and

 d-ieqar d-olush v-ollushiehw, [...]
 D-duty D-have.SCV V-be.PSTCOND
 'Although by contract it was his duty to teach me French and German and to teach me all the sciences, [...].'

Chechen (Jeschull 2004:247)

The infinitive verbs are seen as being simultaneously part of the same event and semantically equivalent, i.e. the contract, and are conjoined with *-i(i)*, however, the NPs *French* and *German* are seen as being part of separate events and are therefore conjoined with 'a. It appears, thus, that in Chechen it is not sufficient for two coordinands to be identical in terms of syntactic categories, coordinands need to be seen as being part of the same event in order to be conjoined with *-i*.

Having laid out some of the relevant properties of coordinating conjunctions and shown that category-specific conjunctions are common cross-linguistically, I will now turn to a more detailed discussion of coordinating conjunctions in TrSax.

6.2. Coordinating conjunctions in TrSax

There are two coordinating conjunctions in TrSax that correspond to the English conjunction *and*: (1) *en/end* and (2) *och*. Different pronunciations may be encountered for each conjunction depending on the dialect. For example, *end* can occur as *en* [ɛn]/ *ent* [ɛnt]/ *end* [ɛnd]/ *ant* [ant] / *und* [ʊnd], and *och* can occur as *och* [ɔx]/ *uch* [ʊx]. For consistency, I will use *end* and *och* in this chapter as general representations of each conjunction (and in Viscri Saxon

examples from my own data), but I will represent the different pronunciations as they occur in examples from other sources.

In a brief dictionary of the TrSax *Nösner* dialect (northern TrSax dialect group), Kisch (1900:12) defines the conjunction *end*, which occurs as *ant* in this dialect, as follows: “*ant (unde)*²⁷ verbindet (abweichend v. Nhd.) nur Sätze; zur Verbindung von Wörtern dient *och (ouch)*: *eich gô tort ant dau bleifst häⁱ* aber *eij och dau* (ich und du)” [*ant (unde)* connects (nonconforming with NHG) only sentences; *och (ouch)* serves for the connection of words: *eich gô tort ant dau bleifst häⁱ* but *eij och dau* (I and you)].

In his grammar of the Vingard Saxon dialect, McClure (1973) notes that the dialect has two conjunctions *en(t)*²⁸ and *uch* (i.e. *end* and *och*): *en* corresponds to the English ‘and’ (or German *und*), while *uch* corresponds to the English ‘and also’ (or German *und auch*). McClure (1973:201) points out that “the main difference between the two conjunctions is that *en* implies a higher degree of continuity between the two elements conjoined, while *uch* focuses more on the differences between the conjoined elements.” It is not clear however what he means by ‘continuity’ or ‘differences between the conjoined elements’ as he does not go into more detail and proceeds to show examples of each conjunction without much explanation. Perhaps ‘continuity’ in this case refers to discourse continuity since the examples provided by McClure show clauses being conjoined with *ent* and phrases with *uch*. Furthermore, his translation of *uch* as ‘and also’ seems to contradict his claim that *uch* focuses on the differences between coordinands since ‘and also’ implies similarity between coordinands rather than difference. While McClure does not comment on the distribution of each conjunction in the same way Kisch (1900) does, the examples he shows imply that each conjunction has a specific function, because he indicates where one of the conjunctions would be ungrammatical as in examples (48) – (50) below. The example in (50) shows that *en* would be ungrammatical if used to conjoin the two NPs *dai Fra* ‘the woman’ and *der Monn* ‘the man’, and that *och* would be grammatical in this case:

²⁷ It is not clear if Kisch is referencing the MHG forms *unde* ‘and’ and *ouch* ‘also’ in parentheses as the predecessors of the current TrSax forms *ant* and *och*. There are no explanations in the text about what the words in parentheses refer to.

²⁸ McClure (1973:201) claims that both *en* and *ent* are used for ‘and’, but speakers prefer *en* because *ent* is too close to the German *und* ‘and’.

- (48) [dai Fra]_{DP} **uch/ *en** [der Monn]_{DP} sjen haj
the woman and the man be.3PL.PRS here
‘The woman and the man are here.’

Vingard Saxon (McClure 1973:201)

The examples in (51) and (52) show two TPs conjoined with *en* and *uch* is indicated as ungrammatical in each case:

- (49) [iech gäng]_{TP} **en/ *uch** [effnet de Dir]_{TP}
I go.1SG.PST and open.1SG.PST the door
‘I went and opened the door.’

- (50) [hey as gjengen]_{TP} **en/ *uch** [as gjengen]_{TP}
he be.3SG.PRS go.PCT and be.3SG.PRS go.PCT
‘He went on and on/ He went and went.’

Vingard Saxon (McClure 1973:201-202)

While the examples shown in McClure (1973) seem to conform to Kisch’s (1900) description of how each conjunction is used, it is not clear which conjunction would be used for phrases other than NPs in Vingard Saxon because McClure does not provide examples. Thus I conducted an investigation into the ASD database to obtain a clearer picture of how each conjunction is used in TrSax.

6.2.1 Case study on TrSax conjunctions in the ASD

The ASD provides further evidence on the two conjunctions in TrSax through Wenker sentences, a set of 42 sentences developed by Georg Wenker in the late 19th century, commonly used in dialectology work on Germanic languages and dialects (Ewerth 2015). There are 12 Wenker sentences with conjunctions in the ASD, and elicited examples for each sentence are available from about 120 different dialects²⁹. These examples are available through recordings transcribed in IPA and translated into German, and they are a great resource for analyzing exactly what type of coordinands occur with each conjunction (e.g. finite clauses, NPs, PPs, APs, etc.), and to formulate some generalizations for TrSax based on a considerable number of dialects.

Shinohara (2016) analyzed the two TrSax conjunctions in the ASD corpus and showed that there are some strong tendencies for each conjunction based on how frequently they

²⁹ There are about 250 different TrSax dialects. While the ASD does not contain recordings from all the dialects, examples from 143 dialects are represented in the database either in the form of Wenker sentences, recordings of spontaneous speech, or both (Klaster-Ungureanu 2015:20).

occurred in each environment. According to Shinohara (2016:237) *auch* ‘also’ is used as a conjunction in TrSax when it conjoins two phrases. If the coordinands contain finite verbs, i.e. in the case of finite TPs, the conjunction *und* is used (Shinohara uses the German terms *auch* ‘also’ and *und* ‘and’ to refer to the TrSax conjunctions *och* and *end*). Shinohara views *auch* (i.e. *och*) as an adverb that is used as a conjunction when the coordinands are phrases that do not contain finite verbs. I will, therefore, abstract away from her analysis, as I view *och* as a conjunction, and present my own analysis of the Wenker sentences from the ASD.

The ASD offers the possibility to view all the Wenker sentences that were collected from about 120 different TrSax localities in Romania. At the time the data were collected in the 1960s and 1970s, participants from various TrSax villages were shown the sentences in Standard German³⁰ and asked to translate them into their TrSax dialect (Klaster-Ungureanu 2015:19-20). In addition to the TrSax examples of Wenker sentences, data is shown about the locality where the example was collected and the recording the example is taken from. Viscri was not among the locations data were collected from.

I sorted all the Wenker sentences that contained conjunctions from the ASD corpus through their *Etimat* tab, which facilitates the analysis of variation among the different dialects by allowing the researcher to choose target words in the sentences they want to analyze. The initial Wenker sentence is shown in German. Once a target word is selected, examples of that Wenker sentence are displayed from all the TrSax dialects data were collected from, and the target word is shown in bold. I first established what type of coordinands occurred in a target sentence, counted all the TrSax examples that were shown for the target sentence, and calculated the proportions for *end* and *och* based on their token counts. For example, the first Wenker sentence that contains a conjunction is sentence number 4³¹, shown in Standard German in (51) below. The coordinands are two clauses (TP) indicated in square brackets:

³⁰ This elicitation method may enhance the potential influence of German onto TrSax and, thus, reduce the liability of the results. I will, however, show that there are strong tendencies in how each conjunction occurs and that such tendencies are different from what is typical for Standard German.

³¹ The Wenker sentences are usually presented in a list format, and each sentence is associated with a number in the list. For example, sentences 1-3 do not contain conjunctions. The first Wenker sentence that contains a conjunction is the 4th sentence in the list.

- (51) [der gute alte Mann ist mit dem Pferde
the.M.SG good old man be.3SG.PRS with the.SG.N.DAT horse
- durch-s Eis gebrochen]_{TP} **und** [in das kalte
through-the.SG.N ice break.PCT and in the.SG.N cold
- Wasser gefallen]_{TP}
water fall.PCT
- ‘[The good old man broke through the ice with his horse] **and** [fell into the cold water].’
Standard German

End occurs in 68% of the examples, *och* occurs in 32% of the examples (50 tokens³²). For space consideration I am not able to represent the Wenker sentences in each dialect. For a complete list of the Wenker sentences (in German) and their translation in English, I direct the reader to the Appendix or the Linguistic Atlas of Kansas German Dialects (LAKGD)³³. I have also provided a more extensive overview of the analysis in the Appendix.

The types of coordinands present in the Wenker sentences that contain conjunctions, and the extent to which *end* and *och* occur in each case are represented in Table 14 below.

Coordinands	end	och	Tokens
TP & TP	97%	3%	857
TP & TP _(-FIN)	34%	66%	290
DP & DP	17%	83%	605
AP & AP	10%	90%	41

Table 14. Results of Wenker sentence analysis by type of coordinand

First, some clarifications are in order. Most NPs occurred with a determiner, thus I am representing coordinands that contained NPs as DPs in Table 14. TPs represent finite clauses with an expressed finite verb, while TP_(-FIN) represent clauses with unexpressed finite verbs, such as in example (51) above. The tense carrying auxiliary *ist* ‘be’ is expressed in the first clause in (51), but not in the second. Only the participle verb *gefallen* ‘fallen’ occurs in the second clause.

³² There were a total of 120 examples for this sentence but there was variation in how this sentence was produced in the different TrSax dialects. Speakers expressed the finite auxiliary in the second clause in 70 examples. As I will show shortly, this would prompt the use of *end* instead of *och*. The percentages I have shown rely only on examples that were exactly the same but differed only in conjunction choice (50 tokens total). The remaining 70 tokens that had the auxiliary both in the first and second clause were all conjoined with *end*.

³³ <http://www2.ku.edu/~germanic/LAKGD/wenkersaetze.shtml>. The ASD contains 4 additional Wenker sentences not shown in the LAKGD.

More shared material than the auxiliary is unexpressed in the second TP in example (51), i.e. the subject *der gute alte Mann* ‘the good old man’ is also unexpressed as illustrated below:

- (52) [~~der gute alte Mann ist mit dem Pferde durchs Eis gebrochen~~]_{TP1} **und** [~~DER GUTE ALTE MANN IST~~ in das kalte Wasser gefallen]_{TP(-FIN)}
 ‘[The good old man broke through the ice with his horse]_{TP1} **and** [~~THE GOOD OLD MAN~~ fell into the cold water]_{TP(-FIN)}.’

Standard German

Subject ellipsis is common in the analyzed Wenker sentences, and it is not a significant factor in conjunction choice, but ellipsis of the finite verb is. This can be best exemplified through the Wenker sentences³⁴ shown in (53) and (54) below. I show the sentences in German and I emphasize which conjunctions appeared in the examples and to what extent.

Both examples contain clauses with subject ellipsis, indicated with ‘Ø’ in the first line of each example and in the translation. The unexpressed finite modal in the second example is indicated in the translation in (54). Both clauses conjoined in (53) have expressed tense carrying verbs (TP & TP), but only the first clause in (54) has an expressed finite verb, i.e. the modal *musst* ‘must’, and the second clause has an unexpressed modal (TP & TP_(-FIN)):

- (53) [du hast heute am meisten ge-lern-t]_{TP} **und** [Ø bist artig ge-wes-en (...)]_{TP(-FIN)}
 you have.2SG.PRS today at most PTCP-learn-PTCP
 and be.2SG.PRS good PTCP-learn-PTCP
 ‘You learned the most today and Ø were well behaved. (You may go home earlier than the others.)’
- (54) [du musst erst noch etwas wachsen]_{TP} **und** [Ø größer werden]_{TP(-FIN)}
 you must.2SG.PRS first yet some grow.INF and bigger become.INF
 (You aren't big enough to drink a whole bottle of wine.) You must grow some more first and Ø **MUST** get bigger.

Standard German

There are 121 examples of the sentence shown in (53) in the ASD. In 98% of the examples, the two TPs are conjoined with *end*, and in 2% they are conjoined with *och*. There 120 examples of the sentence shown in (54) in the ASD. The TP and the TP_(-FIN) are conjoined with *end* in 18% of the example and with *och* in 82% of the examples. Thus a division between TP and TP_(-FIN)

³⁴ There are sentences number 15 and 16 in the appendix. I included only the segments relevant for the analysis in the gloss, but provided the whole sentence in the translation.

becomes relevant when analyzing the coordinands each conjunction favors, as the results in Table 14 above also indicate.

Based on the results in Table 14, *end* is strongly favored for conjoining clauses with finite verbs (TP & TP) as it occurs in 97% of such cases. *Och* is favored to conjoin a TP and a TP_(-FIN) as it occurs in 66% of such examples, but this preference is not as strong as in the case of phrases. *Och* is strongly favored to conjoin DPs (83%) and APs (90%). These were the only types of phrases available through the Wenker sentences in the ASD, thus further analyses are necessary to establish if this rule extends to other types of phrases. Because the analysis is based on examples from about 120 different TrSax dialects, it is not clear how robust these tendencies would be in just one dialect. Table 14 indicates that in principle, there are dialects that use *end* where *och* is preferred among all the dialects, and *och* where *end* is preferred. For example, *end* occurs in 17% of the examples of two NPs being conjoined and in 34% of the examples of a TP conjoined with a TP_(-FIN).

Furthermore, there are dialects represented in the ASD that allow conjunction of TPs with both *end* and *och* such as in (55) and (56), and dialects that allow the conjunction of (non-finite) phrases with both *end* and *och* such as in (57) and (58). All these examples are taken from the TrSax dialect spoken in Mühlbach. The number that is shown in the citation after the village name indicates a specific recording, i.e. a specific speaker. Examples (55) and (56) come from different speakers (i.e. 451 and 459), but examples (55) and (57) come from one and the same speaker – 451, and (58) and (60) come from speaker 459.

- (55) [mer sen mäd]_{TP} **uch** [hun durscht]_{TP}
 we be.3PL.PRS tired and have.3PL.PRS thirst
 ‘We are tired and thirsty.’ ASD|Mühlbach|451|WS23
- (56) [mir sin mihd]_{TP} **und** [han turscht]_{TP}
 we be.3PL.PRS tired and have.3PL.PRS thirst
 ‘We are tired and thirsty.’ ASD|Mühlbach|459|WS23
- (57) e äst de Oahr ängdin ohne Solz_{NP} **uch** Fiëfer_{NP}
 he eat.3SG.PRS the eggs always without salt and pepper
 ‘He always eats the eggs without salt and pepper.’ ASD|Mühlbach|451|WS7

- (58) ar est di Eier ohne Salz_{NP} un Phefer_{NP}
 he eat.3SG.PRS the eggs without salt and pepper
 ‘He eats the eggs without salt and pepper.’

ASD|Mühlbach|459|WS7

It is not clear how widespread this type of variation is within the same dialect, since most of the dialects represented in the ASD only show one example per dialect. However, these examples show that there are TrSax dialects that allow the use of both conjunctions in the same environment. If the same holds in Viscri Saxon, contact effects from German would occur as increased use of *end* in such environments, and contact effects from Romanian would occur as increased use of *och* in such environments.

In this section, I have shown that TrSax has two coordinating conjunctions, *end* and *och*, and that each conjunction strongly favors specific types of coordinands: *end* is favored with finite clauses (TPs), while *och* is favored for other phrases (i.e. DP, AP). Furthermore, finite verb ellipsis in the second clause plays an important role in conjunction choice: both *end* and *och* are used to conjoin a TP and a TP_(-FIN), but *och* is preferred in this case. These rules seem to be widely conventionalized among the TrSax dialects in the ASD corpus. I will discuss possible accounts for the presence of two coordinating conjunctions in TrSax and their origins in the following section.

6.3 Coordinating conjunctions in Proto-Germanic and other Germanic languages

Mithun (1992:91) points out that a good place to start understanding modern diversity in a language is to look at its antecedents in the parent language. TrSax developed from OHG in a language island, in isolation from High German (in its various stages). Thus, TrSax has many features that are different from (current) Standard German and related Germanic languages. While current Germanic languages have only one coordinating conjunction, earlier stages of some Germanic languages had two attested coordinating conjunctions.

Old Norse (circa 9th - 13th century AD) for example, used to have two coordinating conjunctions, *ok* and *en*, both fulfilling the function of ‘and’. The two conjunctions could be used in the same environments in Old Norse, conjoining all types of phrases and clauses (Nielsen 2017:237). Because *en* ‘and’ coexisted with a homophone that could also be used as the adversative conjunction ‘but’, Nielsen (2017) argues that *en* slowly disappeared from Modern Mainland Scandinavian languages altogether. The adversative conjunction *en* was replaced by other words with adversative meaning, and only versions of the coordinating conjunction *ok*

‘and’ still exist in current Scandinavian languages, e.g. *og* in Norwegian or *och* in Swedish. Note that Old Norse *ok* ‘and’ and Swedish *och* ‘and’ are very similar to TrSax *och* ‘and’. This similarity may be due to the fact that these conjunctions have a common origin in Proto-Germanic.

As illustrated in Table 15 below, there is a split in the coordinating conjunctive system of Germanic languages. West Germanic languages retained a coordinating conjunction closer to ‘and’ (English - *and*, German- *und*, Dutch - *en*), while North Germanic languages retained a conjunction closer to *ok/og* (Swedish *och* or Norwegian/ Danish/ Icelandic *og*) (Braunmüller 1978:115-116).

West Germanic		North Germanic	
English	<i>and</i>	Swedish	<i>och</i>
Dutch	<i>en</i>	Danish/ Norwegian	<i>og</i>
German	<i>und</i>	Icelandic	<i>og</i>

Table 15. Coordinating conjunctions in Germanic languages (Source: Braunmüller 1978:115)

Braunmüller (1978:115-116) suggests that by comparing the equivalents of ‘and’ and ‘also’ in modern Germanic languages it can be established that there was once a shared conjunctive system among the Germanic languages. The conjunctions shown in Table 15 can be traced back to the Proto-Germanic (PGmc) etymons **inđi* (e.g. ModHG *und* < MHG *unde* < OHG *unta/ inti* < PGcm **inđi*) and **auk* (> Swed. *och*, Dan./Norw. *og*, Germ. *auch*). Both etymons fulfilled the grammatical function of ‘and’, but **auk* also fulfilled the grammatical function of ‘also’. North Germanic languages have retained *og/och* both as the coordinating conjunction ‘and’ and the additive particle ‘also’, and have lost conjunctions derived from **inđi*, as exemplified by the case of Old Norse. West Germanic languages retained coordinating conjunctions derived from **inđi* and lost conjunctions derived from **auk* as they retained the additive particles derived from **auk* (e.g. *auch* ‘also’ in Standard German).

When exactly **auk* was lost as a conjunction in German is not clear. *Ouh* is well attested both as a conjunction and an additive particle in OHG (Schützeichel 2004:230-231), and the MHG word *ouch* (<*ouh* OHG) is listed as a conjunction in Lexer’s online dictionary,³⁵ with the

³⁵ http://woerterbuchnetz.de/cgi-bin/WBNetz/wbgui_py?sigle=Lexer&lemid=LO00674 accessed on 03/28/2019.

main function of connecting two sentences. However, the meaning of ‘and’ does not occur in the translation, only the meaning of ‘also’. Wolf (1978:37) points out that the conjunction *und* ‘and’ and the additive particle *ouch* ‘also’ were commonly used sentence connectors in MHG, and that the distinction between conjunction and additive was not as clear in MHG as it is in ModHG/Standard German.

Thus, the TrSax conjunction *och* could be a retention of a Proto-Germanic feature that was still present in OHG, the stage of German that TrSax can be traced back to (cf. Müller 1864, McClure 1973). The OHG conjunctive expression *ouh* had several meanings in OHG, including ‘and’ and ‘also’ (Braunmüller 1978:114). While the meaning of ‘and’ is not retained in ModHG, *auch* ‘also’ functions as an additive particle and can be used to coordinate two sentences as illustrated in (59):

- (59) Der Fernseher ist kaputt. Auch hat ein Student mein Auto angefahren.
The TV set is broken. Also has a student my car hit
‘The TV is broken. Moreover, a student hit my car. [All this didn't exactly improve my mood.]’

Standard German (Reis and Rosengren 1997:246)

For this coordination to make sense, the two sentences need to have some identical material acting as a common denominator, and this is a crucial semantic requirement for the constituents under the scope of *auch* (Reis and Rosengren 1997:299). This is made explicit in the example above by adding the co-text ‘All this didn't exactly improve my mood’, but it is not obligatory for the coordination to make sense.

If McClure’s (1978) definition of *och* as ‘and also’ is correct, it could explain why *och* has a specialized function in TrSax, i.e. why it is favored to conjoin phrases as I have shown in Table 15 above. The phonological overlap between the conjunction *och* ‘and’ and the additive particle *och* ‘also’ may have led to semantic overlap resulting in the added meaning of ‘and also’ to the conjunction *och*, thus constraining the use of *och* to environments where ‘and also’ would make sense. Because ‘and also’ implies that the two constituents that are conjoined should be semantically equivalent, *och* may be favored with phrases because there is a higher chance for phrases to be semantically (and syntactically) equivalent, than for sentences. I will discuss this issue in the more detail in the following section.

6.3.1 Multiple causations in the development of category-specific conjunctions in TrSax

While the conjunction *och* could be the retention of an OHG feature that grammaticalized into a category-specific conjunction due to language-internal overlap with the additive particle *och*, multiple factors may have led to this outcome. As mentioned earlier, Romanian and TrSax have a shared feature, namely, both languages have one lexeme that can function as a conjunction and an additive particle, i.e. a homophone with two interpretations/functions. This similarity between TrSax and Romanian led Shinohara (2016: 241-242) to hypothesize that the TrSax additive particle *och* ‘also’ developed into a conjunction under the influence of Romanian, because many Transylvanian Saxons are TrSax – Romanian bilingual. The transfer of coordination conjunctions from one language to another is a well-attested phenomenon in cases of language contact (Matras 1996, 2007), as is the development of new conjunctions in one language under the influence of another (Mithun 1988, 1992). Both Mithun (1988) and Matras (1996) point out that bilingualism and prestige status of the donor language were important predicaments for the transfer of conjunctions from the donor language into the recipient language in the cases they analyzed. As I showed in Chapter 3, TrSax-Romanian bilingualism is more common only since the 1950s (cf. McClure 1973, Isbăşescu and Mantsch 1975, Ney 1980), when the communist regime forced many people from the villages to work on collective farms, thus bringing together people with different ethnic backgrounds. It is therefore unlikely that a contact-induced change, from the additive particle *och* to the conjunction *och* in this case, grammaticalized and diffused to the different TrSax dialects in such a short period of time (cf. Backus et al 2013). After all, many of the dialects in the ASD show that *och* is systematically used to conjoin phrases, and Kisch (1900) already mentions that *och* is used with this specific function in his description of the Nösner dialect.

Several authors analyzed the outcomes of contact between TrSax and Romanian and they report it resulted mostly in word-borrowings (Klaster-Ungureanu 1958, Ney 1984, Krefeld 2015). However, Ney (1984) illustrates TrSax structures that have been influenced by Romanian, and one of them involves the use of *och* ‘also’ in structures that are possible in Romanian, but not in TrSax or Standard German. Ney (1984:42) points out that Romanian has only influenced the use of the additive particle *och* ‘also’, but not the conjunction *och* ‘and’, i.e. *och* is not used instead of *end* or the other way around (but she does not comment on the particulars of the use of *end* and *och*). Thus, the structure that is affected in TrSax corresponds to the German

sowohl...als auch ‘both...and’ and it is replaced with *och...och* ‘also...also’ in TrSax and with *auch...auch* ‘also...also’ in the German spoken by Transylvanian Saxons, as in (60)³⁶ below:

- (60) die sprechen **auch** Ländlerisch **auch** Sächsisch
 they speak.3PL.PRS also Ländlerisch also Saxon
 ‘They speak both Ländlerisch³⁷ and Transylvanian Saxon.’

German (Ney 1984:42)

This is modeled on the Romanian correlative adverb construction (cf. Bîlbîie 2008) shown in (61) below:

- (61) la petrecere vor veni **și** prietenii **și** colegii lui Ion
 to party will.3PL.PRS come.INF ADV friends ADV colleagues of John
 ‘Both John’s friends and his colleagues will come to the party.’

Romanian (Bîlbîie 2008)

Bîlbîie (2008) points out that in the correlative adverb construction *și...și* the first occurrence of *și* is typically interpreted as the adverb ‘also’, and the second occurrence is interpreted as the conjunction *și* ‘and’. She further claims that this construction is specific to Romanian, and, unlike in other Romance languages, both instances of *și* in the correlative adverb construction *și...și* in (61) are adverbs. One of Bîlbîie’s arguments that supports her claim is that the conjunction *și* could be added to the construction shown in (61) resulting in a sequence of conjunction and adverb as in (62):

- (62) (...) **și** prietenii **și** **și** colegii lui Ion
 ADV friends CONJ ADV colleagues of John
 ‘Both John’s friends and also his colleagues (will come to the party).’

Romanian

It appears, thus, that Romanian had an influence on the use of the adverb/ additive particle *och* in TrSax in that it can be used between two nouns, a function that is not grammatical in Standard German, but is grammatical in Romanian. It seems unlikely, however, that the conjunction *och* developed due to contact with Romanian more recently as TrSax – Romanian bilingualism became more common. The prolonged contact between TrSax and Romanian and the similarity between Romanian *și* and TrSax *och* may have led to the maintenance of *och* as a

³⁶ Ney (1980:42) discusses the use of *och...och* in TrSax but she does not show any examples of how the construction is used in TrSax. She only shows the German example I replicated in (60) and points out that this construction has been extended to the German spoken by Transylvanian Saxons.

³⁷ Ländlerisch is in Austrian-German dialect spoken in Transylvania. The speakers of the dialect are called Landler and they came to Romania in the 19th century from Austria.

conjunction in TrSax, while internal factors, i.e. the fact that *och* can have the meaning of ‘also’ as well, have led to its category specific function.

6.4 Hypothesis on contact effects from German and Romanian in current Viscri Saxon data

There are two coordinating conjunctions in TrSax and evidence from about 120 dialects shows that they are in complementary distribution: *end* conjoins finite TPs and *och* conjoins any phrase that does not include finite TPs. Standard German has only one coordinating conjunction *und* that is used to conjoin all types of coordinands. Romanian has only one coordinating conjunction *și* that is used to conjoin all types of coordinands. *Și* also functions as the additive particle ‘also’. The conjunctions and additive particles of the three languages in contact are summarized in Table 16 below. The two main types of coordinands shown in the second column are XP –phrases, and TP – finite clauses.

		Language		
		TrSax	German	Romanian
Coordinands	XP & XP	<i>och</i>	<i>und</i>	<i>și</i>
	TP & TP	<i>end</i>	<i>und</i>	<i>și</i>
Additive particle (also)		<i>och</i>	<i>auch</i>	<i>și</i>

Table 16. Coordinating conjunctions and additive particles in TrSax, German, and Romanian

Considering that there are TrSax dialects that allow overlapping use of *end* and *och* (see examples 57 – 60 above), I hypothesize that influence from either language in TrSax would result in the loss of the category-specific functions of each conjunction, and in increased use of the conjunction that overlaps more with the source language for transfer. Thus, more influence from German in TrSax would result in the expansion of *end* to all types of coordinands and the increased use of *end* where both conjunctions are possible, while influence from Romanian would result in the expansion of *och* to all types of coordinands and the increased use of *och* in all contexts where both conjunctions are possible. To test this hypothesis I am first going to establish the contexts in which both conjunctions can be used in Viscri Saxon. To determine if German and Romanian have an influence on the variation between the two conjunctions, I will compare data from the participants in Romania to data from the participants in Germany and use the language dominance scores as a predictor of contact effects. Due to the typological similarity between Viscri Saxon and German, the cognate status of Viscri Saxon *end* and German *und*, and

the prestige status of German among Transylvanian Saxons, I expect that German will have an influence on Viscri Saxon more than Romanian. I would not be surprised if *end* becomes more acceptable outside of its category-specific function, but *och* is more restricted to its category-specific function.

In the first case study on word order variation in verb clusters, I found that speakers with higher language dominance scores, i.e. German-dominant speakers, used German-like constructions more than speakers who were Romanian-dominant. Because the Romanian-like word orders in Viscri Saxon correspond to structures perceived as native TrSax constructions by the speakers, it was not possible to establish whether contact effects from Romanian come in the form of increased use of the overlapping structures between Viscri Saxon and Romanian. Increased Romanian dominance could simply lead to less German dominance and consequently fewer influences from German into Viscri Saxon. If the results of the present case study on structural variation in Viscri Saxon coincide with the results of the first case study, it will become more evident how German and Romanian influence the structure of Viscri Saxon. The following sections describe the Viscri Saxon data I am analyzing for contact effects, the methodology, results, and discussion of the results.

6.5 Methodology

The data used in this case study come from the same transcribed interviews used in the analysis of word order variation in verb clusters. I selected all the tokens/utterances that contained the site of the variable, i.e. coordinating conjunctions with a coordinand on the left and one on the right. For example, utterances that started on a coordinating conjunction after a brief pause in the discourse were excluded. This selection method allowed for a more accurate distinction between the use of *och* as a conjunction and the use of *och* as an additive particle. In addition, I relied on the translations provided by the native speaker transcribers to exclude examples where *och* was used as the additive particle ‘also’, and excluded examples where the meaning was ambiguous³⁸.

The token selection started at about 10 minutes into the recording allowing for a warm-up and relaxation period for the participant, and continued until 30 tokens were identified for each conjunction (cf. Nagy 2015:315). Where not enough examples were available/ participant, I

³⁸ It could be that *och* was translated as ‘and’ when the speaker meant ‘and also’ (and probably vice versa), but overall the tokens I chose are mostly consistent in terms of constituent form and conjunction choice.

searched through the first 10 minutes of the recording as well (this applied to only 3 participants out of 14). Two of the participants did not deliver 30 examples for each conjunction.

For every utterance that contained a conjunction, I marked what type of coordinands occurred before and after the conjunction. Once I established a general classification of the coordinands, I calculated the proportions for each conjunction in a given environment, e.g. between two NPs, two finite clauses, etc. I performed additional statistical analysis using a generalized linear model in R (the *lmer4* package) for environments where both conjunctions could occur. The dependent variable in the analysis was the conjunction, i.e. the likelihood of using *och* versus *end*. To determine whether the environment had a significant effect on the use of one conjunction versus the other I included the type of the coordinand as a fixed effect. The other fixed effects in the analysis were site (Germany and Romania), and the language dominance scores. The individual participant was included as a random effect.

6.6. Results

The results presented below relate to Viscri Saxon data only, and, unless otherwise specified, all the examples I show in this section are from Viscri Saxon. A total of 814 utterances and phrases containing coordinating conjunctions were analyzed (398 tokens from Romania-participants, 416 tokens from Germany-participants), 409 tokens for *end* and 405 tokens for *och*. Figure 7 below shows the descriptive statistics for all the tokens combined. The coordinands are shown on the *y*-axis and the percent for each conjunction is shown on the *x*-axis. Going from top to bottom on the *y*-axis, the first category of coordinands are clauses with finite verbs (TP, 494 tokens), followed by TPs conjoined with a clause with an unexpressed finite auxiliary/ modal (TP & TP_(-FIN), 40 tokens), determiner phrases (DP, 214 tokens), adjective and adverb phrases (AP, 32 tokens), and prepositional phrases (PP, 24 tokens).

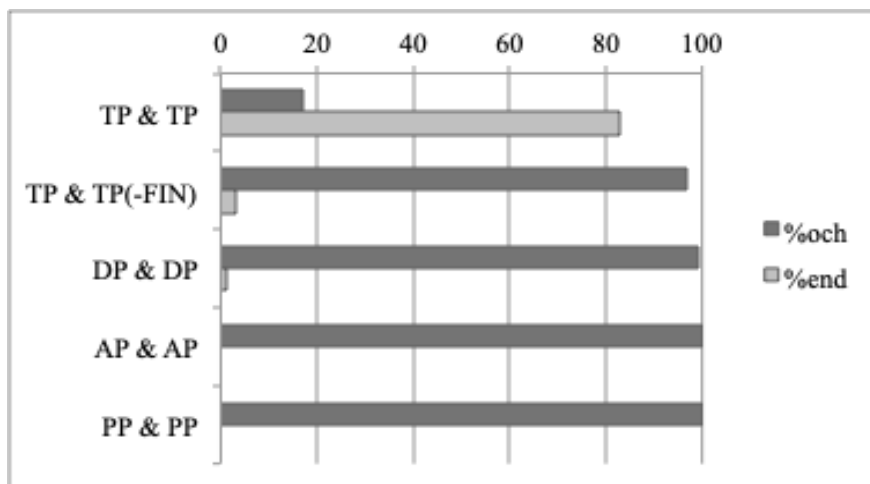


Figure 7 – Use of *och* and *end* by type of coordinand

As Figure 7 indicates, the environment where both conjunctions are most likely to occur is when conjoining two TPs. The conjunction *end* occurs in 83% of such cases and *och* in 17% of the cases. Examples of such clauses are shown in (63) and (64) below, where each clause is delimited by square brackets. Example (63) shows two clauses conjoined with *end* and example (64) shows two clauses conjoined with *och*:

(63) [et waus uständlich]_{TP} **end** [kanntj niet moihr wunni gehn]_{TP}
 it be.3SG.PST inconvenient and can.3SG.PST not more when go.INF
 ‘It was inconvenient and one could not go (there) all the time.’

(64) [mer zahn af de Fos-necht]_{TP} **och** [nei eam Harwest
 we move.3PL.PST on the.F.SG carnival-night end now in.DAT fall

 seullen mer af de Hochzetj]_{TP}
 shall.3PL.PRS we on the.F.SG wedding
 ‘We went for the carnival and now in fall we are expected to the wedding.’

Clauses where a TP and a TP_(-FIN) are conjoined, as the one shown in (65) below, occurred with *och* 97.5% of the time; there was only one example of two such clauses conjoined with *end*. The example in (65) shows a TP and a TP_(-FIN) conjoined with *och*. The modal *muass* ‘must’ is overt in the first clause and unexpressed in the second clause:

(65) de Fiseule-n muass em [allujn keuchen]_{TP}
 the.PL bean-PL must.3SG.PRS one alonecook.INF

och [det Wasser zwoi Mal oh-schieden]_{TP(-FIN)}
 and the.N.SG water two time.PL out-poor.INF
 ‘One must cook the beans on their own and ~~MUST~~ pour the water out twice.’

Och is also the preferred conjunction when the coordinands are two DPs (*end* occurred only in 1% of the examples), two APs (no tokens with *end*), and two PPs (no tokens with *end*).

Example (66) below shows two DPs conjoined with *och*:

- (66) mer hatten Jonatan_{DP} **och** Lader-oippel_{DP}
 we have.3PL.PST Jonathan and leather-apple.PL
 ‘We had Jonathan and Boskoop apples.’

Example (67) shows two adverb phrases conjoined with *och*:

- (67) die ha weull-en balich_{AP} **och** uifach_{AP}
 the.PL here want-3PL.PRS cheap and simple
 ‘They here/ These people want (something) cheap and simple.’

Having established that DPs, PPs, and APs are conjoined with *och*, I collapsed them into a category called XP and proceeded to examine clauses in more detail. A closer analysis of TPs revealed that main clauses (S) and subordinate clauses (S_Sub) are not conjoined in the same way, i.e. each type of clause favors a specific conjunction. When two main clauses such as the ones shown in (63) and (64) above are conjoined, both *end* and *och* can be used, but *end* is strongly preferred (see Figure 8 below). When two subordinate clauses are conjoined, such as the two clauses indicated in parenthesis in (68) below, *och* is strongly preferred:

- (68) [eat heut Vuardrach ge-hauld-en]_S
 she have.3SG.PRS presentation PTCP-hold-PTCP

 (wa em oarbet)_{S_Sub} **och** (wa em ze east kit)_{S_Sub}
 how one work.3SG.PRS and how one to something come. 3SG.PRS
 ‘She held a presentation on how one should work and how one should achieve something.’

Both subordinate clauses in example (68) are headed by a subordinating conjunction – *wa* ‘how’ – but utterances in which two subordinate clauses are conjoined under the same subordinating conjunction, such as in (69) below, are also common in the data, and such subordinate clauses are also commonly conjoined with *och*:

- (69) [ech sahn]_S **datt** (der Zegun kit)_{S_Sub}
 I see.1SG.PRS that the.M.SG gypsy come.3SG.PRS

och (ameraink mohit)_{S_Sub}
 and around mow.3SG.PRS
 ‘I see to it that the gypsy comes and mows all around (the premises).’

Figure 8 below shows the preferred conjunctions for several coordinand subcategories that I identified. Going from top to bottom, the first coordinand category is XPs (i.e. DPs, PPs, APs), the second category represents TPs and TP_(-FIN), the third category represents main (tensed) clauses (S & S), the fourth category represents subordinate clauses (S_{Sub} & S_{Sub}), and the fifth category *Asymmetrical Coordinands* represents coordinands of different types, e.g. a main clause and a subordinate clauses (S & S_{Sub}), a main clause and a DP (S & DP) etc.

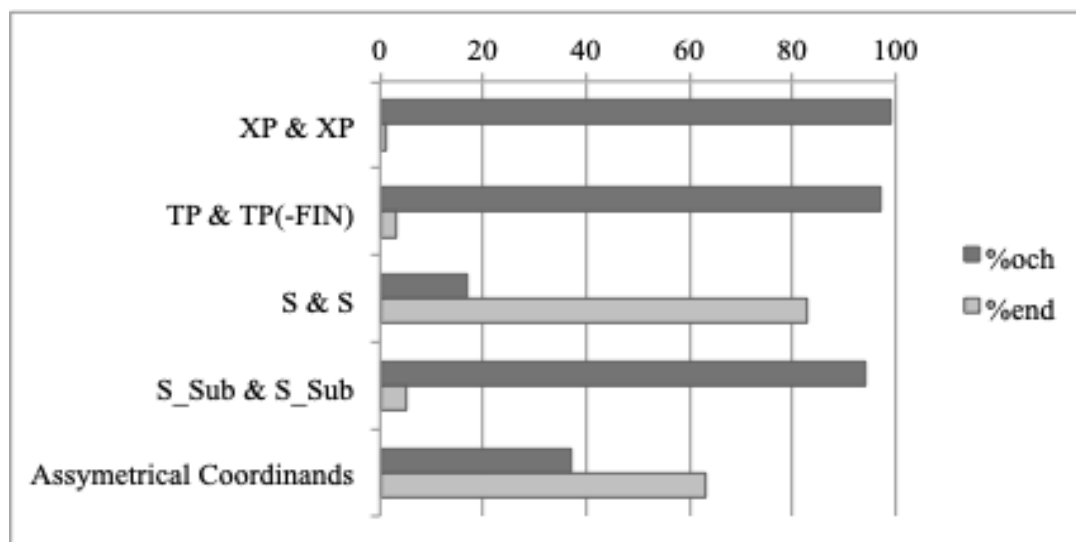


Figure 8 – Use of *och* and *end* with different types of coordinands

Once the finite clauses are broken down in further categories, it becomes evident that *end* is the preferred conjunction when two main clauses are conjoined (83% *end*, 17% *och*, 424 tokens), but *och* is preferred when a TP is conjoined with a TP_(-FIN) (97.5% *och*, 2.5% *end*, 40 tokens), and when two subordinate clauses are conjoined (95% *och*, 5% *end*, 32 tokens). When the coordinands are asymmetrical, *end* occurs in 67% of the example and *och* in 33% of the examples (based on 38 tokens).

Examples of asymmetrical coordination, i.e. when different types of coordinands are conjoined, are given in (70) and (71) below with each conjunction. Subordinate clauses are shown in parentheses and main clauses are shown in square brackets. In (70), a subordinate clause is conjoined with a main clause with the conjunction *end*. Example (71) shows a subordinate clause conjoined with a main clause with *och*.

- (70) [wuarschenlich gluiwen da et]_S (wuat em ean erzieht)_{S_Sub}
 probably believe.3PL.PST they it what one them tell.PTCP
- end** [sen zefrieden der-meat]_S
 and be.3PL.PRS content there-with
 ‘They probably believe what they are told and are happy with that.’
- (71) [de Jaujer hun es ge-see-t]_S (datt et Biear git)_{S_Sub}
 the hunters have.3PL.PRS us PTCP.tell. PTCP that it bear give.3SG.PRS
- och** [de Hirte-n hu se alduist gesahn]_S
 and the.PL shepherd-PL have.3PL.PRS them sometimes see.PCT
 ‘The hunters told us that there were bears (in the area) and the shepherds have seen them occasionally.’

The results shown in Figure 8 are also confirmed by a generalized mixed effects analysis. Even though the preferences for each conjunction based on type of coordinand are strong, I ran a model that included the coordinands where both conjunctions could be used to determine whether there were any contact effects present in the use of each conjunction. The results of the model are shown in Table 17 below. The reference conjunction is *och* and the reference site is Romania.

Fixed effects	Estimate	SE	z Value	p Value
(Intercept)	-0.831	0.435	-1.909	0.056
S & S	-1.537	0.379	-4.055	0.0005
Site (R)	0.517	0.379	1.364	0.172
Dominance	0.0003	0.003	0.109	0.913
Random Effect: Speaker	Variance: 0.438		Std. deviation: 0.662	
N= 464, Speakers = 14				

Table 17. Generalized linear mixed effects model for conjunction choice, based on 464 tokens from 14 speakers

The likelihood of using *och* to conjoin two main clauses (S & S) is significantly lower than for using *end*, i.e. the preferred conjunction for conjoining two main clauses is *end* ($p < 0.001$). There was no effect for ‘Site’ on use of conjunction or for dominance scores ($p > 0.05$ in both cases). The ‘Intercept’ contains the effect for the ‘Asymmetrical coordinands’, the individual speaker, and the residuals, and it is not significant ($p > 0.05$).

The descriptive statistics for how conjunctions are used by participants in Romania and Germany are shown in Table 18 below.

Conjunction	Romania		Germany	
	%end	%och	%end	%och
XP & XP	0.01	99.9	0.02	99.8
TP & TP _(-FIN)	0	100	5	95
S & S	86	14	92	8
S _{Sub} & S _{Sub}	0.05	99.5	1	99
Asymmetrical coordinands	62	38	64	36

Table 18. Descriptive statistics for use of *end* and *och* by participant group

It becomes evident from Table 18 that the two groups are very similar in their use of the two conjunctions with the different types of coordinands. Proportionally, *och* is used more by participants in Romania to conjoin two finite clauses but the statistical analysis confirms that it is not a significant difference. Contact effects from German or Romanian could not be identified in either group.

6.7 Discussion

The purpose of the analysis presented above was two-fold. The first goal was to establish whether there are environments where both conjunctions could be used in Viscri Saxon. The second goal was to evaluate contact effects from German and Romanian in the use of each conjunction in Viscri Saxon. Based on the evidence presented from other dialects in section 6.2.1 of this chapter, I established that *end* is the preferred conjunction with finite clauses (when both clauses have expressed finite verbs), and *och* is preferred with phrases in TrSax. Following McClure's (1973) definition of *och* as 'and also', and the fact that there is an overlap between the conjunction *och* and the additive particle *och* 'also', I proposed that the category-specific use of *och* may be due to the fact that it requires the coordinand to the left of *och* to be semantically related to the coordinand to the right.

The results of the analysis show that *end* has a category-specific function in Viscri Saxon, but it may be somewhat different than what has been proposed in previous studies: *end* is the preferred conjunction for finite TPs (with expressed verbs) when such TPs are main clauses. *Och* is also used in such cases, though to a more limited extent than *end*. The primary function of *och* is to conjoin categories such as NPs, PPs, and APs, clauses where finite auxiliary/ modal ellipsis

occurs in the second clause, and subordinate clauses. *Och* may be preferred to conjoin subordinate clauses because there is more symmetry between such clauses than between two main clauses, as two subordinate clauses form one constituent that is dependent on a main clause. Similarly, phrases that are conjoined by *och* form one constituent that is dependent on (or dominated by) another constituent. When two subordinate clauses are conjoined, they both entail information about the same main clause that they are subordinate to. Furthermore, the same subordinate conjunction can scope over two subordinate clauses, as I have shown in (69) above.

Och can be encountered (to a lesser extent than *end*) in all kinds of finite clauses as well, including clauses that are not syntactically similar, such as a main clause and a subordinate clause. There are thus indications that its function is not limited to conjoining phrases and it is extending to finite clauses. Over time it might compete with *end* for that domain, and if Romanian has an effect on the distribution of the two conjunctions in this environment *och* could become the preferred conjunction for combining two clauses. At this point in time, it is not a significant effect, as shown in the statistical analysis. Speakers may be well aware that *och* is a feature that is characteristic for TrSax and may find it more acceptable to use *och* to conjoin any types of coordinands, than to use *end* in such cases, because *end* is more German-like. The results of the analysis also show that there are no contact effects from German on the use of *end*. Such effects would be evident if the function of *end* would extend to conjoining all kinds of phrases, but such examples were minimal in the data.

Due to the typological similarity between TrSax and German, the cognate status of TrSax *end* and German *und*, and the prestige status of German among Transylvanian Saxons, I expected the use of *end* to become more common with coordinands that can be conjoined with *und* in German. Consequently, I predicted a higher degree of contact effects from German in this area in light of the intensified contact between Viscri Saxon and German, and the degree of bilingualism among participants from Germany, but these predictions were not met. Overall the results of my analysis show that variation in conjunction choice is a well-established grammatical property of Viscri Saxon, and Viscri Saxon speakers with different levels of dominance in German and Romanian are well aware of the structural boundaries each conjunction operates within.

6.8 Conclusions

There are two coordinating conjunctions in Viscri Saxon, *end* and *och*, and they both fulfill the grammatical function of 'and'. The two conjunctions are category-specific, in that *end*

is used to conjoin finite clauses and *och* is used everywhere else, including finite clauses. The less restricted functions of *och* indicate that *och* is losing some of its category-specific function that is still very strong in Viscri Saxon, namely conjoining non-finite phrases and subordinate sentences. However, *end* remains restricted to its function and contact effects from German or Romanian were not detected in any case. Variation between the two conjunctions is determined solely by grammatical factors, and participants from both groups use the conjunctions with their grammatical constraints.

Chapter 7

General Discussion And Conclusions

The present chapter provides a summary of the dissertation and a general discussion of the findings from the two case studies. The chapter is organized as follows: I provide a summary of Chapters 2 – 6 in section 7.1, then I discuss the findings from the two case studies in section 7.2, and the answers they provide with regards to the research questions posed in Chapter 1. The implications of the dissertation are discussed in section 7.3. The chapter concludes with a layout of topics for further research in section 7.4.

7.1 Summary of the dissertation

The purpose of this dissertation was to analyze structural variation in Viscri Saxon, and to establish whether German and/ or Romanian, the languages in contact with Viscri Saxon, would have an effect on variation due to transfer phenomena. At the same time I sought to determine whether different subsystems of Viscri Saxon morpho-syntax would be affected to the same degree by the contact languages. Chapter 2 provided an overview of the relevant language contact literature with a focus on morpho-syntactic transfer, and introduced the framework for detecting contact-induced changes in Viscri Saxon. The first set of studies underlined the main factors that facilitate morpho-syntactic transfer – typological similarity between the languages, intensity of contact, assessed by duration of contact and degree of bilingualism – and presented evidence on transfer from studies of various language contact situations. Several studies I discussed indicated that relative clauses are prone to contact effects in different types of contact scenarios, but that in principle anything can transfer from a source language into a recipient language.

The second set of studies I discussed emphasized new directions in the field of language contact. I provided an overview of experimental and corpus research on the cumulative effects of bilingual language interaction that lead to contact-induced language change. Such studies indicate that increased use of and exposure to a contact language (or source language) can lead to contact-induced changes in a recipient language. The areas that tend to be prone to change are

structures that are shared between the contact and recipient language, and the main contact effects are in the form of feature enhancement, i.e. speakers show a preference for features that are shared between recipient and contact language.

I proposed, following Matras (2007, 2011) that the transfer of morpho-syntactic features should result in the dissolution of structural boundaries between the languages in contact and lead to shared grammatical rules between the contact language and the recipient language. I also discussed attempts at establishing ‘borrowing’ hierarchies to provide a clearer picture of language-internal structural factors that influence transfer, and underlined the importance of social and psychological processes in the outcomes of language contact.

Chapter 3 provided important background information on Transylvanian Saxons, the origins of TrSax in Romania, and the way TrSax, German, and Romanian were connected over the centuries. I illustrated that German (in its various stages) has been present in TrSax communities as early as the 15th century AD, but it was used mostly by the elites. German was adopted as an official written language for Transylvanian Saxons and it became more accessible to the wider community with the reformation of the Lutheran church (16th century). The nature of contact with Romanian was different: groups of TrSax speakers and Romanian speakers have been in prolonged contact for several centuries, but it was used only by Transylvanian Saxons who came in contact with Romanian speakers due to the nature of their work, for example through sheep herding and farming. In principle, once German and Romanian became more accessible to Transylvanian Saxons (around the beginning of the 20th century AD) the three languages have developed specialized functions in the community: TrSax was the home and community language, German was used for literacy and religious purposes, and Romanian to communicate with ethnic Romanians. The language dynamics changed in 1989 when a considerable number of Transylvanian Saxons left Romania and immigrated to Germany. Currently, TrSax speakers in Romania use Romanian in frequent interactions, some of them using Romanian even in the home. TrSax speakers who moved to Germany use German on a regular basis in various communicative domains, including the family domain.

Chapter 4 described the procedures used in collecting, and transcribing the data, and provided relevant information on the participants. I compared two groups of Viscri Saxon speakers, one from Romania and one from Germany, based on a series of social factors. I showed that the two groups of participants were very similar in terms of language acquisition

history, use of Viscri Saxon, self-assessed proficiency in Viscri Saxon and German, and attitudes towards Viscri Saxon, Romanian, and German. All the participants involved in this study had very positive attitudes towards the three languages, and the most positive attitudes were toward Viscri Saxon. The main differences between the two groups were in the time spent in Germany, and in the use of German and Romanian. Participants in Germany had spent significantly more time in Germany (exposure to German) and used German significantly more than participants in Romania. The participants in Romania had spent significantly more time in Romania (exposure to Romanian) and use Romanian significantly more than participants in Germany. These factors also resulted in overall higher language dominance in German among participants in Germany and higher language dominance in Romanian among participants in Romania. Language dominance between German and Romanian (as measured using the Bilingual Language Profile questionnaire) was chosen as the main sociolinguistic predictor for subsequent analyses of contact-induced changes in the two areas of structural variation in Viscri Saxon.

Chapter 5 presented the first case study on structural variation in Viscri Saxon. Two-verb clusters in subordinate clauses were analyzed closely, and possible word orders were compared to the distribution of similar patterns in related languages and dialects. I also addressed word order variation in non-finite two-verb clusters in TrSax main clauses, showed that there are many similarities between subordinate and main clause clusters, and exemplified main clause verbal constructions in Standard German and Romanian. I established that variation in Viscri Saxon occurs between German-like constructions (the 2-1 order and the 3-2 order) and Romanian-like constructions (the 1-2 order and the 2-3 order) when considering the two types of verb clusters together. Variation in verb clusters was analyzed using generalized linear mixed effects models that included type of construction (Aux + V, M + V) as a linguistic predictor, and language dominance scores and site (Germany, Romania) as sociolinguistic predictors for word order. Looking at subordinate clauses, I found that Viscri Saxon two-verb clusters pattern differently than in related languages (i.e. Luxembourgish and Flemish) and dialects, in that there is a flexible distribution between the 1-2 (Aux/M-V) and the 2-1 (V-Aux/M) orders regardless of construction type. The effect of German was significant: speakers with higher dominance scores (German-dominant) were significantly more likely to use German-like orders. Conversely, speakers with lower dominance scores (Romanian-dominant) were more likely to use Romanian-like orders. Individual patterns of variation illustrated that anything from exclusive use of

German-like orders to (almost) exclusive use of Romanian-like orders is possible in Viscri Saxon, with speakers from both sites falling somewhere in the middle of this continuum. I will discuss the implications of these findings in Section 7.2, in connection with the results of the second case study and the research questions introduced in Chapter 1.

The second case study on variation in coordinate conjunction choice was presented in Chapter 6. I showed that there are two coordinating conjunctions in TrSax, *end* and *och*, that fulfill the function of ‘and’. I demonstrated that they are category specific conjunctions (cf. Haspelmath 2007) based on data from the Atlas of Transylvanian Saxon dialects (the ASD): *end* is used to conjoin finite clauses and *och* is used to conjoin phrases such as DPs, APs. In light of the intensified contact between Viscri Saxon and German, I expected *end* to become acceptable with all kinds of phrases under the influence of German *und* ‘and’. I also expected *och* to become possible with finite clauses due to the intense contact between Viscri Saxon and Romanian, because there is structural overlap between the particle *och* that fulfills the functions of ‘and’ and ‘also’, and Romanian *și* that fulfills the same functions in Romanian. The analysis of the two conjunctions in the Viscri Saxon data complemented the category-specific rules established based on other dialects. I showed that the two conjunctions are indeed category specific in Viscri Saxon and added evidence on the types of categories they conjoin. In Viscri Saxon, *end* is used only to conjoin finite clauses with expressed finite verbs. *Och* is used to conjoin categories such as DPs, PPs, APs, a TP and a TP with an elided auxiliary/modal (TP & TP_(-FIN)), subordinate clauses, but it can also be used to some extent in the same environment as *end*. However, when *och* is used in this latter context, it occurs only to a limited degree. *End* was not encountered with the categories mentioned above, not even in the utterances of the German-dominant speakers, as I expected. Even though *och* could be used in the same environments as *end* (e.g. TP & TP), no contact effects from German or Romanian were detected when looking at the effects of site and language dominance. I will discuss the possible explanations for the lack of contact effects on variation in conjunction choice in the following section.

7.2. General discussion of the two case studies

In this dissertation, I took a sociolinguistic approach to variation in Viscri Saxon. I identified two areas of structural variation, i.e. verb clusters and conjunction choice, and in each case one of the variants had structural overlap with Romanian and the other variant had structural overlap with German. I explored whether the two areas of morpho-syntactic variation have been

affected by contact with German and Romanian by testing the effects of grammatical and sociolinguistic factors (e.g. language dominance) on variation in mixed effects analyses.

Assuming that structural overlap between languages (in the targeted areas) is a strong predictor for the occurrence of cross-linguistic interactions (cf. Hartsuiker et al. 2004, Jacob et al. 2017), and that increased exposure to and use of a contact language may lead to more transfer in multilingual speakers (cf. Kootstra and Şahin 2018), I posed the following research questions:

RQ1: If there are contact effects from German and/or Romanian in either of the areas that display variation in TrSax, are they equal in kind and degree?

RQ2: In the absence of a monolingual variety, can the source of a potential contact-induced change in TrSax be identified by comparing varieties of the same dialect when spoken in two distinct linguistic ecologies (i.e. Germany and Romania)?

RQ3: Are there relevant social and linguistic factors that can be used to explain the possible influences from German and/or Romanian onto TrSax?

With regards to RQ1 it is challenging to establish if the influence of Romanian on variation is the same as the influence of German considering the absence of diachronic data. First, contact effects were identified in the case of verb clusters and the results of the analysis show that speakers who are more German-dominant (i.e. speakers in Germany) have a preference for German-like word order (the 2-1 and the 3-2 orders). Romanian-like word orders (the 1-2 and the 2-3 orders) are more likely to be used by Romanian-dominant speakers. Based on these results it would seem that German and Romanian have a similar effect on the distribution of variants in Viscri Saxon, i.e. the enhancement of shared features. However, the 1-2 and the 2-3 orders coincide with the orders identified as inherent TrSax orders in previous studies (cf. Holzträger 1912, McClure 1973). It is, therefore, possible that under German influence Viscri Saxon is moving towards the more frequent use of the 2-1 order, as was evident in the data from speakers in Germany, and that the effect of Romanian on Viscri Saxon is not so much the enhancement of a shared word order, but the preservation of the 1-2 order. Speakers who use more Romanian use less German (and to some extent less TrSax) and are therefore less likely to exhibit German influence in their Viscri Saxon.

Therefore, the two languages could play different roles in modulating variation. Romanian may be acting as a ‘buffer’ between Viscri Saxon and German, decelerating contact-induced changes in Viscri Saxon under the influence of German (cf. Clyne 2003). Speakers who

are Romanian-dominant use less German and are thus likely to exhibit less influences from German, than speakers who are German-dominant. Given that German and Viscri Saxon are typologically very close, but Viscri Saxon and Romanian have more typological differences, it would be reasonable to encounter more contact effects from German in Viscri Saxon than from Romanian. The fact that there are speakers who are German-dominant but do not use German-like structures more than Romanian-like structures further indicates that the 1-2 order is well established in Viscri Saxon, and there may be factors outside of contact effects that lead to the preservation of inherent TrSax features in Viscri Saxon. Such factors may be related to speakers' language attitudes (cf. Thomason and Kaufman 1988, Thomason 2001).

Pertaining to RQ2, the results of the first case study show that in the absence of a monolingual variety, contact-induced changes in a language can be identified when comparing varieties as spoken by multilingual speakers in two different sites. Furthermore, language dominance, which encompasses use of and exposure to a language in addition to other dimensions of language dominance, is one of the main predictors of contact effects. At the same time, such a comparison also revealed more about the features of Viscri Saxon that remained stable despite intensified contact with German and Romanian.

Further insights about the factors modulating transfer and answers to RQ2 and RQ3 may be reached by considering the results of the second case study. Given the cognate status of Viscri Saxon *end* 'and' and German *und* 'and', I expected German-dominant speakers to use the coordinating conjunction *end* in Viscri Saxon in the same way they would in German, i.e. with all types of coordinands (cf. Fernández et al. 2017, Travis et al. 2017). It seems though that the typological similarity between Viscri Saxon and German, and the increased use of and exposure to German (or increased language dominance in this case) were not sufficiently strong factors to lead to contact effects in this area. While language dominance in German had the major effect on variation in the case of verb clusters, this factor is only significant when there are no linguistic constraints that condition the variation, i.e. when not only structures but also grammatical rules are shared. In the case of conjunction choice, the distribution of each conjunction was explained solely by grammatical factors. It is, however, possible that German and Romanian have an ongoing preservation effect of two conjunctions in Viscri Saxon, because each of the two conjunctions has a structural correspondent in one of the contact languages. This feature sets TrSax apart from current Germanic languages that have only one expression for 'and'.

The fact that contact effects were present in one area (i.e. verb clusters), but not the other (i.e. conjunction choice), informs us further about the role structural factors play in the potential outcomes of language contact. There are two possible explanations for these differential outcomes. First, subordinate clauses have been shown to be vulnerable to contact effects in different types of contact situations (cf. Jendraschek 2007, Muysken 2012). Because two-verb clusters occur in subordinate clauses they may be more prone to contact effects than conjunctions, given that the latter are not restricted to subordinate clauses.

A second possible explanation for the differential outcomes in terms of contact effects could be the frequency of occurrence of the two types of constructions that affects their structural autonomy. In general, two-verb clusters are less frequent in speech than conjunctions, because they are restricted to subordinate clauses or to the right periphery of a main clause (for non-finite clusters). This became evident in the data analysis: when selecting tokens for verb clusters, there were participants, who delivered less than 20 examples over the entire recording³⁹. Furthermore, there were no indices in the data that word order in verb clusters would be dependent on specific structural requirements. In contrast, identifying 30 tokens for each conjunction/ participant was not challenging and this process only required about 20 – 30 minutes of recorded speech for the majority of the participants. Furthermore, the analysis showed that each conjunction is tightly connected to a specific category. The intensified contact between Viscri Saxon and German, and Viscri Saxon and Romanian over the past 25 years affected the frequency distributions of the two word orders in the case of verb clusters, and no apparent linguistic constraints on word order could be detected. However, TrSax conjunctions are still dependent on particular environments. This might be due to the fact that conjunctions are frequently used in speech and, thus, occur frequently in these particular environments. Their frequency of occurrence may be anchoring them in the subcategorization frames that they are sensitive to rendering them tightly interconnected with the categories they are sensitive to, and thus less structurally autonomous than verbs in verb clusters. Their structural dependency may make TrSax conjunctions more resistant to change in these intense contact situations than features such as verbs in verb clusters that are structurally more autonomous (cf. Matras 2011:208). The ordering of verbs in verb clusters appears to be flexible in Viscri Saxon, i.e. it is not connected to a particular type of construction.

³⁹ Recordings lasted between 45 min – 1 hour.

7.3 Implications of the research

The implications of this dissertation are threefold. First, it contributes to the discussion on morpho-syntactic properties of West Germanic languages by adding a contact-driven explanation to word-order variation in two-verb clusters, and by showing that there is a current Germanic language (TrSax) that possesses two coordinating conjunctions that fulfill the function of ‘and’. Even though this was not the initial purpose of the two case studies, I have shown that TrSax has specific properties that make it distinct from other related Germanic languages, and that internal and external (contact effects) factors may have led to this outcome. The case study on conjunction choice further contributes to the broader discussion on category-specific conjunctions by adding examples of types of categories such conjunctions favor (e.g. PPs, subordinate clauses, etc.).

Second, the sociolinguistic analyses of variation in Viscri Saxon contribute to thoroughly documenting verb clusters and conjunctions in Viscri Saxon, two areas of TrSax grammar that received little to no attention in past work. I have shown that language dominance is an important factor to consider in analyzing variation in a multilingual setting. Data from speakers with different levels of language dominance can inform us about contact effects from other languages in the absence of diachronic data, and a reference standard variety. Furthermore, such data can also reveal more about the structures that are resistant to change, i.e. the structures that are used in a similar way by speakers with different linguistic profiles.

Lastly, the dissertation has direct implications for theories of language contact, more specifically for the understanding of language-internal structural factors that facilitate transfer, with potential implications for ‘borrowing’ hierarchies (cf. Thomason and Kaufmann 1988). I have shown that language dominance in a contact language has an effect on the frequency distribution of variants in a recipient language when there is overlap between structures in the recipient and contact language. However, structural overlap is not a sufficient precondition for such contact effects to occur. Cross-linguistic structural boundaries need to be dissolved (cf. Matras 2007, 2011) so that the overlapping structures can be used in the same way in the recipient language as in the contact language. The dissolution of structural boundaries, or the transfer of morpho-syntactic features, is facilitated in subordinate clauses (cf. Muysken 2012), especially when it involves structures that are not frequently used (i.e. verb clusters). However, frequently used structures (i.e. conjunctions) may be protected by their frequency of occurrence

and speakers may be less likely to renounce the structural boundaries between the languages in contact (Matras 2011).

7.4 Future research

To further explore how the intensified contact between German and Romanian influence the structure of Viscri Saxon, I propose to explore further areas of Viscri Saxon. For example, the Eifler rule, a phonological variation rule, can be encountered in Viscri Saxon: in fluent speech, when the suffix of a word ends on an alveolar nasal [n], the nasal is dropped unless the following word starts on [d], [t], [ts], [h], or a vowel (cf. Capesius 1966). This West-Germanic phonological rule is present in West-Germanic languages such as Luxembourgish, but not in Standard German. In Standard German, word final [n] is typically pronounced. Because the Eifler rule (and in general phonology) is better documented than syntax in TrSax, it would not be challenging to establish what the pre-contact variety should have looked like. Contact effects from German would lead to the pronunciation of word final [n] in environments where the Eifler rule should apply. Certainly, exploring the Eifler rule in Viscri Saxon would only reveal more about the effects of German, and less about the role of Romanian. It would, however, complement our understanding of the language-internal structural factors that facilitate transfer.

Another possible avenue for future research is exploring priming effects in word-order variation in verb clusters. As Travis et al. (2017) have shown in the case of English-Spanish cross-linguistic priming of overt subject pronouns, participants were more likely to use English-like syntax in their Spanish after they had switched from Spanish to English in an utterance. This mechanism of ‘self-priming’ could be explored with verb clusters in participants that use both word orders to comparable degrees. Because TrSax and German are so similar, it could be challenging to detect code switches, but cognate words could also trigger the use of German-like structures, since cognates have been shown to lead to cross-linguistic activation (cf. Marian and Spivey 2003).

In general, to test hypotheses of contact-induced language change as the result of cross-linguistic priming in spontaneous speech, we would need to look at the structures participants produce in the contact language. The approach I took in this dissertation was to make predictions based on standard rules in the contact languages. Thus, to truly show that structures in Viscri Saxon are affected by the structures participants use in German and/ or Romanian, I further plan

to investigate how participants use the target structures in German and Romanian based on further recordings conducted with the same participants.

APPENDIX

Analysis of TrSax conjunctions based on Wenker sentences from the ASD (from Chapter 6)

Wenker sentence	Coordinands	end	och	N ^o tokens
4	TP & TP _(-FIN)	72%	28%	50
7	NP & NP	7%	93%	121
9	TP & TP TP & TP	97% 96%	3% 4%	121
15	TP & TP	97%	3%	121
16	TP & TP _(-FIN)	18%	82%	120
17	TP & TP TP & TP _(-FIN)	98% 37%	2% 63%	120
18	TP & TP	90%	10%	120
23	TP & TP	98%	2%	80
23'	AP & AP	2%	98%	41
24	TP & TP	98%	2%	121
30	NP & NP	8%	92%	120
37	NP & NP NP & NP	44% 22%	56% 78%	120
42	NP & NP	6%	94%	121

Table 19. Analysis of Wenker sentences with conjunctions in the ASD

The number of the Wenker sentence is shown in the first column, the types of the coordinands in the second column.

List of Wenker sentences used in Chapter 6 mini case study on conjunctions from the ASD

The sentences are shown in German with English translations (taken from the Linguistic Atlas of Kansas German Dialects). The Wenker sentences are usually shown in a list in a specific order, and each sentence has its own number in the list. Sentences 1-3 do not contain conjunctions. The 4th sentence in the list is the first sentence that contains a conjunction the second one is sentence number 7 and so on.

4. Der gute alte Mann ist mit dem Pferde durchs Eis gebrochen **und** in das kalte Wasser gefallen.
The good old man broke through the ice with his horse and fell into the cold water.
7. Er isst die Eier immer ohne Salz **und** Pfeffer.
He always eats eggs without salt and pepper.
9. Ich bin bei der Frau gewesen **und** habe es ihr gesagt, **und** sie sagte, sie wollte es auch ihrer Tochter sagen.
I was at the woman's and told it to her, and she said, she wanted to tell it to her daughter too.
15. Du hast heute am meisten gelernt **und** bist artig gewesen. Du darfst früher nach Hause gehen als die anderen.
You learned the most today and were well-behaved. You may go home earlier than the others.
16. Du bist noch nicht groß genug, um eine Flasche Wein auszutrinken. Du musst erst noch etwas wachsen **und** größer werden.
You aren't big enough to drink a whole bottle of wine. You have to grow some more first and get bigger.
17. Sei so gut, geh und sag deiner Schwester, sie soll die Kleider für eure Mutter fertig nähen **und** mit der Bürste ausbürsten.
Be so good, go and tell your sister she should finish sewing the clothes for your mother and clean them with a brush.
18. Hättest du ihn gekannt! Dann wäre es anders gekommen, **und** es täte besser um ihn stehen.
If only you had known him! Things would have turned out differently and he would be better off.
23. Wir sind müde **und** sind durstig.
We are tired and thirsty.
- 23'. Wir sind müde **und** sind durstig. (Variation on sentence 23)
24. Als wir gestern abend zurückkamen, da lagen die anderen schon zu Bett **und** waren fest am schlafen.
When we got home last night, the others were already lying in bed and were fast asleep.

30. Wieviel Pfund Wurst **und** wieviel Brot wollt ihr haben?

How many pounds of sausage and how much bread did you all want?

37. Die Bauern hatten fünf Ochsen **und** neun Kühe **und** zwölf Schäfchen vor das Dorf gebracht.
Die wollten sie verkaufen.

The farmers had brought five oxen and nine cows and twelve little sheep before the village.
They wanted to sell them.

42. In unserer Scheune haben wir am Freitag Hanf **und** Flachs versteckt.

We hid hemp and flax in our barn on Friday.

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