# Word order in subordinated clauses in the Surselva

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# Abbreviations

1	first person
3	third person
AUX	auxiliary
DEF	definite
DET	determiner
DIR.OBJ	direct object
IMPERS	impersonal pronoun
IMPF	imperfect
NEG	negation
М	masculine
PRTCL	particle
PL	plural
Q	question particle/marker
REFL	reflexive
REL	relative
$\mathbf{SG}$	singular
SBJV	subjunctive

# **1** Introduction

The Germanic languages constitute an intriguing object of study for the field of syntax. One characteristic trait (if not even the most prominent one), which has received significant attention among scholars, is the verb-second (V2) property of all Germanic languages except for English. V2 refers to a particular word order found in declarative and interrogative main clauses as well as, to a varying degree, also in different types of subordinated clauses (Vikner 1995, Holmberg 2015). The following German example illustrates this property.

(1) Heute präsentiert die Rhätische Bahn ihren neuen Triebwagen der today presented the Rhaetian Railway her new railcar the Öffentlichkeit.<sup>1</sup>
 public
 'Today, the Rhaetian Railway is presenting its new railcar to the public.'

As can be seen from (1), the finite verb *präsentiert* occupies the second position of the clause since the verb is preceded by only one constituent. Crucially, the syntactic function of the clause-initial element is irrelevant; that is, the sentence in (1) would be well-formed if the adverb and the subject were exchanged. V2 is in fact not confined to the Germanic languages but also some non-Germanic languages exhibit a V2 property. One example of these languages is Romansh, a (Rhaeto-)Romance language spoken in Switzerland (e.g. Haiman & Benincà 1992, Kaiser 2002). Despite the occurrence of V2 outside the Germanic branch, V2 must be considered as a typologically rare phenomenon as the set of non-Germanic V2 languages is relatively small (Holmberg 2015).

Given the outlined circumstances, two central questions arise in connection with V2 which should guide research into V2:

- (I) Why is V2 a typologically rare phenomenon?
- (II) Why is the position of the finite verb confined to the second position?

Ideally, V2 analyses provide answers to both questions, but it might be impossible to resolve (I) satisfactorily. It is conceivable that chance is a factor contributing to the sparsity of V2 languages. In either case, addressing (II) may also contribute to resolving (I) as certain (possibly yet to be determined) structural configurations active in V2 languages are responsible for the uniqueness of the V2 property. The overarching goal of this thesis is to contribute to (II) and hereby contributing indirectly to (I).

<sup>&</sup>lt;sup>1</sup>Henceforth, finite verbs are conventionalised in **bold** face whereas subjects appear italicised in order to ensure a better visual identification of relevant constituents if necessary.

As starting point for an investigation into (II), the variation between V2 languages can be used. Contexts of variation enable inferences about the underlying factors. Variation between V2 languages exists broadly in two contexts. Although research has shown that the V2 word order is robust in main clauses, deviations such as verb-third (V3) are attested, especially in urban vernacular varieties of V2 languages (e.g. Kiezdeutsch, lit. 'Hood German') (Walkden 2017). The second realm of variation within the V2 languages are embedded clauses. On the one hand, the contexts in which embedded V2 clauses can occur differ between languages. One the other hand, the extent to which V2 is possible varies as well. For instance, an Icelandic variety allows object-initial embedded V2 clauses only under certain matrix clause predicates while no such restrictions apply to subjectinitial and adjunct-initial clauses (Hrafnbjargarson & Wiklund 2009).

To date, research has centred on the situation in the Germanic languages. It is, however, indispensable to diversify the empirical data base by studying the situation in non-Germanic languages. Therefore, a study on one of these languages, namely Romansh, was conducted. More precisely, only a variety of Romansh referred to as Sursilvan was scrutinised due to a strong dialect division within Romansh (Liver 2010). As object of examination, the availability of embedded V2 in complement clauses embedded under certain matrix verbs was chosen. This choice is motivated by the vast amount of existing literature allowing a comparative approach to this topic.

The results of this study suggest that two different varieties exist in Sursilvan. The first variety, which is labelled Sursilvan A, exhibits only subject-initial complement clauses with V2. The second variety, Sursilvan B, is more liberal as adjunct-initial-complement clauses are possible as well. The status of object-initial V2 complement clauses, however, is inclusive in the results, but it is conjectured on the basis of the results of Grünert (2018) that object-initial clauses are possible under asserted matrix predicates. These conclusions are then used to propose a syntactic analysis of V2.

This thesis is structured as follows: Section 2 provides a concise overview of the Romansh variety Sursilvan. A descriptive definition of V2, its distribution as well as the diagnosing of V2 in SVO languages is given in section 3. In section 4, a classification of predicates taking clausal complements is introduced which is relevant for subsequent sections. Section 5 introduces a typology of the Germanic V2 languages proposed by Vikner (1995) and summarises the findings of studies that examined embedded V2 clauses in different Germanic languages. The V2 property of Rhaeto-Romance languages is outlined in 6. In this section, the situation in Ladin and in the four most vivid Romansh varieties is presented. Section 7 sketches different theories of V2. In section 8, the results of an acceptability study are reported which are embedded into the general research context in section 9. Finally, the thesis is summarised in section 10.

## 2 Sursilvan

Sursilvan is one of five Romansh idioms -a language spoken in the canton of the Grisons in Switzerland (Willi & Solèr 1990, Kaiser et al. 2001, Liver 2010). In the context of Romansh, the term *idiom* must not be understood as an expression with figurative meaning but rather as a subgroup of Romansh dialects sharing the same written language (Kaiser et al. 2001: 193–194, Liver 2010: 43). Beside Sursilvan, the other four idioms are Sutsilvan, Surmiran, Puter and Vallader (Willi & Solèr 1990: 446, Kaiser et al. 2001: 194, Liver 2010: 44). Sursilvan is spoken in an area covering the whole Anterior Rhein valley (Ger. Vorderrheintal, Rom. Surselva) and its tributary valleys, i.e. from the Oberalppass to the confluence of Anterior and Posterior Rhein at Reichenau, while Sutsilvan is the Romansh dialect of the Posterior Rhein valley. Surmiran is spoken in the Albula valley (Ger. Albulatal, Rom. Sutsés) and the Oberhalbstein (Rom. Sursés). Finally, Puter and Vallader are spoken in the Upper and Lower Engadine (a portion of the Inn valley) plus in the Münstertal (Rom. Val Müstair), respectively (Kaiser et al. 2001: 194, Liver 2010: 44).<sup>2</sup> Within Sursilvan in turn, five major dialectal regions are identified by Liver (2010: 44): In the upper Surselva, these are Tujetsch (Ger. Tavetsch) and Val Medel (Ger. Medels). Dialectal regions lying downriver from these are Cadi (centre Disentis/Muster), Foppa (centre Ilanz/Glion) and in a tributary valley to the south of Ilanz/Glion, Lumnezia.

The dialectal dissection within Romansh is so pronounced that the mutual intelligibility between speakers from geographically distant areas is impeded (Liver 2010: 43). This, for the preservation of Romansh probably disadvantageous circumstance is attributed to two factors by Liver (2010: 43): First, the alpine topography with its valleys separated by mountain ranges handicaps exchange between these areas. Second, a cultural and political centre countervailing the reduced exchange is missing. The canton capital Chur could have functioned in this way, but it was Germanised in the 15<sup>th</sup> century. Efforts to establish a supraregional standard language, called Rumantsch Grischun, and thereby thwarting the dialectal dissection have been made since 1982 (Liver 2010: 70).

Sursilvan constitutes, together with Vallader, the most vital Romansh idiom.<sup>3</sup> This,

<sup>&</sup>lt;sup>2</sup>The latter idioms, i.e. Puter and Vallader, are also referred to as (Rumantsch) Ladin. Importantly, this designation must be distinguished from the (Dolomitic) Ladin varieties spoken in the Dolomites (Liver 2010: 44). See Liver (1974) for the origin of *ladin*. Henceforth, Ladin is only used to designate Dolomitic Ladin.

<sup>&</sup>lt;sup>3</sup>With respect to the vitality of the idioms, Sursilvan and Vallader are followed by Surmiran (albeit

however, must not deceive one about the decline of Romansh which is revealed by censuses data since 1860 (Liver 2010: 45). According to the census conducted in 2000, throughout Switzerland, approximately 60,500 persons speak Romansh, albeit the number of speakers using Romansh within their family lies much lower at approximately 49,000 (Sursilvan 17,900) (Furer 2005, Rumantscha 2015: 34). Today, the formerly continuous Romansh-speaking area is fractured (particularly due to the demise of Sutsilvan) (Willi & Solèr 1990: 446, Kaiser et al. 2001: 196).

Romansh has been in contact with Germanic and German varieties, respectively, since the  $4^{\text{th}}$  century.<sup>4</sup> Since then, German has increased its influence on Romansh and Sursilvan in particular<sup>5</sup> to such a dimension that German is omnipresent nowadays through school, media as well as non-Romansh speakers (Liver 2010). Virtually every Romansh speaker is bilingual in both Romansh and German (Willi & Solèr 1990: 446, Liver 2010: 69). As a result, a situation of a double diglossia has arisen: On the German side, Standard German functions as the H(igh)-variety while Swiss German forms the L(ow)-variety. For Romansh, the situation is more complex owing to a threefold diglossia: The local dialect constitutes the L-variety whereas the idioms functions as H-variety. Rumantsch Grischun on the other hand possesses the role of the Highest-variety (Liver 2010: 69).

In terms of syntactic properties, Sursilvan (and Romansh in general) is characterised by a so-called verb-second (V2) property. Before turning to the definition of the central topic of this thesis, i.e. V2, it is indispensable to briefly mention the *questione ladina* in conjunction with Romansh. This refers to a fierce debate among scholars about the aggregation of Romansh, Dolomitic Ladin and Friulian into a Rhaeto-Romance language (Liver 2010: 15). Proponents argue these three languages form a true linguistic unit whereas opponents consider it to be only artificial. See Liver (2010) and Kaiser et al. (2001) for an overview and discussion of the arguments. Henceforth, *Rhaeto-Romance* will be used without a commitment to a particular point of view and rather as umbrella term for the three languages.

Sursés more than Sutsés), Puter and Sutsilvan, which is seriously endangered (Liver 2010: 45).

<sup>&</sup>lt;sup>4</sup>In the 4<sup>th</sup> century, Alemanni began to invade Romash-speaking territories, although the first Alemannic settlements in a portion of the Rhein valley in the canton of St. Gallen date back only to the 7<sup>th</sup> century (Liver 2010: 77–79).

<sup>&</sup>lt;sup>5</sup>Between the 8<sup>th</sup> and 9<sup>th</sup> century, the province Raeti Curiensis, where the Romansh-speaking territory lay, was reoriented towards the German-speaking North with the result that both the clerical and political power lay henceforth with a German-speaking upper class (Liver 2010: 78).

# 3 Verb-second

The main focus within this thesis lies on a word order phenomenon commonly referred to as verb-second (V2). In this section, a descriptive definition of V2 is given (3.1) and languages which feature a V2 property are specified (3.2). Finally, diagnostics for identifying V2 in ambiguous cases is introduced (3.3). The relevance of the latter will become clear in the following sections.

## 3.1 A descriptive definition of V2

Verb-second (V2) describes a word order phenomenon which is characterised by the confinement of the finite verb to the, descriptively speaking, second position of the clause. This means the finite verb is preceded by only one constituent (Vikner 1995: 39, Kaiser 2002: 1, Holmberg 2015: 342). Consider the following example from German – a V2 language:

- (2) a. *Die Rhätische Bahn* **betreibt** den Bernina Express täglich. the Rhaetian Railway operates the Bernina Express daily 'The Rhaetian Railway operates the Bernina Express on a daily basis.'
  - b. \*Den Bernina Express *die Rhätische Bahn* **betreibt** täglich.
  - c. \**Die Rhätische Bahn* den Bernina Express **betreibt** täglich.

As the contrast in grammaticality between (2a) and (2b) and (2c), respectively, indicates, sentences with multiple constituents preceding the finite verb are ungrammatical. A further constitutive property of V2 is the lack of restrictions applying to the grammatical function (i.e. subject, object, adjunct) or category of the clause-initial constituent (Vikner 1995: 39, Kaiser 2002: 1, Holmberg 2015: 347). Consequently, if a non-subject precedes the finite verb, the subject and the finite verb are inverted.<sup>6</sup> In (3), (2a) is rendered with the object (3a) and adjunct (3b) in sentence-initial position.

- (3) a. Den Bernina Express betreibt die Rhätische Bahn täglich.
   the Bernina Express operates the Rhaetian Railway daily
   'The Rhaetian Railway operates the Bernina Express on a daily basis.'
  - b. Täglich **betreibt** *die Rhätische Bahn* den Bernina Express.

V2 is not restricted to declaratives but can be observed in wh-interrogatives as well, as

 $<sup>^{6}</sup>$ Kaiser (2002: 1) notes the use of the term *Germanic inversion* to denote V2 but criticises this use by return as falling short of capturing the obligatoriness of the finite verb in the second position of the clause.

shown for German in (4) (Holmberg 2015: 349).

(4) Wie viel **kostet** der Autoverlad Vereina? how much costs the car transporter Vereina 'How much does the car transporter Vereina cost?'

Holmberg (2015) notes, however, the existence of variation between V2 languages regarding frontable elements: In Icelandic – another V2 language – for instance, ekki 'not' is eligible as clause-initial element, whereas the German equivalent *nicht* 'not' refrains preposing. Swedish, also characterised by a V2 order, allows the preposing of objects only if they are information-structurally topical but not focal in nature.

Despite the strict adherence to the V2 order, V2 languages still feature deviations from this pattern. Verb-first (V1) orders in imperatives (5) and polar questions (6) constitute two examples (Holmberg 2015: 352).<sup>7</sup>

- (5) **Fahr** mit dem Zug nach Scuol! ride with the train to Scuol 'Take the train to Scuol!'
- (6) **Fährt** der Zug nach Scuol von Gleis 3 ab? goes the train to Scuol from platform 3 away 'Does the train to Scuol leave from platform 3?'

Deviations from V2 are not limited to V1 orders, but also V>2 orders occur. Holmberg (2015: 353) cites stacked locative and temporal adverbs preposed to the clause-initial position as example:

(7) Gestern am Abend um 7 Uhr verließ der Zug den Bahnhof in yesterday at.the evening at 7 o'clock left the train the station in Richtung Pontresina.
direction Pontresina
'Yesterday evening at 7 o'clock, the train left the station in direction of Pontresina.'

Although the adverb cluster in (7) could be analysed as a complex constituent, Holmberg (2015: 354) adduces the fact that each adverb forms an independent prosodic phrase. The correctness of this analysis shall not be further discussed here as it does not correspond with the overall goal of this paper. Crucially, cases in which V2 structures are preceded by a complementiser or dislocated constituent are usually not considered to be deviations as these elements are assumed to be externally merged in their positions (Holmberg 2015:

<sup>&</sup>lt;sup>7</sup>Holmberg (2015: 353) mentions in the context of V1 orders in V2 languages also narrative inversion in Icelandic and topic drop. See Holmberg (2015) for further details on these constructions.

347).

The flexibility regarding the nature of the clause-initial constituent constitutes a fundamental difference between V2 languages and languages like English where the SVO word order resembles a V2 order (8a), but the ungrammaticality of (8b) evidences that the resemblance of V2 is only apparent.<sup>8</sup>

(8) a. Gion drives the train to Scuol this morning.
b. \*The train to Scuol drives Gion this morning.

Before diagnostics for the discrimination of V2 languages and SVO languages are sketched in section 3.3, the languages exhibiting a V2 property are presented in the following subsection.

## 3.2 Distribution of V2

V2 constitutes a typologically rare phenomenon in that its occurrence is almost unanimously restricted to some members of the Indo-European language family.<sup>9</sup> All of the modern Germanic languages exhibit V2 with the only exception being English (cf. 5.1) (Vikner 1995: 39, Holmberg 2015: 343). Among the Romance languages, only Romansh and the Badiot and Gherdëina varieties of Dolomitic Ladin are characterised by V2 (cf. 6) (Kaiser & Hack 2009, Poletto 2000, 2002). The only Celtic language displaying V2 is Bretonic (9) (Jouitteau 2007).

(9) War ar wezenn e<sup>10</sup> kane al labous on the tree PRTCL sang-IMPF the bird '(It was) on the tree (that) the bird sang.'
(Jouitteau 2007: 165)

The Indo-Aryan languages Kashmiri (Bhatt 1999) and the Himachali dialects Kotgarhi and Koci (Hendriksen 1990) are the only V2 languages of the Indo-European language family outside Europe. This is exemplified for Kashimiri in (10) and Koci in (11), respectively.

<sup>&</sup>lt;sup>8</sup>This is an oversimplification of the Situation in English. See 5.1 for more details.

<sup>&</sup>lt;sup>9</sup>The subsequent enumeration includes only modern languages. It is, however, argued that earlier stages of some modern non-V2 languages are characterised by a V2 property. Benincà (2006), for instance, analyses all Old Romances languages as V2 languages. A similar analysis is proposed for Middle Welsh by Willis (1998). Furthermore, V2 constitutes the dominant word order in declarative main clauses of Old English (Walkden 2014).

<sup>&</sup>lt;sup>10</sup>Bretonic disposes of a set of preverbal particles. Those particles seem to constitute a deviation from V2, but Jouitteau (2007: 193 en.1) (2007: 193 en.1) argues that the finite verb is incorporated into the preceding particle.

- (10) darvaaz mutsroov rameshan door opened Ramesh
  'Ramesh opened the door'
  (Bhatt 1999: 85)
- (11) iã koru aũ eb:i dziunde her make I now alive 'I make her alive.'
  (Hendriksen 1990: 162)

Outside the Indo-European family, V2 is even less frequently attested.<sup>11</sup> According to Ehala (2006), Estonian, a Finno-Urgic language, exhibits a V2 pattern, as illustrated in (12).

(12) Suppi söö-vad lapse-d täna. soup eat-3PL child-PL today 'Today, the children eat soup.'
(Ehala 2006: 59)

Tohono O'Odham (formerly known as Papago), which belongs to the Uto-Aztecan language family and which is spoken in Southwestern Arizona and Sonora in Mexico, constitutes a further instance of a V2 language (Zepeda 1983: 8, Miyashita 2006: 735–736). However, the finite verb in the second position must be an auxiliary inflected for person and number of the subject (Miyashita 2006: 736).<sup>12</sup> This is illustrated in (13).

(13) Ceposid 'o g wakial g haiwan. branding AUX.3.SG DET cowboy.SG DET cow.SG
'The cowboy is/was branding the cow.'
(Miyashita 2006: 736)

In the next subsection, diagnostics for V2 are established which allow the discrimination of V2 and non-V2 order in ambiguous cases.

<sup>&</sup>lt;sup>11</sup>In the context of V2 languages, the Tupi language Karitiana is often mentioned. Although the examples provided by Storto (2003, 2014) indicate a V2 order, other examples show deviating orders. The classification of Karitiana as V2 language thus ultimately depends on the theoretical definition of V2 (e.g. in terms of movement of the finite verb to the C-domain). This theoretical definition would render Karitiana a V2 language according to the analysis of Storto (2003, 2014).

<sup>&</sup>lt;sup>12</sup>The classification of Tohono O'Odham as V2 language depends on the actual status of its auxiliaries. In case the second position auxiliaries possess a clitic character, the V2 classification is rendered invalid. This would parallel the situation in (Upper) Sorbian (Kaiser & Scholze 2009).

## 3.3 Diagnosing V2 in SVO languages

As briefly mentioned in 3.1, non-V2 languages such as English can display apparent V2 patterns in specific contexts. In the case of English, the underlying SVO word order accounts for the V2 'mimicry'. This raises the question how V2 and non-V2 languages with SVO can be distinguished. Contrary to SOV languages like Frisian and German in which embedded clauses exhibit the underlying SOV word order, the position of the finite verb is not indicative for V2 in SVO languages.<sup>13</sup> A reliable indicator for V2 structures seems to be the possibility of preposing a non-subject before the finite verb. It is, however, conceivable that in certain structures, fronting of non-subjects is impossible due to other unrelated factors. Therefore, a measure independent of the availability of non-subject fronting is required.

Vikner (1995) adapts for the Mainland Scandinavian languages an observation made by Pollock (1989) that sentence-medial adverbs and negation, which appear neither clauseinitially nor clause-finally, i.e. Cinque's (1999) lower adverbs, can be used to disambiguate SVO constructions. If the finite verb precedes a lower adverb, this indicates a V2 construction. However, if the adverb precedes the finite verb, the construction on hand does (obviously) not feature V2. In fact, this diagnostic has been generally adopted for the Germanic languages to identify V2 order and will also be used here.<sup>14</sup> Note that this diagnostics is not theory-neutral and presupposes that V2 involves movement of the finite verb – a generally uncontroversial assumption within generative syntax though.

This section descriptively defined V2 and provided a list of all known V2 languages. Moreover, diagnostics that will become relevant for the discussion of Vikner's (1995) typology sketched in section 5 were introduced in this subsection. A further aspect which will bear relevance to this discussion but even more to the study reported in section 8 is addressed in the following section: Hooper & Thompson (1973) discuss five predicate classes in connection with the availability of main clause phenomena in embedded clauses which are thus relevant for embedded V2 structures.

(i) Sie hören, dass sie (laut) singt (\*laut). they hear that she (loudly) sings (loudly)

<sup>&</sup>lt;sup>13</sup>Admittedly, this is an oversimplification for SOV V2 languages. For instance, embedded clauses with intransitive verbs appear to exhibit V2 which is disambiguated only in the presence of an adjunct (i). Thus, the verb position alone is not sufficient for diagnosing V2 structures.

<sup>&</sup>lt;sup>14</sup>See Hróarsdóttir et al. (2007) for problems with adverbs as diagnostics in regional North Norwegian varieties.

## 4 Classes of clausal complement-taking verbs

The examples of V2 structures which were provided in the previous section contained solely interrogative and declarative main clauses. This, however, does not correspond to the actual situation since V2 languages feature, to a varying degree, V2 orders also in embedded clauses. In fact, the availability of embedded V2 is used by Vikner (1995) as classifying property in his typology outlined in the next section (5.1). In connection with the ensuing discussion of his typology in 5.2, the classification of complement-taking verbs proposed by Hooper & Thompson (1973) becomes relevant as many studies on embedded V2 (especially in the context of Scandinavian languages, but see also e.g. Salvesen & Walkden (2017) on Old English and Old French) utilised this classification. This is also the case for the study reported in section 8. Moreover, these classes are also relevant for analyses of embedded V2 (7.2).

Hooper & Thompson's (1973) classification of verbs taking clausal complements was devised to account for the observation in English that main clause phenomena such as left dislocation or negative constituent preposing<sup>15</sup> are ungrammatical when embedded under certain matrix predicates. Based on the concepts of assertion and factivity, Hooper & Thompson (1973) distinguish five predicate classes labelled A to E. Class A is comprised of verbs of saying and related predicates and selects strongly assertive complements; class B verbs denote mental processes and introduce weak assertions; Class C predicates select non-asserted, non-factive complements; class D consists of verbs expressing subjective attitudes or emotions introducing factive complements; class E comprises "verbs of perception and knowledge" (Wiklund et al. 2009: 1920) which select factive complements as well. In questions, contexts involving certain modal operators and conditionals, class E predicates may lose their factivity and are therefore called semifactives (Karttunen 1971: 63–65).<sup>16,17</sup> The following predicates are quoted as examples by Hooper & Thompson (1973: 473–474):

<sup>&</sup>lt;sup>15</sup>For a complete list of main clause phenomena, see Hooper & Thompson (1973: 466–468) and Heycock (2017).

<sup>&</sup>lt;sup>16</sup>Within the more recent literature, the five predicate classes are denominated differently as strongly assertive verbs (class A), weakly assertive verbs (class B), non-assertive, non-factive verbs (class C), factive verbs (class D) and semifactive verbs (class E). The denominations are used interchangeably in the remainder of this thesis.

<sup>&</sup>lt;sup>17</sup>Salvesen & Walkden (2017: 175) use a sixth class of predicates – class V – for their corpus study on Old French and Old English. This class comprises verbs of volition which are, similar to class C predicates, neither asserted nor presupposed and express the speaker's attitude "towards a hypothetical state of affairs" (Salvesen & Walkden 2017: 175). Verbs of this class do not take finite complements in Modern English (Salvesen & Walkden 2017: 175) which explains why Hooper & Thompson (1973) leave them unconsidered.

- A: say, report, exclaim, assert, claim, vow, be true, be certain, be sure, be obvious
  B: suppose, believe, think, expect, guess, imagine, it seems, it happens, it appears
  C: be (un)likely, be (im)possible, be (im)probable, doubt, deny
  - D: resent, regret, be sorry, be surprised, bother, be odd, be strange, be interesting
  - E: realise, learn, find out, discover, know, see, recognise

Hooper & Thompson (1973) conclude that main clause phenomena are possible under predicates of classes A, B and E but not under predicates of classes C and D.

Using Hooper & Thompson's (1973) classification in studies of embedded V2 presupposes thus that embedded V2 is treated as main clause phenomenon (Heycock 2017). Having now laid the groundwork for ensuing sections, the aforementioned typology of V2 is summarised and discussed in the next section.

# 5 A typology of V2

### 5.1 Vikner's (1995) typology of the Germanic V2 languages

The languages listed in 3.2 are all characterised by the occurrence of V2 in (at least) declarative main clauses. There are, however, differences between these languages to which degree V2 is possible in other clause types. This circumstance is used by Vikner (1995) to propose a typology of V2 languages, which comprises merely the Germanic languages though. A basic distinction is made by Vikner (1995: 42) between general and residual V2 languages in reference to the obligatoriness of V2 in main clauses.<sup>18</sup> The latter notion was originally introduced by Rizzi (1996) and refers to languages in which the occurrence of V2 is confined to certain conditions. English is classified as the only Germanic residual V2 language by Vikner (1995).<sup>19,20</sup> In English, V2 orders arise in wh-interrogatives (15)

(i) Où **est**-*elle* allée? where is-she gone 'Where is she gone?' (Rizzi 1996: 79)

<sup>&</sup>lt;sup>18</sup>Vikner (1995) construes declarative, interrogative (both polar and wh) and imperative main clauses as instances of V2. Although declaratives and wh-interrogatives exhibit a V2 order on the surface, imperatives and polar questions are (usually) realised as V1 clauses. This aggregation of different surface word orders is motivated on the grounds of the assumption that both orders involve the same verbal movement, namely V-to-C movement. See section 7 for further discussion.

<sup>&</sup>lt;sup>19</sup>The use of the term *residual* implies that earlier stages of these languages disposed of a more elaborated V2 system as Holmberg (2015: 344) points out. This seems to apply at least to English, cf. fn.9.

<sup>&</sup>lt;sup>20</sup>Among the non-Germanic languages, French is classified as residual V2 language. Here, a V2 order arises in wh-questions where the clitic subject and the finite verb invert (Rizzi 1996: 75):

as well as preposed negative constituents (16) but only in connection with auxiliaries and modal verbs as the c-examples illustrate (Rizzi 1996: 67, 73, Vikner 1995: 42, Holmberg 2015: 344).

- (15) a. Where **does** this line end?
  - b. \*Where *this line* **does** end?
  - c. \*Where **ends** this line?
- (16) a. In no case would I take the bus.
  - b. \*In no case I would take the bus.
  - c. \*In no case **take** I the bus.

Accordingly, general V2 languages, i.e. all remaining Germanic languages, generally adhere to the V2 order in main clauses (Vikner 1995).

Vikner (1995) further subcategorises the general V2 languages into three different groups predicated upon the degree to which V2 is possible in embedded clauses and the presence of a clause-initial complementiser: general embedded V2 (GEV2), limited embedded V2 (LEV2) and – borrowing Biberauer's (2002) term – 'well-behaved' V2 languages. The first two subcategories are unified by the mandatory presence of an overt clause-initial complementiser in embedded V2 clauses.

The first subgroup, i.e. GEV2 languages, is defined by the unrestricted occurrence of V2 in embedded clauses except embedded questions and related constructions (Vikner 1995: 66–67). Yiddish and Icelandic are the only languages which are classified as GEV2 languages (Vikner 1995: 65). LEV2 languages, in contrast, license embedded V2 only in complements of a restricted set of matrix verbs which do not seem to share a common property, though (Vikner 1995: 67, 72).<sup>21</sup> Interestingly, the set of verbs allowing embedded V2 in their sentential complements seems to vary across languages (Vikner 1995: 72). The languages which are classified as LEV2 languages by Vikner (1995) account for the majority of all Germanic languages, i.e. the Mainland Scandinavian languages (Danish, Norwegian, Swedish), Frisian and Faroese.

The third subgroup, the 'well-behaved' V2 languages parallels the LEV2 languages in that V2 in embedded clauses is grammatical only in the sentential complements of

According to Holmberg (2015: 344), Spanish constitutes a further residual V2 language within the Romance languages.

<sup>&</sup>lt;sup>21</sup>Vikner (1995: 70) notes that several scholars, e.g. Iatridou & Kroch (1992), refer to these verbs as bridge verbs. van Riemsdijk & Williams (1986: 294) use this term to denote verbs allowing extraction from their complements (i.e. long movement). The set of bridge verbs allowing extraction and the set of bridge verbs allowing V2 complements does not fully coincide and is thus misleading, as Vikner (1995: 70 fn.7) points out. See de Haan (2001) for a detailed discussion of the situation in Frisian.

certain matrix verbs (Vikner 1995: 67). However, 'well-behaved' V2 languages display a complementary distribution of an overt complementsier and V2 – a fact that was observed by den Besten (1983) for German. In fact, German is the only 'well-behaved' V2 language Vikner (1995) identifies.<sup>22</sup>

A language that receives a special status within this typology is Dutch. Vikner (1995: 66 fn.3) argues that Dutch is the only language which does not allow embedded V2 (notwithstanding the possibility of V2 in dialectal Dutch, cf. Hoekstra (1993)). Moreover, Afrikaans remains unclassified. The following subsection closes this gap by presenting results reported in the respective literature.

## 5.2 Problems for Vikner

The typology of Germanic V2 languages outlined in 5.1 has stimulated further research into embedded V2 in both Germanic and non-Germanic languages. This strand of research has produced intriguing empirical findings which challenge Vikner's (1995) typology as too simplistic and emphasises the need for a revaluation. The purpose of this subsection is to present relevant data of embedded V2 but also to provide more detailed information. However, this subsection does not attempt to propose a revised typology.

#### 5.2.1 Yiddish

Diesing & Santorini (to appear) analyse corpus data as well as native speaker judgements to provide an overview of embedded V2 in Yiddish.<sup>23</sup> With respect to complement clauses, their data confirms the GEV2 character in embedded clauses, i.e. V2 occurs under all predicate classes proposed by Hooper & Thompson (1973), i.e. even under class C (17) and D predicates (18), although complement clauses embedded under class C and D predicates exhibit a significantly smaller proportion of non-subjects in initial position (Diesing & Santorini to appear: 8).

(17) a. Meglekh, az do darf men gikher haltn [...]. (Class C) possible that there must one rather hold [...]
'It is possible that in that [...] is better considered [...].'

<sup>&</sup>lt;sup>22</sup>The discrepancy of embedded V2 and extraction stated by Vikner (1995) (cf. fn.21) is challenged for German by Featherston's (2004) experimental data which suggest that the sets of verbs allowing extraction and embedded V2 coincide.

<sup>&</sup>lt;sup>23</sup>This use of *Yiddish* is actually imprecise as it suggests that no variation exist within Yiddish. In fact, only the eastern branch of Yiddish can be categorised as GEV2. The western branch, which become extinct in the 19<sup>th</sup> century, displayed V2 only in main clauses (Diesing & Santorini to appear: 1).

b. Es iz a shod vos<sup>24</sup> afile LGB hot Maks nit geleyent. (Class D) it is a shame that even LGB has Max not read 'It is a shame that Max has not even read LGB'
(Diesing & Santorini to appear: 3)

Irrespective of the matrix predicate, preposed non-subjects exhibit the tendency to be contrastively emphasised (Diesing & Santorini to appear: 2).

Although overt complementisers in embedded clauses are considered to be a constitutive feature of GEV2 languages, Yiddish exhibits the possibility to omit these under predicates that allow main clause phenomena, that is classes A, B and E (Diesing & Santorini to appear: 8). A further restriction constitutes the positional confinement to a sentence-final position (18a). This fact is in stark contrast to clauses with overt complementiser which can be realised in the position preceding the finite verb (18b) and form the sentential subject of the matrix clause (Diesing & Santorini to appear: 8). Unfortunately, it remains unclear whether extraction out of complementiserless clauses is prohibited, which would constitute a further difference between clause with and without complementiser.

(18)	a.	*Es <b>vet</b> kumen tsu epes, vel ikh nisht veln.
		it will come to something will I not want
		'I don't want it to come to anything.'
	b.	Az <i>es</i> <b>vet</b> kumen tsu epes, vel ikh nisht veln.
		that it will come to something will I not want
	(Die	esing & Santorini to appear: 8)

Despite the seemingly general existence of V2 structures in complement clauses, the adherence to the V2 order is not entirely perfect. Consider the example in (19).

(19) Hot zayn mishpokhe farlangt, az nit andersh: der rov muz haltn a has his family requested that not otherwise the rabbi must hold a hesped.
funeral oration
'So his family requested that the rabbi must absolutely give a funeral oration.'
(Diesing & Santorini to appear: 11)

As (19) shows, adverbs can be realised in the clause-initial position followed by another, non-verbal constituent resulting in a V3 order. Albeit this option exists, it is rarely attested in corpus data (Diesing & Santorini to appear: 11).

In opposition to complement clauses, embedded questions and related constructions are

 $<sup>^{24}</sup>$  In Yiddish, factive predicates select a different complementiser (vos) than non-factive predicates (az) (Diesing & Santorini to appear: 2).

considered by Vikner (1995) to be environments in which V2 structures are ungrammatical. Although Vikner (1995: 74) concedes the possibility of V2 in embedded questions in Yiddish with *far voz* 'why', Diesing (2004) and Diesing & Santorini (to appear) argue for a more general pattern while simultaneously admitting that these structures are rare and require a "special discourse licensing" (Diesing & Santorini to appear: 5).<sup>25</sup> It remains unspecified what the canonical or unmarked word order in embedded wh-interrogatives is. Diesing (1990, 2004) notes, however, the availability of V3 constructions in which the wh-constituent and a topic precede the finite verb. A property of embedded V2 questions which was also observed for complement clauses with overt complementiser is the possibility to appear in the clause-initial position of the matrix clause or as left-dislocation as in (20) (Diesing & Santorini to appear: 7).

(20) Ver iz der iberzetser, dos veysn mir fun erstn shar-blat.
who is the translator, that know we from first title page 'Who the translator is, that we know from the first title page.'
(Diesing & Santorini to appear: 7)

It is also worth noting that relative clauses (21) and adverbial clauses display V2 orders. The remarks of Diesing & Santorini (to appear: 4) even suggest that V2 is mandatory in adverbial clauses since the finite verb must precede the negation or sentential adverbs.

(21) der yid vos shabes bay nakht vet khayem zen. the man REL Saturday at night will Chaim see 'the man that Chaim will see Saturday night'
(Diesing & Santorini to appear: 4)

To conclude, the adherence to the V2 word order appears to be even more pronounced than previously assumed by Vikner (1995). In the next section, the findings for the second GEV2 language, Icelandic are reported.

### 5.2.2 Icelandic

Icelandic is the only language beside Yiddish being categorised as GEV2 language by Vikner (1995). Research over the past 25 years has indicated though that the GEV2 property should not be conceived as an ubiquitous property of Icelandic (given of course the appropriate contexts, cf. 5.1) since at least two varieties exist which differ regarding the generality of embedded V2 (Hrafnbjargarson & Wiklund 2009, Wiklund et al. 2009).

 $<sup>^{25}</sup>$  Unfortunately, Diesing & Santorini (to appear) do not explicate what this special discourse licensing actually is.

Within the literature, these two varieties are denominated as Icelandic A and Icelandic B (Hrafnbjargarson & Wiklund 2009: 24).<sup>26</sup> Icelandic A and B have in common that the word order in complement clauses embedded under Hooper & Thompson's (1973) predicate classes A, B and E is V2 and that non-subjects can occupy the clause-initial position in these contexts (Wiklund et al. 2009: 1923). The difference between Icelandic A and B manifests itself in complement clauses embedded under predicates of classes C and D. In both varieties, subject-initial V2 is generally accepted by speakers in these contexts but while speakers of Icelandic A accept topicalisations of objects as well as adjuncts in this context, speakers of Icelandic B reject topicalisations of objects, but permit the preposing of spatio-temporal adjuncts (Wiklund et al. 2009: 1923, Hrafnbjargarson & Wiklund 2009: 37, 2010: 58).<sup>27</sup> That is, speakers of Icelandic A judge (22) as acceptable, whereas speakers of Icelandic B judge (22) as unacceptable. Note, however, that the preposing of objects in Icelandic A is rendered unacceptable when it is not accompanied by a demonstrative (Hrafnbjargarson & Wiklund 2009: 33).

(22) Hún sá eftir því að þessar bækur hefði hún lesið she regretted it that these books had she read 'She regretted that she had read these books.'
(Hrafnbjargarson & Wiklund 2009: 37)

Apparently independent of diatopic variation, complement clauses with clause-initial subject (but not otherwise) permit the extraction of both adjuncts and arguments unless discourse-related elements such as epistemic adverbials and focus particles are present in the respective clause (Hrafnbjargarson et al. 2010, Hrafnbjargarson & Wiklund 2010: 61).

In clause types other than complement clauses, subject-initial V2 is the default word order (Angantýsson 2017, Angantýsson & Jonas 2016, Hróarsdóttir et al. 2007). Only in certain types of adverbial clauses (concessive, final, causal, consecutive (result)), non-subjects are eligible as clause-initial constituent, albeit adjunct fronting occurs more freely than argument fronting (Hrafnbjargarson & Wiklund 2009: 29, Angantýsson & Jonas 2016). This pattern mirrors the situation in complement clauses embedded under class C and D

<sup>&</sup>lt;sup>26</sup>According to Hrafnbjargarson & Wiklund (2009: 24), this terminology dates back to Jónsson (1996). Unfortunately, this nomenclature appears rather unmeaningful as no statements are made as to the diatopic origin of these differences.

<sup>&</sup>lt;sup>27</sup>The findings from a large-scale survey on Icelandic by Angantýsson (2017) suggest that the actual situation in Icelandic is more complex than outlined above. Angantýsson (2017: 61) observes diverging judgements between the youngest and the oldest age group in his survey. For instance, the latter group accepted non-subject topicalisations in complement clauses embedded under A, B and E predicates to a much greater extent than the former group. These diverging judgements lead Angantýsson (2017) to hypothesis an ongoing language change. This issue is outside the scope of this paper and will thus not be further discussed. The simplified picture suffices for the objectives of this thesis.

predicates in Icelandic B. It remains, however, unclear whether the given descriptions are valid for both Icelandic varieties or merely for Icelandic B.

Some Icelandic speakers accept structures in which certain pre-VP adverbs intervene between the clause-initially realised subject and the finite verb as alternative to V2 clauses, giving rise to V3 orders.<sup>28</sup> More specifically, this subgroup of pre-VP adverbs displays its distinctive behaviour merely in subordinated but not superordinated environments (Angantýsson 2007: 238, 2017: 70). The following example illustrates the V3 order in a relative clause.

(23) Það er ein bó þarba sem *Haraldur* ekki hefur lesið there is one book there REL Harol not has read 'There is one book that Harold hasn't read.'
(Angantýsson 2007: 245)

In cases where clauses exhibit multiple adverbs, the finite verb must either precede or succeed the cluster (Hróarsdóttir et al. 2007: 48, Wiklund et al. 2007: 212).<sup>29</sup> The acceptability of V3 clauses depends, according to Angantýsson (2007), on the clause type and on nature of the subject (pronominal or nominal). While V3 is acceptable with nominal as well as pronominal subjects in indirect argument wh-questions and NP-modifying relative clauses, V3 is acceptable only with unstressed pronominal subjects in indirect adjunct/adverbial wh-questions and AP-modifying relative clauses. Complement clauses generally resit V3.

A complicating factor that has to be considered in connection with embedded V2 in Icelandic is stylistic fronting. This term denotes a syntactic operation which places adverbs, past participles, verbal particles and predicate adjectives before the finite verb (Maling 1990, Hrafnbjargarson & Wiklund 2009: 39). In the following example, the past participle  $byrja\partial$  'begun' underwent stylistic fronting.

(24) Hún benti á ýmsa roskna trésmiði í bænum, sem byrjað höfðu með she pointed to various old carpenters in town REL begun had with engum efnum.
nothing
'She pointed to various old carpenters in town that had begun with nothing.'
(Maling 1990: 75)

 $<sup>^{28}</sup>$  Angantýsson (2007, 2017) defines pre-VP adverbs as adverbs that precede the VP and which cannot succeed the VP when the finite element in a clause is an auxiliary.

<sup>&</sup>lt;sup>29</sup>Hróarsdóttir et al. (2007) and Wiklund et al. (2007) do not specify the adverb class. The adverbs used in their examples suggest, however, that these adverbs coincide with Angantýsson's (2007, 2017) adverbs.

Decisively, stylistic fronting is confined to contexts of subject gaps, i.e. embedded subject relative clauses, indirect subject questions and impersonal passives (Maling 1990: 76, Hrafnbjargarson & Wiklund 2009: 40). These are precisely those contexts where Icelandic speakers disallow topicalisations of non-subjects.

Based on these descriptions, Icelandic differs from Yiddish which appears to allow embedded V2 in more contexts than Icelandic. Nonetheless, the general availability of subject-initial V2 supports the classification as GEV2 language.

#### 5.2.3 Mainland Scandinavian

The three Mainland Scandinavian languages Norwegian, Swedish and Danish display the word order patterns expected under Vikner's (1995) classification in that embedded V2 is possible only in complements to specific verbs. Complement clauses embedded under predicates of Hooper & Thompson's classes A, B and E allow both subject- and non-subject-initial V2 in addition to the default non-V2 order (Wiklund et al. 2009, Bentzen 2010, Julien 2007, 2015).<sup>30</sup> Although Wiklund et al. (2009) argue for the ungrammaticality of V2 clauses embedded under class C and D predicates, Julien (2007: 123, 2015: 165) retrieves several Swedish and Norwegian V2 clauses embedded under class D predicates similar to the following Norwegian example in (25) from corpora.

(25) Alltid glemte de at den gutt-en var ikke som andre. always forgot they that that boy-DEF was not like others 'The always forgot that that boy was not like the others.'
(Julien 2007: 123)

Crucially, all of Julien's (2007, 2015) examples involve merely subject-initial V2 although this does not constitute definitive proof for the ungrammaticality of non-subject-initial V2.<sup>31</sup> In addition, V2 is rendered acceptable in cases class C predicates are negated and conversely, negated class B predicates prohibit V2 complements, as shown for Swedish in (26) (Julien 2007, 2015).

(26) Vi anser inte att *problem-et* (\* $\ddot{\mathbf{ar}}$ ) inte ( $\ddot{\mathbf{ar}}$ ) av teknisk natur. we consider not that problem-DEF (is) not (is) of technical nature

<sup>&</sup>lt;sup>30</sup>According to Bentzen (2010: 170), no interpretational differences arise between V2 and non-V2 clauses.
<sup>31</sup>Wiklund et al. (2009: 1931) mention briefly the existence of non-subject-initial V2 clauses in Norwegian varieties under a subset of class C and D predicates. According to Wiklund et al. (2009), not further specified intonational properties, which are absent under class A, B and E predicates, are observable in this context. This suggest that at least in Norwegian a genuine difference exists between non-subject-initial V2 clauses embedded under class C and D predicates on the one hand and under class A, B and E predicates on the other hand.

'We do not think that the problem is not of a technical nature.' (Julien 2007: 121)

Apart from complement clauses, embedded V2 (both subject- and non-subject-initial) is also attested in 'content' clauses, i.e. complement clauses to nouns, certain copula constructions, adverbial clauses (causal, concessive, final and 'so X that ...' consecutive (result)) and non-restrictive relative clauses (Julien 2007, 2015, Hrafnbjargarson & Wiklund 2009).

An interesting property of Swedish and Norwegian embedded V2 clauses (but not of their non-V2 alternates) noted by Julien (2015: 152) constitutes the possibility of indexical shift. This means first and second person pronouns in the embedded clause refer either to the speaker and addressee of the ongoing discourse or to the discourse entities of the discourse described in the utterance. Furthermore extraction from complement clauses without V2 is possible in all three Mainland Scandinavian languages, while a different picture arise in embedded subject-initial V2 clauses. According to Hrafnbjargarson et al. (2010), extraction in this context is barred in Swedish and Danish but not in Norwegian where argument extraction is allowed. Indexical shift is blocked though in extraction environments (Julien 2015: 158).

Further properties of embedded V2 clauses which are especially relevant in comparison with the other Germanic languages (see below) are (i) the ability of quantifiers to bind a variable in the embedded clause (although negation cannot scope into the embedded clause), (ii) the possibility of preposing the embedded clause in its matrix clause, (iii) the possibility to be embedded under a non-V2 clause and (iv) the fact that the absence of complementisers in complement clauses yields a direct quote interpretation (Julien 2007, 2015). Especially (i)-(iii) have been used to argue for the true embeddedness of V2 clauses (Julien 2015).

The Mainland Scandinavian languages behave mostly as argued by Vikner (1995). There are, however, deviations such as V2 in adverbial clauses which are unexpected under their classification as LEV2 language. Further research is necessitated to explore these deviations.

#### 5.2.4 Frisian

As to (West) Frisian, the situation appears to be more intricate than the typology outlined in 5.1 suggests. Even tough complement clauses embedded under certain predicates<sup>32</sup>

<sup>&</sup>lt;sup>32</sup>The list of verbs selecting V2 complements specified by de Haan (2001: 6) can be subsumed under Hooper & Thompson's (1973) predicate classes A, B and E.

can display V2 (unless the matrix clause is modalised, questioned or negated), further conditions exists in which V2 is possible: 'content' clauses (27), causal clauses (28) and consecutive (result) clauses with the degree adverb sa (29) (de Haan 2001: 7).

- (27) Pyt hie my in boadskip stjoerd, dat hy (koe) moarn net komme Pyt had me a message sent that he (could) tommorrow not come (koe).
  (could)
  'Pyt had sent me message that he could not come tomorrow.'
  (de Haan 2001: 7)
- (28) Hy koe net komme omdat hy (moast) Teake helpe (moast).
  he could not come because he (must) Teake help (must)
  He could not come because he had to help Teake.'
  (de Haan 2001: 8)
- (29) Hy is sa siik dat hy (kin) dy hjoed net helpe (kin). he is so ill that he (can) you today not help (can) 'He is so ill that he can not help you today.'
  (de Haan 2001: 7)

As (27)–(29) illustrate, embedded V2 clauses alternate with V-final clauses. Although it might be tempting to conclude that the V2 and V-final alternates behave identically, multiple deviant properties object to this conclusion: First, V-final clauses require an overt complementiser, whereas in subordinated V2 clauses, complementisers are only facultatively realised (de Haan 2001: 8). Secondly, subordinated V2 but not V-final clauses exhibit main clause phenomena, such as topicalisation, left dislocation and speaker-oriented interjection, cf. the topicalised variant of (27) in (30) (de Haan 2001: 12).

(30) Teake hie my in boadskip stjoerd, dat my (woe) er wol helpe (\*woe). Teake had me a message sent that me (would) he all right help (would) 'Teake had sent me a message that he wanted to help me all right.'
(de Haan 2001: 12)

Thirdly, embedded V2 clauses show, according to de Haan (2001), ordering restrictions which are unobserved for embedded non-V2 clauses: Topicalisations of embedded V2 clauses within the matrix clause are illicit. That is to say, embedded V2 clauses can merely follow their matrix clause. Furthermore, embedded V2 clauses are barred from

being realised in non-root positions such as in relative clauses.<sup>33</sup> Fourthly, the scopal domains of quantifiers and negation are confined to the matrix clause which means that an antecedents cannot bind a variable inside the embedded V2 clause unlike V-final clauses (de Haan 2001: 17). Lastly, the difference is also prosodically reflected in that the matrix clause and the embedded V2 clause are separated by an intonational break. Both intonation units contain their own focused constituent – hence the matrix clause and the embedded V2 clause constitute an independent focus domain (de Haan 2001: 18). Crucially, however, this must not deceive about the fact that both clauses are still connected by the intonation contour since no pitch fall can be observed (de Haan 2001: 19).<sup>34</sup>

On the basis of these properties of embedded V2 clauses, de Haan (2001) argues that embedded V2 clauses are actually not subordinated but rather coordinated and emphasises that this type of coordination must be distinguished from coordinated structures induced by equivalents of *and*, for instance. de Haan (2001: 16) adopts Reis' (1997) notion of clause integration to denote this special type of coordination.<sup>35</sup> Clausal integration means that an embedded clause occupies an argumental position in its matrix clause, which means that unintegrated clauses are unembedded and rather adjoined to the whole matrix clause (Reis 1997: 127). This analysis entails, as de Haan (2001: 22) notes, that the complementisers *dat* 'that' and *omdat* 'because' in unintegrated V2 clauses must be distinguished from their V-final counterparts.

There are, however, contexts where (West) Frisian exhibits 'well-behaved' structures, i.e. V2 in complement clauses is only licit in absence of a complementiser. Interestingly, these structures occur under the same matrix predicates as unintegrated V2 clauses (de Haan 2001: 34). Pivotal to the discussion here is the observation that these 'well-behaved' V2 structures exhibit different properties than unintegrated V2 clauses: variable binding (scope) is possible across clause-boundaries (31), matrix and subordinated clause are part of the same focus domain and no intonational separation of matrix and subordinated clauses occurs (and hence only a single focus domain exists, see the capitalised constituent in (31)) (de Haan 2001: 34).

(31) Eltsenien<sub>i</sub> sei,  $[hy_i \text{ soe } op'e \text{ TIID } were].$ everyone<sub>i</sub> said [he<sub>i</sub> would on time be] 'Everyone said he would be on time.'

<sup>&</sup>lt;sup>33</sup>A further restriction mentioned by de Haan (2001: 20) that seem to fit into this category is the limited iterability as subordinated V2 clauses can only be succeeded by root clauses.

<sup>&</sup>lt;sup>34</sup>One further aspect distinguishes V2 and V-final clauses. Whereas V-final complement clauses allow extraction, their V2 counterparts do not (de Haan 2001: 21). The other V-final alternates are islands themselves.

 $<sup>^{35}\</sup>mathrm{See}$  5.2.5 for a similar observation in German.

(de Haan 2001: 34)

In summary, two types of embedded V2 clauses exist in Frisian. The first type of embedded V2 corresponds to the type assumed by Vikner (1995) although it seems to occur in more environments, paralleling the situation in the Mainland Scandinavian languages. The second type appears to correspond to the 'well-behaved' type.

### 5.2.5 German

The alleged complementary distribution of V2 and complementisers in German has been considered to be one of the prominent syntactic features of German. The 'well-behaved' character of German, however, is impugned by recent surveys which unearthed new empirical findings which indicate that German parallels Frisian in many respects. Contrary to earlier claims in the literature, cases of V2 complement and 'content' clauses with overt complementiser (henceforth *dass*-V2), exemplified in (32) and (33), can be found (Freywald 2008, 2009, 2016, Catasso 2016).

- (32) Ich hab gelesen, dass in Sizilien gibt's welche, die sind 'n paar hundert I have read that in Sicily give'it some which are a couple hundred Jahre alt years old
  'I have read that in Sicily, there are some, which are several hundred years old.' (Freywald 2008: 255)
- (33) Aber ich habe [...] den Eindruck, dass hier steht der Poeta Doctus dem but I have [...] the impression that here stand the poeta doctus the Dichter im Weg. poet in.the way
  'But I have [...] the impression that here, the poeta doctus stands in the poet's way.'
  (Freywald 2008: 255)

According to Freywald (2008: 250), these dass-V2 constructions are confined to spoken language and contexts close to the spoken modality (e.g. web forums), respectively, and occur only periodically.<sup>36</sup> It could be objected that instances like (33) ought to be analysed as erroneous performance. This appears problematic though: On the one hand, examples of dass-V2 are already attested during the Old and Middle High German period (Freywald 2008: 279, Catasso 2016: 363). Importantly, Catasso (2016) detects dass-V2 constructions

 $<sup>^{36}</sup>$ Freywald (2008: 252) states that no particular geographical or dialectal distribution can be discerned which is why Freywald concludes that *dass*-V2 is a general phenomenon of German.

in various written texts of different genres (e.g. narrative, religious) which indicates a conscious utilisation. On the other hand, Freywald (2008: 247, 2016: 335) does not discover indications of performance errors such as self-repair. These observations suggest that *dass*-V2 constructions form a real phenomena and occur above chance; a performance error analysis can therefore be precluded.

The distribution of dass-V2 in complement clauses resembles the distribution of Frisian complement clauses insofar as they occur under strongly and weakly assertive predicates as well as under semi-factive predicates unless the matrix clause is negated or questioned (Freywald 2008: 248, 2009: 115). Concerning 'content' clauses, similarities or differences between German and Frisian are not determinable due to the lack of specific descriptions for Frisian. At least in German though, dass-V2 are possible under nominal derivations from the three verb classes noted above as well as semantically abstract nouns (Freywald 2008: 248). German dass-V2 clauses exhibit characteristics which are also largely shared by their Frisian equivalents in that (i) main clause phenomena are possible, (ii) dass-V2 clauses are confined to the sentence-final position, (iii) dass-V2 clauses lie outside the scope of matrix clause elements, (iv) only indicative mood can be used and (v) both clauses dispose of their own intonational domain (and consequently of their own focus domain) although both clauses are still prosodically connected since no pitch fall occurs (Freywald 2008, 2009, 2016).

Freywald (2008: 258) notices that all dass-V2 complement clauses can be transformed into clauses without complementiser whereas the reversed transformation – that is converting V2 complement clauses into dass-V2 complement clauses – is not always available. The transformable complementiserless V2 clauses are characterised by the same restrictions of the matrix clause and display the same properties (i.e. (i)-(v)) (Reis 1997, Freywald 2016). Based on these properties, Reis (1997) and Freywald (2016) argue for an unintegrated status of these V2 clauses. V2 complement clauses realised mandatorily without complementiser, in contrast, display different properties: (i) Main clause phenomena, which include non-subject topicalisation, are banned, (ii) binding from the matrix clause into the embedded clause is possible, (iii) subjunctive mood is grammatical and (iv) the matrix clause and the 'well-behaved' V2 clause belong to the same focus domain (Reis 1997, Freywald 2016). Nonetheless, similarities persist between both types of complementiserless V2 complement clauses. One the one hand, 'well-behaved' V2 complement clauses are subject to the same restrictions on the matrix clause predicates (Freywald 2016). One the other hand, 'well-behaved' V2 complement clauses are realised sentence-finally (Reis 1997: 139), although this restriction applies less strictly since preposing of this construction type is sometimes possible, as the following example from Freywald (2016) shows.

(34) Sie zieht nach Spanien, hat sie geschrieben? she moves to Spain hat she written 'She wrote that she is moving to Spain?' (Freywald 2016: 343 fn.16)

Strikingly, the properties of German obligatorily complementiserless complement clauses are akin to the properties of their Frisian correspondents. Freywald (2016) analyses this type of V2 as integrated V2 clause.<sup>37</sup>

The occurrence of embedded V2 is not restricted to complement and content clauses in German. Restrictive relative clauses as well as certain types of adverbial clauses (causal, concessive and adversative) are reported to exhibit V2 orders (Freywald 2009, 2016, Catasso 2016, Catasso & Hinterhölzl 2016). (35) illustrates V2 in restrictive relative clauses (but see also (32)).

(35) [...] es gibt doch viele Schriftsteller, die haben keine eigene
[...] it gives PARTICLE many authors which have not any own
Vorstellung von Zeichensetzung [...]
imagination of punctuation
'There are indeed many authors which have no own imagination of punctuation.'
(Freywald 2009: 118)

Except for prosodic independence, German V2 relative clauses are characterised by the same properties of (dass-)V2 complement clauses, i.e. confinement to sentence-final position, binding of variable inside relative clause impossible from matrix clause and assertive force (Freywald 2009: 118–119).

The situation in German seems to resemble the Frisian situation to a great extent. The difference between both languages is the frequency with which these phenomena occur. Further research is required to determine how acceptable *dass*-V2 structures are for German speakers.

### 5.2.6 Afrikaans

Afrikaans – a SOV language – is the only (major) Germanic language which is not classified by Vikner (1995). Biberauer (2002) demonstrates that it is necessary to distinguish between Standard Afrikaans and Modern Spoken Afrikaans. While Standard Afrikaans

<sup>&</sup>lt;sup>37</sup>Reis (1997) as relatively unintegrated. This analysis is based on shared properties with V-final clauses which however do not fully coincide.

displays the pattern of 'well-behaved' V2 languages illustrated in (36), Modern Spoken Afrikaans possesses a unique status regarding wh-questions and otherwise a LEV2 status (Biberauer 2002).<sup>38</sup>

(36) a. Karel sê hy sal om tienuur huistoe kom Karel say he will at 10-hour home-to come 'Karel says he will come home at 10 o'clock'
b. \*Karel sê dat hy sal om tienuur huistoe kom Karel say that he will at 10-hour home-to come 'Karel says that he will come home at 10 o'clock'

(Biberauer 2002: 26)

Embedded wh-interrogatives in Modern Spoken Afrikaans can be realised either with a V-final or a V2 word order, as exemplified in (37), under all wh-complement-taking predicates (Biberauer 2002 2017). In fact, Biberauer (2002: 35) reports that 70% of the embedded wh-interrogatives featured in her corpus exhibit a V2 order. This norm-like pattern is corroborated by native speakers' inability to recognise the deviation from the expected V-final order (Biberauer 2002: 35).

(37) G'n mens buite die akademie weet wat is 'Neerlandistiek' nie.
No person outside the academia know what is 'Netherlandistics' NEG 'No one outside of academia knows what 'Netherlandistics' is.
(Biberauer 2002: 31)

Biberauer (2002) argues that wh-questions exhibiting V2 are truly embedded since on the one hand, no intonation break exists between the matrix clause and the embedded questions which parallels the situation in V-final interrogatives and on the other hand, wh-interrogatives lie within the scope of negation in the matrix clause, indicated by the negative scope marker *nie*, cf. (37).

The situation in declarative clauses, however, appears more complex in Modern Spoken Afrikaans albeit V2 in complement clauses constitutes a licit word order, cf. (38).

(38) Ek is seker dat *die regering* het nog nie eens sover gedink nie.
I is sure that the government has still not even so-far though NEG
'I am sure that the government has not even thought that far yet.'

<sup>&</sup>lt;sup>38</sup>Biberauer (2002: 26) remarks that embedded V2 clauses in Standard Afrikaans are licensed under a greater set of verbs than German. Unfortunately, it remains unclear whether this means that embedded V2 in Standard Afrikaans is possible even under class C and D predicates. Furthermore, given the findings of Freywald (2008, 2009, 2016) and Catasso (2016), scrutinising the possibility of embedded V2 causes introduced by a complementiser in Standard Afrikaans could produce interesting results.

(Biberauer 2002: 31)

Biberauer (2002: 36) argues that the possibility of embedded V2 orders in complement clauses is constrained by the frequency of the respective matrix verbs, their generality of meaning as well as the possibility to introduce informationally salient complements.<sup>39</sup> The first two of those three factors condition the deletion of complementisers. This is particularly relevant as matrix verbs which do not permit the omission of complementisers feature only rarely V2 orders in their complement clauses (Biberauer 2002: 37). Interestingly though, Biberauer (2002: 46) notes that the set of verbs accepting V2 complements in Modern Spoken Afrikaans is the same set which allows V2 complement clauses in Mainland Scandinavian. Given the findings outlined in 5.2.3, this set of verbs corresponds to Hooper & Thompson's (1973) predicate classes A, B and E.

Two further aspects are worth mentioning. First, complement clauses with V2 in Biberauer's (2002: 39) corpus feature overwhelmingly a subject-initial order<sup>40</sup> – a result which is corroborated by acceptability judgements indicating that only subject-initial V2 orders are fully acceptable while object-initial orders are outright unacceptable and at least marked with clause-initial adverbials. Secondly, the finite verbs featured in the second position of the clause are mostly non-thematic, i.e. auxiliaries, modals and copulas (Biberauer 2002: 41). Apart from frequency, complement clauses with lexical verbs differ from clauses with non-thematic subjects in that an intonation break is noticeable between the complementiser and the lexical verb (Biberauer 2002: 42).

In conclusion, Standard Afrikaans and Modern Spoken Afrikaans need to be analysed separately. While the former exhibits the status as 'well-behaved' V2 languages, the latter resembles the pattern observed for LEV2 languages, although differences between the frontable constituents in terms of their syntactic functions exist.

#### 5.2.7 Summary

Table 1 summarises the results of this section.

<sup>&</sup>lt;sup>39</sup>Biberauer (2002) herself analyses the majority of V2 complement clauses as only apparent instances of V2. Her analysis will not be further discussed in this paragraph as sketching the empirical findings constitutes the main objective.

 $<sup>^{40}</sup>$ Biberauer (2002: 39) excludes certain adverbials due to their alleged parenthetical status which is indicated by their "strength of prosodic cues" (Biberauer 2002: 39). Unfortunately, it remains unspecified which prosodic cues provide this evidence. If these adverbs are in fact of parenthetical nature, this would entail that V1 orders are possible because otherwise the inversion of the subject and the finite verb is unexpected. According to den Besten (2002: 11), V1 is possible in embedded polar questions introduced by of 'whether'.

	A		В			С			D			Е			Adv. cl			wh			
	SU	OB	AD																		
Yiddish	$\checkmark$																				
Icelandic A	$\checkmark$	*	*	*																	
Icelandic B	$\checkmark$	*	$\checkmark$	$\checkmark$	*	$\checkmark$															
MSc	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*	*	*	*	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*
Frisian	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*	*	*	*	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*
German	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*	*	*	*	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	*	*	*
MS Afrikaans	$\checkmark$	*	$\checkmark$	$\checkmark$	*	$\checkmark$	*	*	*	*	*	*	$\checkmark$	*	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$

Table 1: Possibility of embedded V2 in the Germanic languages

# 6 Rhaeto-Romance V2

As it was noted in section 1, the vast majority of research into V2 is centred on the Germanic languages. The results reported in the literature demonstrate that the Germanic V2 languages vary with respect to the availability of V2 in embedded clauses. As described above, the goal of this thesis is to broaden the empirical picture by examining the situation in a non-Germanic variety, namely Sursilvan. This section summarises the findings reported in the literature for Sursilvan but also for the other Romansh idioms (6.1). Furthermore, the situation in the only other (Rhaeto-)Romance V2 language, that is Dolomitic Ladin, is described (6.2). This is necessary to identify potential peculiarities of these two related languages. In contrast to the previous section, the descriptions in this section are not restricted to embedded clauses but comprise also main clauses.

## 6.1 Swiss Romansh

Throughout the literature, it is argued that all Swiss Romansh varieties exhibit V2 in main clauses (e.g. Haiman & Benincà 1992: 167, Kaiser 2002: 2). This property will be illustrated exemplarily for Sursilvan. For the other varieties but also for Sursilvan, the role of V2 in embedded contexts will be sketched below. Moreover, deviations as well as other peculiarities in connection with V2 are addressed. The first idiom to be discussed is Sursilvan in 6.1.1 which will be followed by the Engadine idioms in 6.1.2 and Surmiran in 6.1.3. The only idiom which will not be discussed below is Sutsilvan for which not sufficient data is available.

### 6.1.1 Sursilvan

In Sursilvan (and the other idioms), the finite verb occupies the second position in the clause irrespective of the clause-initial constituent in declarative main clauses. Apart from subjects, also objects (39), adjuncts (40), whole subordinated clauses (41), gerunds, participles and infinitives are eligible as preverbal element (Spescha 1989: 595–597, Liver 2010: 147–148). This extents also to wh-questions as exemplified in (42) (Spescha 1989: 594, Hack & Kaiser 2013, Liver 2010: 147). Note that in case of analytic tenses, the subject intervenes between the auxiliary and the past participle (cf. (39)) although this rule does not always apply strictly (Spescha 1989: 595, Grünert 2018: 26).

(39) La brev **ha** *la mumma* scret. the letter has the mother written 'The mother wrote the letter.' (Spescha 1989: 595)

- (40) Damaun mein nus en vacanzas. tomorrow go we in holdidays 'Tomorrow, we go on holiday.'
  (Liver 2010: 148)
- (41) Cura ch'el entrau, ein tuts stai sin peis. when that'he entered, are all stood on feet 'When he entered the room, all stood up.' (Spescha 1989: 596)
- (42) Cura eis ella morta? when is she died 'When did she die?'
  (Liver 2010: 147)

Kaiser (2002, 2002–2003) and Kaiser & Scholze (2009) discovered several V3 structures while examining the word order patterns in the Book of Samuel. The majority of these V3 sentences are left-dislocated structures, albeit some of the discovered V3 structures cannot be captured under such an analysis. Hence, Kaiser (2002, 2002–2003 and Kaiser & Scholze (2009)) argue that these V3 structures can be attributed to the verse form of the text passage they occur in (Song of Hannah). In fact, it is generally agreed within the literature that Sursilvan displays the strictest adherence to V2 of all five Romansh idioms (Oetzel 1994: 155, Liver 2010, Grünert 2018).

The word order in embedded clauses has received virtually no attention among scholars. Grünert (2018) is the first to examine the word order in embedded declaratives in both contemporary Romansh and older stages ( $16/17^{\text{th}}$  century) of Romansh. Using corpus data from all Romansh varieties as basis, Grünert (2018) concludes that in all Romansh varieties V2 is possible in complement and adverbial clauses and no restrictions apply as to the syntactic function or category of the preverbal constituent. This is illustrated in (43).

(43) Mario Alig ha [...] getg, che lu seigi ei in bienton pli Mario Alig has [...] said that then AUX.3SG.SBJV it a piece more ruasseivel. quietly 'Mario Alig [...] said that it would be somewhat quieter then.' (Grünert 2018: 28) However, the occurrence of V2 in complement clauses is subject to similar restrictions observed for the Germanic languages. Non-subject-initial V2 is constrained by the presence of asserted predicates in the matrix clause, i.e. V2 complement clauses under negated or inherently negated, factive as well as interrogative matrix predicates are ungrammatical (Grünert 2018: 29). In addition, V2 under volative matrix predicates is also ruled out. This assessment strongly suggests that V2 in complement clauses depends on the same class of matrix verbs as e.g. Mainland Scandinavian languages albeit the status of semi-factive verbs remains unclear.<sup>41</sup>

Grünert (2018: 29) states that Romansh features embedded V2 in more clause types than German although leaving the additional clause types unspecified. At least in shortened cleft sentences of the structure *sentential adverb* + *che*, V2 is possible in all Romansh varieties (Grünert 2018: 34).<sup>42</sup>

In embedded wh-questions V2 does not occur in Sursilvan. Embedded wh-questions are generally of the type *wh che* and are succeeded by the subject (Spescha 1989: 595, Rolshoven 2007: 339, Hack & Kaiser 2013: 147).

(44) Ella sa era buca dir cura ch' *el* vegn. she can also not say when that he comes 'She also cannot say when he will come.'
(Hack & Kaiser 2013: 147)

The wh-adverbs cu(ra) 'when' and co 'how' allow the omission of *che* but notwithstanding, these are obligatorily followed by the subject (Spescha 1989: 559, Rolshoven 2007: 339).

### 6.1.2 Vallader and Puter

Puter and Vallader – the varieties from the Upper and Lower Engadine – are, as noted above, characterised by a V2 order in declarative and interrogative main clauses. In contrast to Sursilvan however, verb clusters are normally not separated by a subject in case of inversion (Grünert 2018: 26). Despite being V2 languages, two types of deviations from V2 are attested in the Engadine varieties. On the one hand, in contrast to Sursilvan, both varieties dispose of a set of proclitic object pronouns which results in a configuration demonstrated in (45) for Puter (Kaiser & Scholze 2009: 321).

(45) *Il scolar* am=**scriva** üna charta the pupil me=writes a letter

 <sup>&</sup>lt;sup>41</sup>Grünert (2018: 32) notes that V3 orders were possible in embedded clauses in earlier stages of Sursilvan.
 <sup>42</sup>Unfortunately, no Sursilvan examples are provided by Grünert (2018), but see (47) in section 6.1.2 for an Engadine example.

'The pupil writes a letter to me.' (Kaiser & Scholze 2009: 321)

In (45), the proclitic indirect object am intervenes between the sentence-initial subject and the finite verb giving rise to a SOV order. Kaiser & Scholze (2009: 324) argue, however, that instances like (45) should not be considered as true deviations from V2 (i.e. V3) due to the dependent nature of clitics which thus cannot form independent constituents.

On the other hand, written texts feature sentences with two XPs preceding the finite verb (Liver 2010: 53, 68, Oetzel 1992: 18, 1994, Kaiser 2002–2003: 329).<sup>43</sup> In her survey of contemporary fictional texts, Oetzel (1994) discovered several instances of V3 in both varieties - either with an additional preverbal object or adverb. Interestingly, Oetzel (1994: 164) found less V3-instances with objects than with adverbs. Two of her findings are given in (46a) and (46b) (both Vallader).

- (46) a. Quella lura chatta bainbond ün cun blers raps this then find soon one with many money 'She will then find someone with much money.'
  (Oetzel 1994: 159)
  - b. Quai *tuots* han laschà valair this all AUX let count 'All have let this count.' (Oetzel 1994: 164)

Rather unexpectedly, the subject can either precede, as in (46a), or succeed the second preverbal constituent – a word order variation that is impossible when objects are involved since objects must obligatorily precede the subject as in (46b), according to Oetzel (1992: 30).

Oetzel (1994) considers multiple factors to be responsible for the occurrence of V3 in the Engadine varieties albeit only two are explicitly stated: First, sentence-initial objects and adverbs in sentence-initial position are, depending on the context, either topicalised or focalised. That is, information-structure is responsible for the V3 structures. Second, language contact to Italian, where comparable configurations arise,<sup>44</sup> contributes to the observed deviations. Both factors are related to each other given that the word order in the Italian left periphery is informationstructurally conditioned as many authors assume

<sup>&</sup>lt;sup>43</sup>It might be conceivable that those texts employ V3 structures to imitate colloquial speech. The fact, however, that Kaiser (2002–2003: 327) retrieved a V3 clause from a scripture rebuts that hypothesis to a certain extent, although it does not rule out the possibility of V3 in spoken language. This issue must be left open for further research.

 $<sup>^{44}({\</sup>rm Northern})$  Italian varieties, however, do not display V2 orders.
(e.g. Rizzi 1997, Poletto 2000).

Regarding embedded V2, Linder (1987: 36) reaches the conclusion in his survey of several texts from different genres that V2 is restricted to main clauses. This conclusion is falsified by the findings of Grünert (2018) who, as noted above, demonstrates the existence of V2 structures in embedded clauses in Romansh. The Engadine varieties exhibit embedded V2 structures in the same contexts and under the same restrictions as Sursilvan, i.e. V2 occurs in complement clauses, adverbial clauses and shortened cleft structures as in (47). The existence of embedded V2 in complement clauses is also noted by Manzini (2010: 174).

(47) Forsa cha lura as<sup>45</sup> müdess alch [...]. perhaps that then REFL would change something [...] 'Perhaps, something would change then [...].' (Grünert 2018: 34)

Furthermore, Grünert (2018: 34) shows that the Engadine varieties allow embedded V2 in additional contexts. More precisely, relative clauses and indirect question which are introduced by a pronoun with object function exhibit a V2 order. The following examples illustrate this for relative clauses.

(48) quai cha hoz in Engadina Bassa nu daja plü [...]. that REL.DIR.OBJ today in Engadine Lower not give.it more [...]
'That which does not exist anymore in the Lower Engadine.'
(Grünert 2018: 35)

A problem that arises in connection with examples like (48) is the preverbal negation. Unless nu is cliticised to the finite verb, structures of this type must be categorised as V3 instances. In fact, Grünert (2018) notes that V3 structures similar to those in main clauses are possible. Furthermore, V1 structures are possible in these contexts.

#### 6.1.3 Surmiran

Surmiran, the Romansh idiom spoken in the Albula valley and Oberhalbstein, behaves similarly to the other Romansh idioms in displaying V2 word order in both declarative and interrogative main clauses (Anderson 2004, 2005, 2006, 2016). A peculiarity of Surmiran constitutes the possibility to double the finite verb in the second position by its infinitive

<sup>&</sup>lt;sup>45</sup>The classification of this clause hinges on the status of the reflexive pronoun. If the reflexive is cliticised to the verb, this example is a true V2 example.

which then precedes the verb without any complements (Anderson 2004: 9).<sup>46</sup> Apart from that, Surmiran exhibits similar deviations from the V2 pattern as the Engadine varieties. On the one hand, V3 structures are reported in spite of Anderson's (2004, 2005, 2006) claim of the opposite. In fact, Oetzel (1992, 1994) and Liver (2010: 53 fn.15) argue that V3 is particularly frequent in Sumriran in comparison with the four remaining Romansh varieties. Although Oetzel (1992) provides examples of V3 in Surmiran, one of which is given in (49), Oetzel fails to support her claim of the increased frequency with quantitative data.<sup>47</sup>

(49) La seira anturn las nov *Tina* prepara per sorteir the evening about the nine Tina prepares for go out 'In the evening at nine, Tina prepares to go out.'
(Oetzel 1992: 18)

On the other hand, object clitics and the negation particle n(a) are cliticised to the finite verb independent of the sentence-initial constituent, as can be seen in (50). Although this results in a SOV order, the configuration does not actually violate V2 as argued above (Anderson 2004: 4, 2005: 209).

(50) Ier seira n'=ans=ò Maria betg telefono yesterday evening NEG=1PL=has.3SG Maria not phoned 'Yesterday evening, Maria didn't telephone us.'
(Anderson 2006: 8)

Despite the similarities with Puter and Vallader, a series of peculiarities have been observed for Surmiran. One of these is the doubling of the inverted subject by an enclitic pronoun cliticised to the finite verb (Anderson 2004: 5, 2005: 206, 2006: 5).<sup>48</sup> Although Surmiran is not a null-subject language, subjects can be dropped when doubled by a clitic pronoun:

(51) Rumantsch discorra='l (Ursus) stupent Rumantsch speaks.3SG=3SGM Ursus excellently 'Ursus speaks Romansh very well.'
(Anderson 2006: 5)

<sup>&</sup>lt;sup>46</sup>This is not a unique phenomenon among the V2 languages. Several German varieties display a similar behaviour. See Bayer & Freitag (to appear) for a brief overview.

<sup>&</sup>lt;sup>47</sup>Oetzel (1992: 18, 1994: 155) speculates that the purported frequent occurrence of V3 in Surmiran could be attributed to language policies in the 1970s that frown upon the inversion of subject and finite verb.

<sup>&</sup>lt;sup>48</sup>This does not include second person plural subjects because the subject clitic paradigm exhibits a gap at this position (Anderson 2004: 6).

Subjects doubled by a clitic receive an emphatic interpretation, which is lost when the subject is omitted (Anderson 2005: 207).<sup>49</sup>

A further V2 phenomenon which is unique to Surmiran involves the impersonal subject pronoun *ins* 'one'. As Anderson (2004, 2005, 2006, 2016) points out, *ins* does not invert with the finite verb if a non-subject is fronted in both declaratives and interrogatives. Interestingly, in just these cases, *ins* can be doubled by the clitic =(i)gl, as illustrated in (52).

(52) Ainten cell'ustareia ins na=magl=igl betg schi bagn, on=igl in this-inn one NEG=eat.3SG=3IMPERS not so well have.3PL=3PL detg said
'In this inn, you don't eat so well, they said.'
(Anderson 2006: 15)

These ordering restrictions prompt Anderson (2004, 2005, 2006, 2016) to analyse *ins* as a clitic pronoun. This analysis entails, however, that this type of impersonal constructions allows a V1 order. Crucially, a similar situation can be observed with experiencer predicates with postposed sentential subjects. If the experiencer is cliticised to the finite verb, the dummy subject *igl* can be omitted (Anderson 2004, 2005, 2006, 2016):

(53) Am=displai tgi chesta construcziun antschva cugl verb.
1sG=displeases that this sentence begins with the verb 'I am unhappy that this sentence begins with the verb.'
(Anderson 2006: 19)

Anderson (2004, 2005, 2006, 2016) concludes that proclitics function as the sentence-initial element in this particular context. However, this raises the question why these clitic forms do not constitute a violation of V2 in other contexts. Unfortunately, Anderson does not indicate whether constructions with a clause-initial object clitic are licit in other contexts. Hence, further research on this topic is required which could provide an interesting contribution to a better understanding of V2.

With respect to embedded contexts, the descriptions of embedded V2 given for Sursilvan can be assumed to hold also for Surmiran as Grünert (2018) does not delimit his findings to Sursilvan, Puter and Vallader (albeit his examples are stemming predominantly

<sup>&</sup>lt;sup>49</sup>This observation might lead to an analysis in which the subject clitics are analysed as agreement markers or emphatic markers. Such an analysis is unfounded, though, since clitic doubling is impossible with non-referential subjects and rules of lexical phonology do not apply as it would be expected for agreement markers (Anderson 2004: 7).

from those idioms). That is, embedded V2 is possible in complement clauses, adverbial clauses and shortened cleft structures. Consequently, the same restrictions must apply for complement clauses: Non-subject-initial V2 is ungrammatical under negated or inherently negated, factive, volative as well as interrogative matrix predicates (Grünert 2018: 29). The grammaticality of embedded V2 structures is corroborated by Anderson (2004: 12, 2005: 212, 2006: 10, 2016: 180), who provides the following example:

(54) Ia pains [tgi dultschems vegia Corinna gugent]
I think.1sG that sweets have.SBJV.3sG Corinna gladly
'I think Corinna likes sweets.'
(Anderson 2006: 10)

Anderson (2004) also notes that V2 is ungrammatical in relative clauses of Surmiran. Hence, Surmiran is on a par with Sursilvan and differs from Puter and Vallader in this respect.

The results of Grünert (2018) outlined in the preceding subsection show the possibility of embedded V2 in at least complement clauses in the Romansh varieties. A major problem that arises in connection with the corpus methodology employed is the lack of negative evidence. The absence of certain structures in corpora does not entail the ungrammaticality of these structures. Due to the observed variation regarding embedded V2 between V2 languages, such evidence is necessary for the development of appropriate syntactic theories. Hence, an acceptability study on this topic was conducted which was, due to the observed differences between the Romansh varieties, confined to Sursilvan. The results of this study are reported in section 8. For the subsequent discussion, it is, however, necessary to provide an overview of V2 theories which will be addressed in the next section. Furthermore, a comparison with the other Romance V2 language, i.e. Dolomitic Ladin, may be interesting. The situation in this language is thus briefly summarised in the next subsection.

## 6.2 Dolomitic Ladin

Dolomitic Ladin consists of five different varieties of which each is spoken in a different valley around the Sella group in the Italian Dolomits: Badiot (with Marèo), Gherdëina, Fascian, Fodom and Anpezo (Haiman & Benincà 1992: 28, Kaiser & Hack 2009: 74).<sup>50</sup> Among the five Ladin varieties, only Badiot and Gherdëina can be characterised as V2

<sup>&</sup>lt;sup>50</sup>The denomination of the different varieties follows Kaiser & Hack (2009) who use the Ladin glosonyms. This stands in contrasts to the habits of Italian-speaking scholars who use the Italian denominations.

languages (Haiman & Benincà 1992: 167, Kaiser & Hack 2009: 77).<sup>51</sup> Unfortunately, descriptions exist mainly for Badiot; this subsection is therefore predominantly based on this variety.

Although Badiot is on a par with other V2 languages in that the preverbal position can be occupied by different elements irrespective of their function and category (including wh-questions), some interesting restrictions have been observed in the literature.<sup>52</sup> Poletto (2000: 95–96, 2002: 221–222) reports for the dialect spoken in S. Leonardo that only subjects and circumstantial adverbs can occupy the sentence-initial position unfocused (albeit focalisation is nonetheless possible), whereas objects and other adverbs need to be focalised in order to be eligible for the preverbal position.<sup>53</sup> Notably, focused circumstantial adverbs display a different scope than their unfocused counterparts, cf. (55).

(55) DUMAN n vagn=l pa nia tomorrow not goes=he not not 'He is not coming tomorrow.' (interpretation not-tomorrow) (Poletto 2000: 96)

Focused circumstantial adverbs such as *duman* in (55) allow only an interpretation within the scope of the negation and parallel therefore lower adverbs (cf. Cinque 1999) in this respect (Poletto 2000: 96).

In the Badiot variety of S. Leonardo, a subject DP can be doubled by a full-agreeing clitic pronoun but only when subject and finite verb are inverted (Poletto 2002: 223).<sup>54</sup> This resembles the situation noted for Surmiran (6.1.3), cf. (51).

(56) Duman mang=la la muta pom tomorrow eat=she the girl apples 'The girl will eat apples tomorrow.'
(Poletto 2002: 223)

 $<sup>^{51}</sup>$ Remarkably, precisely those two dialects have intensive contact with German (Kaiser & Hack 2009).

<sup>&</sup>lt;sup>52</sup>Badiot (but also Gherdëina) appears less uniform as the following descriptions might suggest. For instance, Poletto (2000: 104) argues that only subject clitics invert with the inflected verb in cases a non-subject is realised clause-initially in the variety of S. Leonardo. This is conflicting with the examples provided by Poletto (2002: 223) which feature inverted nominal subjects in the same variety. Whether this discrepancy can be attributed to unreliable informants or microvariation remains unclear. The existence of microvariation is corroborated by the findings of Casalicchio & Cognola (2018) though.

<sup>&</sup>lt;sup>53</sup>Poletto (2002: 222–224) argues that adverbs must be contrastively focused in order to appear in the sentence-initial position. Unfortunately, Poletto (2002) does not indicate whether the same situation arises with objects.

<sup>&</sup>lt;sup>54</sup>Poletto (2002: 223) notes the existence of a further variant where the subject is doubled by an expletive third person singular masculine clitic. This pattern, however, is only licit with unaccusative verbs and only marginal with transitive verbs (Poletto 2002: 223).

Interestingly, clitic doubling is obligatorily when a lower adverb occupies the sentenceinitial position while sentence-initial circumstantial adverbs allow no clitic doubling (Poletto 2002). Unfortunately, it remains unclear whether clitic doubling is associated with a preverbal focused constituent. This association is conceivable given the diverging behaviours of lower and circumstantial adverbs. In addition, no information is given on the situation with sentence-initial objects. In either case, the congruency with Surmiran is only partial.

Apart from main clauses, V2 is also attested in subordinate clauses. According to Poletto (2000: 99), Badiot complement clauses exhibit a general V2 pattern. Similar to Icelandic, subject-initial V2 clauses are not constrained by the predicate class of the matrix verb (Poletto 2000: 99). This is also true for clauses with circumstantial adverbs, which can occupy the preverbal position in clauses embedded under all matrix predicates (Poletto 2000: 99, 2002: 224).<sup>55</sup> (57) illustrates a V2 clause with clause-initial circumstantial adverb embedded under a class predicate.

- (57) Al s despleej c magari mang-el a ciasa.
  he is sorry that perhaps eats-he at home 'He is sorry that perhaps he will eat at home.'
  (Poletto 2000: 99)
- (58) \*Al s despleej c l giat a-al odù. he is sorry that the cat has-he seen 'He is sorry that he has seen the cat.'
  (Poletto 2000: 100)

Unlike the aforementioned cases, V2 complement clauses with clause-initial objects, as in (58), or lower adverbs are possible only under bridge verbs (Poletto 2000: 100) which correspond to Hooper & Thompson's (1973) predicate classes A, B and E (cf. sections 4 & 5). This constitutes another interesting parallel between Icelandic B and Badiot. It seems that at least in complement clauses both languages behave similarly. Further details, especially in relation to the properties of these V2 clauses, are not provided. Poletto merely notes that V2 clauses can lie within the scope of negation.

In clause types other than complement clauses, embedded V2 appears to impossible. According to Poletto (2000: 98), neither relative clauses nor embedded interrogatives in Badiot exhibit V2. However, the examples given by Poletto (2000) suggest that at least in relative clauses, subject-initial V2 might be possible. Unfortunately, no disambiguat-

<sup>&</sup>lt;sup>55</sup>In embedded contexts, circumstantial adverbs need to be focalised in Badiot in order to appear in the preverbal position (Poletto 2000: 99). No such restrictions are reported for Icelandic.

ing element is contained in the provided examples. The only information to Gherdëina provided by Poletto (2000: 98 fn.11) is that embedded questions exhibit V2 in this variety of Dolomitic Ladin.

Having summarised the situation in Dolomitic Ladin, the different V2 theories are sketched in the next section.

# 7 V2 theories

So far, V2 has been treated only at a descriptive level. In this section, three major strands of analysis are introduced (7.1). This selection is restricted to generative analyses and by no means exhaustive. The denomination of the first two strands, i.e. symmetric (7.1.1) and asymmetric (7.1.2), derives from the presence or absence of structural differences of clause-initial subjects and non-subjects. The third strand sketches a hybrid approach which combines aspects of both symmetrical and asymmetrical analyses (7.1.3). Finally, the assertion debate is addressed which refers to a debate on the role of assertion on embedded V2 (7.2).

## 7.1 Analyses

#### 7.1.1 Symmetric analyses

Symmetric analyses as e.g. proposed by Vikner (1995) assume that the finite verb in V2 structures is moved to the head of the CP from its base position (through  $I^0$ ). The clause-initial constituent resides in the specifier position of the CP although also originating from a lower position in the syntactic structure. Since both arguments and non-arguments can precede the finite verb in V2 clauses, the movement to SpecCP constitutes  $\bar{A}$ -movement. Consequently, V2 is defined within this strand of analyses as head movement of the finite verb to C while another constituent resides in SpecCP.

The great advantage of symmetric analyses is the straightforward explanation of the restriction on the number of preverbal constituents since only one specifier position is available in the CP (Vikner 1995: 42). Moreover, systematic cases of V1 orders such as polar questions or imperatives (cf. 3.1) can be easily captured within this analysis if the existence of phonetically silent operators in SpecCP is assumed (Holmberg 2015: 353, Poletto 2013: 157).

(59) Tsi **hot** *er* gezen Maxn? Q has he seen Max 'Did he see Max?' (Diesing 1990: 56)

Support for such an operator analysis comes for instance from Yiddish polar questions which can be realised with an overt question operator tsi as illustrated in (59) (Diesing 1990: 56).

The idea of verb movement to  $C^0$  originates from den Besten  $(1989)^{56}$  who was the first to observe that finite verbs and lexical complementisers stand in complementary distribution to each other in German and Dutch. That is, finite verbs are realised in the second position of the clause only in those contexts in which a lexical complementiser is absent form the structure. In the German complement clause in (60) for instance, the clause introduced by the complementiser *dass* is well-formed if the verb remains in its clause-final base position (60a). Conversely, the V2 structure is well-formed in the absence of a complementiser (60b). Crucially, if the finite auxiliary *hat* resides in the second position and the complementiser *dass* is lexically realised as in (60c) the resulting structure is ungrammatical.

(60) The newspaper reports ...

- a. ... dass die Rhätische Bahn die Anschaffung neuer Waggons
  ... that the Rhaetian Railway the purchase new carriages
  beschlossen hat.
  decided has
  '... that the Rhaetian Railway decided to purchase new carriages.'
- b. ... *die Rhätische Bahn* hat die Anschaffung neuer Waggons beschlossen. ... the Rhaetian Railway has the purchase new carriages decided
- c. \*...dass die Rhätische Bahn hat die Anschaffung neuer Waggons ...that the Rhaetian Railway has the purchase new carriages beschlossen. decided

A further correlation between complementisers and verbs mentioned by den Besten (1989: 90) is the licensing of finite or infinite verb forms by complementisers. In English, *that* and *if* combine only with finite verbs whereas *for* combines with to-infinitives. This is not confined to English but also true for the Dutch and German equivalents. den Besten (1989: 90) derives from this fact that the complementiser position is associated with a particular feature ([TENSE] in den Besten's (1989) theory) for which the finite verb is also

<sup>&</sup>lt;sup>56</sup>den Besten's (1989) paper had circulated since 1977 and was eventually published in 1983 with two addenda. The 1989 edition – published as part of his cumulative dissertation – is supplemented with four additional remarks.

specified. In consequence, the finite verb is moved to the position of the complementiser (i.e.  $C^0$ ) if no lexical complementiser is realised. This assumption receives further support from a phenomenon called complementiser agreement. In dialects of Dutch and German (but not in the standard varieties), complementisers agree with finite verbs in person (den Besten 1989: 92).

(61)  $\dots datt-\underline{e}$  ze komm- $\underline{e}$  $\dots that-PL$  they come-PL (den Besten 1989: 93)

The Hollandic example in (61) illustrates this phenomenon. The complementiser *dat* bears the same inflectional affix as the finit verb *komme*.

Apart from the complementary distribution of complementisers and finite verbs in the second position, the position of Dutch weak pronouns is considered by den Besten (1989: 25–36) to be an indicator of the same position of finite verbs and complementisers in the CP. While strong pronouns do not need to be right-adjacent to the finite verb (62c) or complementiser (63c), weak pronouns must be right-adjacent to the finite verb (62a) or the complementiser (63a) as the insertion of constituents results in ungrammatical sentences in (62b) and (63b).

- (62) a. **Was** *ze* gisteren ziek? was she yesterday ill 'Was she ill yesterday?'
  - b. **\*Was** gisteren *ze* ziek? was yesterday she ill?
  - c. Was gisteren zij ziek? was yesterday she ill?
    (den Besten 1989: 26)
- (63) a. ... dat *ze* gisteren ziek **was** ... that she yesterday ill was '... that she was ill yesterday.'
  - b. \*...dat gisteren *ze* ziek **was** ...that yesterday she ill was
  - c. ...dat gisteren *zij* ziek **was** ...that yesterday she ill was (den Besten 1989: 25-26)

According to Platzack (1986: 200), similar restrictions on the position of weak pronouns relative to the finite verb or the complementiser exist in other Germanic languages as well

(see Vikner (1995: 44) for Danish).

#### 7.1.2 Asymmetric analyses

Asymmetric analyses put forward e.g. by Travis (1991) and Zwart (1997) differ from symmetric analyses in that subject-initial and non-subject-initial V2 clauses are analysed as structurally different. While the finite verb is moved to  $C^0$  and the clause-initial constituent to SpecCP in non-subject-initial V2 clauses, no CP is projected in subject-initial V2 structures. The subject and the finite verb remain in the IP-domain in subject-initial clauses, which is either split as in Zwart's (1997) approach or unsplit as in Travis' analysis. The position of the subject and the finite verb proposed in Zwart's (1997) frameworks is SpecAgrS and AgrS, respectively.

Travis (1991) and Zwart (1997) support their asymmetric analyses by empirical observations. Weak pronouns functioning as subjects in Dutch and German can appear in the clause-initial position while weak pronouns functioning as objects are barred from preceding the finite verb (Travis 1991: 359, Zwart 1997: 35, 196). The German example in (64) exemplifies that no restrictions apply to nominal subjects (64a) and objects (64c) which contrast with their pronominal equivalents in (64b) and (64d) where only the subject *es* can precede the finite verb. For Travis (1991) and Zwart (1997), this difference can only be explained if weak pronouns are in SpecIP and SpecAgrS, respectively.

- (64) a. *Das Kind* hat das Brot gegessen. the child has the bread eaten 'The child has eaten the bread.'
  - b. Es hat das Brot gegessen.it has the bread eaten'He/she has eaten the bread.'
  - c. Das Brot **haben** *die Kinder* gegessen. the bread have the children eaten 'The children have eaten the bread.'
  - d. \*Es haben *die Kinder* gegessen.
    it have the children eaten
    'The children have eaten it.'
  - (Travis 1991: 359)

According to Zwart (1997: 195), a special type of complementiser agreement referred to as double agreement by Zwart (1997) supports an asymmetric analysis. Double agreement is characterised by different inflection markers for complementisers and verbs (Zwart 1997: 138). One subtype of double agreement exhibits the same agreement markers in embedded clauses and subject-initial V2 clauses whereas the finite verb in non-subject-initial V2 clauses bears the inflection of complementisers (Zwart 1997: 139). In the example from the Dutch dialect East Netherlandic in (65), the finite verbs in the embedded clause in (65a) and in the subject-initial V2 clause in (65b) bear the inflectional marking of verbs t (indicated by (v) in the gloss), whereas in the non-subject-initial question in (65b) only the complementiser inflection affix e (indicated by (c)) is grammatical.

(65) a. ... datte wy speul-t/\*-e. ... that we play-1PL(V)/-1PL(C)
b. Wy speul-t/\*-e. we play-1PL(V)/-1PL(C)
c. Waor speul\*-t/-e wy? where play-1PL(V)/-1PL(C) we (Zwart 1997: 140)

This distribution of inflectional affixes thus suggests that the finite verb occupies different positions.

On conceptual grounds, Travis (1991: 361) and Holmberg (2015: 364) point out problems for learnability posed by a symmetric analysis. Children can hardly detect movement of the subject and the finite verb from the IP to the CP in the Phonetic Form in consideration of the fact that the same configuration results.

#### 7.1.3 Fused analyses

It is outside the scope of this thesis to discuss the shortcomings of both strands of V2 theories.<sup>57</sup> Not least the existence of embedded V2 in combination with an overt complementiser as e.g. noted for the Scandinavian languages poses challenges to both symmetrical and asymmetrical analyses. The accommodation of these structures within a CP-analysis (this includes also non-subject-initial structures in the asymmetrical strand) is impossible without additional assumptions due to the lack of sufficient positions. For the symmetrical analyses, Iatridou & Kroch (1992) and Vikner (1995) propose a solution by assuming a recursive CP.<sup>58</sup> According to this proposal, the complementiser resides in the head of the higher CP whereas the the finite verb and the preverbal constituent are moved to the lower CP.

Apart from symmetrical and asymmetrical analyses, other approaches have been sug-

<sup>&</sup>lt;sup>57</sup>See Schwartz & Vikner (1989) and Schwartz & Vikner (1996) for a discussion of the asymmetric analyses and Frey (2006a: 245) and Frey (2006b) for the fronting of object *es* in German.

<sup>&</sup>lt;sup>58</sup>See de Haan & Weerman (1986: 86–87) for an early proposal of recursive structures in terms of  $\overline{S}$ .

gested. For instance, Diesing (1990) proposes for Yiddish the reanalysis of the movement to SpecIP as Ā-movement which would explain the GEV2 character of Yiddish. A similar analysis is proposed for Icelandic by Rögnvaldsson & Práinsson (1990). More recent analyses of V2 structures, however, have adopted a more complex left periphery (including main clauses).<sup>59</sup> The first of these proposals stems from Branigan (1996) who assumes a two CP structure in which the lower CP hosts subjects while the higher CP hosts nonsubjects. Embedded V2 structures introduced by a complementiser exhibit three CPs in this hybrid version of symmetrical and asymmetrical analyses (Branigan 1996: 74). Later analysis such as those by Poletto (2000, 2002), Mohr (2009) and Salvesen & Walkden (2017) to name just a few have adopted the split CP structure argued for by Rizzi (1997). Based on ordering observations in Italian, Rizzi (1997) splits the CP in multiple functional projections. A recent rendering for Italian is given in Rizzi & Bocci (2017: 2179) and repeated in (66).

## (66) [FORCE [TOP\* [INT [TOP\* [FOC [TOP\* [MOD [TOP\*[ $Q_{EMB}$ [FIN [IP ...]]]]]]]]]]

The projections and their ordering is not mutually accepted. However, all theories are unified by the inclusion of ForceP and FinP. While the former projection encodes the clause type/force (i.e. declarative, exclamative, etc.), the latter encodes finiteness (Rizzi 1997: 283–284). Although finiteness is conceived "as the core IP-related characteristics" (Rizzi 1997: 284), the relevance of finiteness in the left periphery is shown by the existence of finite and infinite complementiser reported in section 7.1.1. Furthermore, the existence of some sort of TopP and FocP is also generally assumed. These projections host constituents which are the topics (i.e. given information) and foci (i.e. new information), respectively, of the clause (Rizzi 1997: 285). The Kleene star in (67) indicates recursivity of the TopPs.<sup>60</sup>

Within this thesis, a complex structure of the left periphery is assumed. The analysis of V2 in section 9 is based on such an elaborated structure of the CP. Although providing a framework to analyse embedded V2, a complex left periphery does not explain why in some V2 languages embedded V2 clauses occur only under certain types of matrix predicates. This issue is addressed in the next subsection.

<sup>&</sup>lt;sup>59</sup>But see Vikner (2017) and Nyvad et al. (2017) for a two recent CP-recursion proposals.

 $<sup>^{60}</sup>$ IntP and  $Q_{emb}P$  host wh-elements in main and embedded contexts, respectively while ModP is the target position of certain modifying adverbs (Rizzi & Bocci 2017).

## 7.2 The role of assertion

The classification of complement-taking verbs by Hooper & Thompson (1973) introduced in 4 is, as aforementioned, based on the notions of presupposition and assertion. Members of class A and B are assertive (strongly and weakly, respectively), class C verbs are non-assertive, non-factive while class D and E predicates are factive and semi-factive, respectively. Although assertion exhibits a central role in their classification, the notion of assertion is only vaguely defined by Hooper & Thompson (1973: 473) as the main proposition or core meaning identifiable through negation and interrogation. Main proposition (or main assertion as Hooper & Thompson (1973) refer to it later) is the proposition whose truth is discussed or questioned in the discourse (Hooper & Thompson 1973: 475). The five proposed verb classes differ regarding the grammaticality of main clause phenomena in their clausal complements. While clauses embedded under predicates of classes A, B and E permit main clause phenomena, clauses embedded under classes C and D do not allow these phenomena. Hooper & Thompson (1973: 495) conclude that the occurrence of main clause phenomena is predicated upon the assertive character of the complement clause and that presupposed clauses can consequently not display main clause phenomena. Asserted embedded clauses function in these cases as the main assertion of the utterance. At first glance, this appears problematic in connection with class E verbs which select factive and thus presupposed complements. Hooper & Thompson (1973: 481), however, argue that matrix clauses with class E predicates can be used parenthetically (akin to class A and B predicates) which enables an reading in which the embedded clause constitutes the main assertion.

Wiklund et al. (2009) reformulate Hooper & Thompson's (1973) analysis in terms of embedded V2 as the assertion hypothesis, repeated here in (67).

(67) The assertion hypothesis

The more asserted (the less presupposed) the complement is, the more compatible it is with V2 (and other root phenomena). (Wiklund et al. 2009: 1924)

Wiklund et al. (2009) examine the two aspects of Hooper & Thompson's (1973) definition of assertion, i.e. main assertion as well as the possibility of identification through negation and interrogation whereby the latter aspect is interpreted as equation of assertion and proposition in that "an assertion must be a proposition" (Wiklund et al. 2009: 1926). It is demonstrated by Wiklund et al. (2009: 1924–1926) for the Mainland Scandinavian languages that the latter aspect does not apply to complement clauses embedded under predicates of class E which are presupposed. Consequently, assertion in this sense is not a prerequisite for embedded V2. This conclusion has lead Wiklund et al. (2009: 1927) to deem Hooper & Thompson's (1973) notion of main assertion to be a misnomer and adopt instead Simons's (2007) main point of utterance (MPU).<sup>61</sup> Simons (2007: 1035) defines MPU as the proposition of an utterance U rendering U relevant. Using question/response pairs<sup>62</sup> as proposed by Simons (2007: 1036) to diagnose MPUs, Wiklund et al. (2009) show that complement clauses embedded under class A, B and E predicates can constitute the MPU whereas complement clauses embedded under class C and D predicates do not allow a MPU reading. Crucially however, a V2 word order in complement clauses is not a prerequisite for the MPU reading nor vice versa (Wiklund et al. 2009: 1929). This observation has lead Wiklund et al. (2009: 1930) to conclude that MPU is also a main clause phenomenon occurring in the same context as V2. Wiklund et al. (2009: 1930) hypothesise that this context is an utterance which constitutes new information for the interlocutor.

Julien (2015) objects to the conclusions of Wiklund et al. (2009). On the one hand, the operationalisation of assertion as MPU is unwarranted. The contexts in which both phenomena occur do not fully coincide (Julien 2015: 161). For instance, in the following Norwegian consequence-of-degree construction in (68), the embedded clause can constitute the MPU, but embedded V2 is ungrammatical.

(68) Bøtene skal være så store at de (\*frister) ikke (frister) innehaveren fined.DEF shall be so large that they (tempt) not (tempt) proprietor.DEF til å fortsette.
to to continue
'The fines should be so large that they do not tempt the proprietor to continue.' (Julien 2015: 161)

On the other hand, Julien (2015: 167) criticises Wiklund et al.'s (2009) definition of assertion which excludes that a clause can be simultaneously asserted and presupposed. Julien (2015) advocates instead to adopt Krifka's (2014) definition of assertion, who defines assertion as the assumption of liability for the truth of the asserted proposition. Adopting this definition entails that assertivity and presupposition are not mutually exclusive and consequently, the connection of assertion and embedded V2 can be maintained in that

<sup>&</sup>lt;sup>61</sup>Despite the renaming, MPUs should be considered as a form of assertion since its based on one aspect of Hooper & Thompson's (1973) definition of assertion. This is also explicitly stated by Wiklund et al. (2009: 1931) in the concluding section of their paper.

<sup>&</sup>lt;sup>62</sup>The assumption behind this test is that the complement clause constitutes a MPU if the clause alone is an appropriate answer to a question.

embedded V2 clauses are asserted at least in the Mainland Scandinavian languages (Julien 2015).<sup>63</sup>

Despite the differences, both Julien (2015) and Wiklund et al. (2009) assume that different structures are selected in embedded V2 and non-V2 clauses. In the former type of clauses, a Force head is projected whereas in the latter type, a smaller structure is selected. Julien (2015) assumes that FinP is the highest projection in these cases, while this is left unspecified by Wiklund et al. (2009) albeit Hróarsdóttir et al. (2007) also assume that FinP constitutes the highest projection in embedded non-V2 clauses.

The role of assertion in relation to V2 cannot be discussed in this thesis more extensively. Three issues are worth pointing out though. First, the general availability of V2 in embedded wh-questions in Afrikaans appears conflicting with the role of assertion. Woods (2016) analyses English embedded inverted questions as mixture of a direct and indirect speech report which provides new expressive and propositional information about the subject of the matrix verb. Whether this is also the case in Afrikaans and whether Krifka's definition of assertion is applicable must be determined by future research. At any rate, it appears doubtful that Krifka's (2014) definition can be applied to true informationseeking wh-questions which clearly show a V2 word order in V2 languages. Secondly, the general ungrammaticality of V2 in embedded clauses of Standard Dutch is unexpected if assertion determines the availability of embedded V2, albeit independent factors need to be excluded. Thirdly, if assertion was indeed a prerequisite for a V2 order in embedded clauses, this would entail that all complement clauses in Yiddish and Icelandic A are asserted. These observations suggest that assertion can only be a necessary but not a sufficient condition for (embedded) V2. The key insights of this section that the availability of embedded V2 does not depend on idiosyncratic properties of the complement-taking verbs but rather on general semantic and pragmatic properties and that the sizes of structures which are selected differ will be retained. This is especially important for the ensuing general discussion which develops a theory of V2 which includes also the findings of the study on Sursilvan presented in the next section.

<sup>&</sup>lt;sup>63</sup>See Freywald (2008, 2016) for a similar view on German dass-V2 clauses. The clause-initial complementiser is analysed as assertion marker.

# 8 V2 in Sursilvan complement clauses: An acceptability judgement study

## 8.1 Introduction

In the introduction to this thesis, two major research questions which should guide the research into V2 were formulated. These two question, repeated here as (I) and (II) for convenience, were derived from two prominent features of the V2 phenomenon, namely the sparsity of V2 languages and, of course, the confinement of the finite verb to the second position of the clause.

- (I) Why is V2 a typologically rare phenomenon?
- (II) Why is the position of the finite verb confined to the second position?

Although V2 has attracted much attention among syntacticians, only the second question (II) has been directly addressed in analyses of V2. The analyses outlined in 7 do not provide an obvious explanation for the typological rareness of V2. A major problem arising in conjunction with (I) constitutes the role of chance: It is conceivable that chance contributes significantly to the sparsity of V2. Nonetheless, the source(s) of variation between V2 and non-V2 languages can be scrutinised which might provide indications for the rareness of V2. This, in turn, necessitates the examination of the confinement of the finite verb to the second position which corresponds to (II). Consequently, the examination of (II) contributes also to (I) albeit indirectly. The overarching goal of this study is thus to contribute to (II).

As the previous sections made clear, V2 languages exhibit environments in which a V2 word order is ungrammatical. Furthermore, the contexts in which (especially embedded) V2 is possible differ from language to language. This language internal and external variation of V2 contexts constitutes an important source for the investigation of V2 as they allow the eduction of responsible factors. For this reason, the empirical base should be as broad as possible. However, as shown in the preceding sections, the study of V2 in modern languages has centred around the Germanic languages despite notable exceptions (e.g. Bhatt (1999) on Kashmiri, Poletto (2000) on Dolomitic Ladin and Grünert (2018) on Romansh). The diversification of the empirical base is thus indispensable.

One of these less-well examined languages in terms of V2 is Romansh. Although the word order in main clauses has been addressed by several authors (cf. 6), subordinated constructions have been neglected so far except for short remarks. Grünert (2018) is the first to scrutinise the Romansh embedded word order in detail using corpus data as a basis.

The results obtained by Grünert (2018) show the possibility of embedded V2 in adverbial clauses as well as complement clauses. The occurrence of non-subject-initial structures in complement clauses is restricted to asserted matrix predicates whereas subject-initial V2 structures occur under all matrix predicates. Although corpora constitute an useful data source for syntactic research, no negative evidence is provided. The absence of phenomena in a corpus does not entail their ungrammaticality as these phenomena could merely occur at a low frequency, accidentally preventing them from being included in the corpus. From this, it follows that it cannot be ruled out that V2 is possible in non-subject-initial complement clauses embedded under non-asserted matrix verbs. Above all, the status of semi-factives is not explicitly addressed.

In consideration of these circumstances, an acceptability judgement study was designed to complement and verify the results of Grünert (2018) regarding complement clauses.<sup>64</sup> Romansh is, as noted in section 2, dialectally dissected. Therefore, only one idiom, namely Sursilvan, was chosen as object of study. Apart from insights into V2, the research into embedded V2 in Romansh and Sursilvan in particular exhibits a further advantage as it offers a link for further research into language contact of (Swiss) German and Sursilvan. It is debated within the literature to which extent the contact with German induced V2 in Romansh (and Dolomitic Ladin) (Kaiser 2002–2003: 331, Kaiser & Hack 2009: 93, Linder 1987: 95).

A major pitfall for the formulation of hypotheses for the experiment arises due to the lack of comparable quantitative data gained from other languages, the sole exception being Biberauer (2002) who notes differences in acceptability for subject-initial, object-initial and adjunct-initial complement clauses. Admittedly, some authors use common acceptability symbols such as \* and ?, but their use is far from homogeneous (Bard et al. 1996) and hence not comparable. Furthermore, non-subject-initial V2 clauses are less frequently observed in corpora (e.g. Julien 2007, 2015, Diesing & Santorini to appear), but this does not entail different acceptability ratings. Therefore, it must be assumed that all V2 constructions are equally well-formed irrespective of their preverbal constituent.

Under this premise, different hypotheses can be derived from the descriptions given in the preceding sections. Decisively, the descriptions of Poletto (2000) and Grünert (2018) suggest that the Rhaeto-Romance languages do not differ significantly from the Germanic languages with respect to embedded V2 so that four different hypotheses (corresponding to the different types of general V2 languages) are conceivable. However, given the examples

<sup>&</sup>lt;sup>64</sup>In fact, the work on this study had begun before Matthias Grünert kindly pointed out to me his publication. The original intent of this study was to provide a first description which was then altered in the light of Grünert's (2018) findings.

of Grünert (2018) which show that V2 complement clauses in Sursilvan are introduced by a complementiser, the 'well-behaved' embedded V2 language type represented by Standard Afrikaans and German (leaving Freywald's (2008, 2009, 2016) observations aside) can be excluded prematurely. Moreover, the general availability of subject-initial V2 contrasts the situation observed in the Mainland Scandinavian languages. Hence, only two different hypotheses can be formulated.

According to the first hypothesis, Sursilvan is on a par with Icelandic B. The predictions under this hypothesis are that subject-initial as well as adjunct-initial (spatiotemporal) complement clauses are acceptable when embedded under all predicate classes. Object-initial clauses, in contrast, are expected to be acceptable under classes A, B and E while being unacceptable under classes C and D. Subject-initial and adjunct-initial clauses should thus receive irrespective of the matrix verb class high ratings whereas object-initial clauses should receive high ratings under A, B and E and low ratings under C and D. The statistical analysis should show a significant effect of the verb class and the clauseinitial constituent. The comparison of the different clause-initial elements should show a significant difference between preverbal objects and preverbal subjects and adjuncts, respectively. The comparison of clause-initial subjects and adjuncts should not produce a significant result. The differences between verbs of classes A, B or E and C or D should also be significant.

Under the second hypothesis, Sursilvan patterns with Icelandic A and Yiddish. This predicts that all clauses are acceptable irrespective of the preverbal constituent and matrix verb. Consequently, all stimuli sentences should receive high ratings. Therefore, the statistical analysis should show no effects of the predicate class or the preverbal constituent. Similarly, the comparisons between the different clause-initial constituents and different verb classes, respectively, are expected not to be significant.

The syntactic framework that is assumed in this paper, i.e. a hybrid analysis taking a complex left periphery as basis, predicts under both hypotheses that no interaction between the matrix predicates and the preverbal constituent should arise since the same structure is projected by each member of the same verb class.<sup>65</sup>

Different measures of acceptability are currently employed for the elicitation of speaker judgements. Three of the most frequently used measures are forced-choice tasks, Likert scale tasks and magnitude estimation tasks (Schütze & Sprouse 2013). In forced-choice tasks, participants determine the more acceptable sentence of a sentence pair (Schütze & Sprouse 2013: 31, Langsford et al. 2018). In the second type of task, i.e. the Likert

<sup>&</sup>lt;sup>65</sup>This would be different if a asymmetrical analysis is assumed. As noted in 7.1.2, different structures are projected depending on the syntactic function of the clause-initial constituent.

task, participants are asked to rate stimuli sentences on a scale (usually 1–5 or 1–7) according to their perceived acceptability (Sprouse et al. 2013: 225, Langsford et al. 2018: 8). In a magnitude estimation tasks, participants assign numbers to stimulus sentences proportionally to a reference sentence (Bard et al. 1996, Cowart 1997: 73, Sorace 2010, Schütze & Sprouse 2013: 34, Sprouse et al. 2013: 224, Langsford et al. 2018: 8). The proponents of magnitude estimations argue that the elicited data is ratio scaled and should thus be preferred over other acceptability tests which measure at a lower scale (Bard et al. 1996). However, despite the purported higher scale of magnitude estimations, a Likert scale task was chosen as elicitation method. This step is motivated threefold: First, Cowart (1997) and Sorace (2010) caution against the use of magnitude estimations if the participants belong to certain demographic groups, among them elderly persons. Due to the attested differences in Icelandic between age groups (Angantýsson 2017), participants of all ages should be included. Secondly, there is considerable doubt about the higher informativity of data elicited with magnitude estimations (Weskott & Fanselow 2009, 2011, Sprouse et al. 2013). In fact, the results of Langsford et al. (2018) indicate that acceptability judgement elicited with a Likert scale task are the most stable and reliable. Thirdly, Likert scale tasks are considered to be generally intuitive (Schütze & Sprouse 2013: 33, Sprouse et al. 2013: 225, Langsford et al. 2018: 8).

## 8.2 Method

#### 8.2.1 Materials

Nine stimuli items with 15 lexicalisations each were constructed. These lexicalisations represented the conditions resulting from the crossing of the two factors PREDICATE [class of the matrix verb] and [the syntactic function of the initial] CONSTITUENT. PREDICATE consisted of five levels corresponding to the five predicate classes proposed by Hooper & Thompson (1973). CONSTITUENT had three factor levels corresponding to subject-initial and adjunct-initial embedded clauses. That is, a total of 135 stimuli sentences were constructed. All stimuli sentences consisted of a two word main clause and a complement clause.

A list of verbs mentioned in Hooper & Thompson (1973), Meinunger (2006) and Salvesen & Walkden (2017) as examples of the five predicate classes was compiled and five verbs of each class were randomly selected. The motivation behind this procedure was to ensure a better comparability with previous surveys. The use of completely different matrix verbs would diminish the comparability if the predicate classes emerge to be misconceptions.

The chosen verbs are given in (69).

imagine', sminar 'guess'

- (69) A: dir 'say', declarar 'assert', pretender 'claim', rispunder 'respond', grir 'shout'
  B: supponer 'suppose', schazegiar 'estimate', crer 'believe', manegiar 'believe,
  - C: evitar 'avoid', dubitar 'doubt', dementir 'deny', snegar 'deny', impedir 'impede'
  - D: condemnar 'condemn', deplorar 'regret', acceptar 'accept', plascher 'please', supportar 'suffer'
  - E: *saver* 'know', *udir* 'hear', *veser* 'see', *discuvierer* 'discover', *capir* 'understand'

Five sets of verbs were constructed from the list in (69) by randomly assigning one verb of each class to a set, i.e. each verb was consequently element of only one set. Owing to the experiment design, four sets of verbs were used twice while one set was used only once. The motivation behind the twofold use was to ensure that potentially confounding semantic effects resulting from the combination of the matrix verb and its complement are reduced. From each set, the main clauses of each item were constructed. All matrix clauses were of the structure *female/male name + finite verb*. All matrix verbs appeared in present tense. The names used in the matrix clause were identical for all lexicalisations of the same item. Except for *plascher* 'please', all entities preceding the finite verb were subjects of the matrix verb. In the case of *plascher*, the preceding constituent was an indirect object marked by a preceding a. Unfortunately, this discrepancy could not be avoided as many class D verbs are psych verbs with object experiencer.

The complement clauses consisted of transitive verbs with (mostly agentive) animate subjects and non-human (mostly inanimate) objects. Furthermore, each complement clause was constructed with a spatio-temporal adjunct. The subjects of the embedded clauses were realised as third person pronominals and allowed a coreferential reading with the matrix subject. In consideration of observations from some V2 languages that V2 in complement clauses is confined to clauses in sentence-final position, the complement clauses occurred always sentence-finally. Different types of finite verbs (auxiliaries, modals and full verbs) were used in the complement clauses. This was partially necessitated by the semantics of the matrix verbs. Moreover, both sentential negation (*buca* 'not') and sentence adverbs were used as indicators of verb movement. Verb sets used twice were realised once with each type of indicator. All complement clauses were in the indicate mood. In addition to the stimulus sentences, 45 filler sentences were constructed. All filler sentences exhibited the same complex structure: a main clause with transitive verb with an agentive animate subject and an inanimate object modified by a relative clause. Similar to the stimulus sentences, the subject was realised as third-person singular proper name while the object was realised as third-person singular DP. The relative clauses were object-relative clauses, i.e. the head of the relative clause functioned as the object of the relative clause. The relative clauses resembled the structure of the complement clauses in the stimulus sentences: One the one hand, the subject of the clause was a third-person singular pronoun which was coreferential with the matrix clause subject. On the other hand, each relative clause comprised also a spatio-temporal adjunct. The comparable complexity of the filler sentences to the stimuli sentences was intended as prevention of any rating biases.

The filler sentences were divided into three equally-sized groups which differed merely regarding their acceptability. The first group comprised fully acceptable sentences with exhibited a SVO order in the matrix clause. The second filler group consisted of unacceptable sentences which resulted from a adjunct-SV order in the relative clause. The matrix clauses of the second group paralleled the ones of the first group. The last group was designed to elicit acceptability ratings on the middle of the scale. The relative clauses exhibited the same structure as the relative clauses of the fully acceptable sentences but the matrix clauses exhibited a OVS order. That is, the relative clause were not adjoined to its external head in this context. These three groups were conceived as anchors establishing the upper and lower end of the scale as well as a middle position. According to Schütze & Sprouse (2013: 37), such a measure ensures the uniform use of the scale by participants.

Both stimulus and filler sentences were developed in German. Both sets of sentences were then translated by different native speakers. This is, needless to say, suboptimal but could not be avoided due to external reasons. The translator of the stimulus sentences had her work cross-checked by a related teacher.

For the data collection a within-subject design was chosen. The stimuli sentences were evenly distributed across three lists such that all lists comprised 45 stimuli sentences from all conditions.<sup>66</sup> Different lexicalistions of the same item in one list differed always for both factors.<sup>67</sup> The filler sentences were used for all lists. Consequently, each list comprised 90 sentences. Note, however, that the filler-stimuli ratio in this study was below the recommend ratio of at least 2:1 (e.g. Cowart 1997, Weskott & Fanselow 2011,

<sup>&</sup>lt;sup>66</sup>The full list of stimuli and filler sentences is provided in the appendix.

<sup>&</sup>lt;sup>67</sup>Ideally, participants would see only one lexicalisation per item. This, however, would be practically infeasible as 15 different lists and even more items would be required.

Schütze & Sprouse 2013). In online-experiments, participants may be more prone to quit the completion of the task prematurely due to the absence of hindering factors such as the presence of an experimenter. The prevention of high drop-out rates is therefore indispensable and the reduction of the filler-stimuli ratio was adopted as measure for this purpose. The quantity of stimuli ratings was assessed as more important for further research than disguising the objective of the study. Above all, participants were still unaware of the actual anticipated results.

#### 8.2.2 Participants

48 Sursilvan speakers participated in this study. The participants were recruited in the internet via electronic mailing lists as well as personal notices. After completing the study, the participants were also asked to further distribute the invitation among eligible speakers. As incentive for participation, three vouchers of the Swiss retail chain Coop worth of 20 frances each were drawn among all interested participants.

One participant had to be excluded from further analysis due to provided comments indicating that the acceptability judgements were given on the basis of intelligibility. The remaining 47 participants were between 23 and 82 years old (mean age 42.74 years, SD 15.87 years) of which 26 identified themselves as women and 21 as men. A broad range of occupations were covered by the participants. While some worked in artistic professions others were lawyers, housewives or pensioners. Nonetheless, the most frequent occupation was with 8 participants *student* (similar to many other syntactic studies although to a much lesser extent).

All but four participants stated Sursilvan as their first language. The four deviating participants acquired Sursilvan at the age of two and four, respectively. While the former participants can still be considered as simultaneous bilinguals, i.e. acquiring two languages either simultaneously or sequentially before age 3;0 (Kupisch 2018: 653 fn.1), the latter group should be classified as sequential bilinguals whose onset of second language acquisition occured after the first language is at least partially acquired (Meisel 2018). Crucially, none of these four participants provided acceptability ratings which lie outside the range of the judgements provided by the other participants and are thus not excluded. Nine participants indicated to be simultaneous bilinguals while four further participants were sequential bilinguals with Sursilvan as their first language. The mean age of the onset of the acquisition of German was 6.38 years (SD 4.45 years) and 8.82 years (SD 2.33 years) if the simultaneous bilinguals are excluded. Within the sample, 12 is the oldest age for the onset of the acquisition of German. The contact to German in their youth differed

between the participants. While 10 participants used both German and Sursilvan at home (remarkably not exclusively simultaneous bilinguals), the majority of participants spoke merely Sursilvan at home in their youth. One participant spoke only German at home. All participants grew up in Grisons except for two participants who grew up in the Swiss German speaking parts of Switzerland. The given information suggests that no participant speaks the varieties of either Tujetsch or Val Medel.

The high number of speakers who acquired Sursilvan in the core area is contrasted by the fact that 20 participants were living in other parts of Switzerland (the majority of them in Zurich). On average, participants had lived for 18.45 years (SD 15.99 years) in their current city. Albeit many participants were living in the 'diaspora', only six participants utilised merely German at home. 9 participants used both German and Sursilvan at home and 32 persons of the sample only Sursilvan. A similar situation arises in connection with the language used for conversations with friends. 44 participants used at least partially Sursilvan, but also other languages such as English were mentioned. Four participants used only German. The dominating language used at work by participants was German although 22 participants indicated that Sursilvan was at least partially used. One participant stated to use Swiss German sign language.

Apart from two participants speaking only German<sup>68</sup> and Sursilvan, the remainder spoke at least one further language (leaving five participants aside who did not provide further information on spoken languages). The most frequent reported languages were English (30 participants), French (24 participants) and Italian (21 participants). Among the mastered languages were also less typical languages like Russian and Catalan. Interestingly, as few as five participants indicated to speak another Romansh variety of which four speak Rumantsch Grischun whereas only one participant spoke Vallader. All of the four Rumantsch Grischun speakers worked in educational or media related professions.

#### 8.2.3 Procedure

The experiment was conducted online using the platform SoSciSurvey. In a first step, demographic data was collected. This includes sex, occupation, spoken languages, the age of the onset of the acquisition of German and Sursilvan, the place of residence as child and adult as well as the language use at home in their childhood and adulthood, at work and with friends. Finally, the current place of residence and the time of inhabitation there was collected. The early data gathering is opposed to the recommendations of Reips (2002)

<sup>&</sup>lt;sup>68</sup>Not all participants distinguished between Swiss German and Standard German. It is very likely though that at least the younger Sursilvan speakers use both German varieties, cf. section 2.

for internet-based research. The logic behind this step was to identify potential problems the participants are faced with in case too many participants terminate the completion of the questionnaire prematurely.

The collection of demographic data was succeeded by the instructions, which were based on Schütze & Sprouse's (2013) suggestions for experiment instructions: Participants were instructed to imagine that the presented sentences are uttered by a friend and to judge on a scale from 1 to 7 whether these sentences sound like utterances of native speakers. If a stimulus sounds indeed like a native speaker utterance a 7 should be assigned to the stimulus whereas a stimulus sounding unlike a native speakers should receive a 1. For ease of understanding, a simple example sentence for each end of the scale was provided. The choice of 7 as highest rating was deliberately made as the grading system in Swiss schools ranges from grade 6 to grade 1 whereby 6 is the best grade students can receive. The rationale behind this was therefore to provide a scale resembling the familiar grading scale. Participants were urged to use the whole range of the scale. Furthermore, the ends of the scale were not marked by the numbers but rather by words using German akzeptabel 'acceptable' and inakzeptabel 'unacceptable'. It was further pointed out to the participants that their judgements should rely exclusively on their own intuition and not on descriptive rules learnt in school or elsewhere. Moreover, neither plausibility nor likelihood of occurrence should affect their judgements. To avoid that potential insecurities affect judgements, the lack of objectivity for this task was underscored.

The instruction phase was followed by an announced familiarisation phase in which four practice sentences containing temporal adverbial clauses were presented to the participants. The practice items alternated between acceptable and unacceptable items. Only one practice item per page was presented. After the familiarisation phase, the start of the experiment was announced albeit six further unannounced practice items followed which included also two items with mediocre acceptability. The covert practice items were constructed along the lines of the overt practice items. Both announced and unannounced practice items were presented with the same rating options as the actual stimuli. After the unannounced practice phase, the actual stimuli interspersed with fillers were presented. Filler and stimuli were online pseudo-randomised using a self-written PHP-script. While the set of fillers was randomised using the inbuilt randomisation function of PHP, the stimuli sentences underwent a more elaborate randomisation procedure. Lexicalisations of the same item were randomised in such a manner that they were separated by at least one lexicalisation of another item. In addition, it was attempted in as many cases as possible that two immediately consecutive stimulus sentences belong to different levels of the factor PREDICATE. This was conceived as measure to countervail the relative small amount of filler sentences. Each stimulus was succeeded by a filler sentence. The participants were randomly dispersed across the three lists while ensuring an even distribution. After all stimuli were judged, the participants were offered an opportunity to leave comments. Finally, participants could enter their email addresses to participate in the voucher drawing.

## 8.3 Results

The ratings for both stimuli and filler sentences were analysed. The programming language for statistical computing R (R Core Team 2019) was used for both analyses and the R package lattice (Sarkar 2008) for plotting the judgement data. Before the statistical analysis was conducted, the judgement data of all participants was manually examined for patterns suggesting that the elicited judgements do not reflect the perceived acceptability but rather arbitrary assignments of numbers to the sentences. No such pattern was detected for any of the participants though.

In general, a considerable amount of variation was observed as can be seen from Figure 1.<sup>69</sup> The ratings of subject-initial clauses in all five predicate classes were generally higher than those of non-subject-initial clauses. Within the group of subject-initial clauses, the medians of predicate classes A, B and D were higher (6) than those of classes C and E (5). Furthermore, the interquartile ranges (IQR) of classes B and E were, compared to the remaining classes, wider (3–7). Interestingly, judgements in all stimuli sentences with subject-initial conditions range from the lowest to the highest rating as the whiskers in Figure 1 visualise.

The lowest ratings, in contrast, were assigned to object-initial embedded clauses irrespective of the predicate class. The medians stated either 1 (classes C and E) or 2 (classes A, B and D). The IQRs were relatively small in that the range is either 1-2 (C, D and E) or 1-3 (A and B). That is, three-fourths of all judgements were located at the lower end of the scale. Apart from wider IQRs, the judgements of object-initial clauses embedded under class A and B verbs displayed a wider range within 1.5 standard deviations insofar as ratings of 6 lay within this range compared to the remaining verb classes where 1.5 standard deviations comprise merely scores of 3. Nonetheless, Figure 1 visualises the existence of outliers in all verb classes indicating high ratings (6 and 7) for some stimuli sentences at least. In fact, when participants were individually considered the medians of certain verb classes stated a value in the middle of the scale (i.e. 3 and 4). However, no

<sup>&</sup>lt;sup>69</sup>For the distribution of the judgements across all conditions for each list, see Figure A1 in the appendix.

Acceptability judgements of stimuli sentences



Figure 1: Acceptability ratings of all lists for subject-initial (SU), object-initial (OB) and adjunct-initial (AD) embedded V2 clauses across predicate classes A to E

pattern was discernible here.

In stimulus sentences with adjunct-initial embedded clauses, the medians stated 2 for all verb classes, the sole exception being class A predicates for which the median stated 3. That is, the medians were in some cases similar to the ones observed in object-initial conditions. Despite similar medians, adjunct-initial clauses exhibited for all predicate classes wider IQRs than their object-initial counterparts as can seen from Figure 1. To be precise, the IQRs of class A and B predicates were 2-5 and 1-5, respectively, while those of class D and E predicates were 1–4. The IQR of class C predicates was the lowest with 1–3. Moreover, except for class C predicates, 1.5 standard deviations cover the whole range of the scale. These facts clearly showed that stimuli sentences with adjunctinitial embedded clauses received more positive ratings than those with object-initial embedded clauses albeit less positive than those with subject-initial clauses. Furthermore, an interesting generalisation can be made: Those participants which exhibited higher ratings for object-initial clauses provided even higher ratings for adjunct-initial clauses. This is also indirectly reflected in Figure 2 which depicts the bare counts of the used ratings on the scale for each verb class. The ratings for stimuli with embedded objectinitial clauses are mostly low (1 or 2) and the counts for higher ratings decrease steadily



Figure 2: Counts of the used ratings on the scale for object-initial (OB) and adjunct-initial (AD) clauses across all predicate classes

(leaving some minor variation aside). The majority of ratings for stimuli with embedded adjunct-initial clauses is also low. Nevertheless, the counts are not steadily declining but rather increasing at 5 to decline again subsequently. This pattern is less pronounced for clauses embedded under class C verbs which display the lowest ratings for all levels of CONSTITUENT. Moreover, the second 'peak' in clauses embedded under class A predicates is located at 7. The number of participants with this diverging pattern was to small to analyse them separately.

A further observation worth pointing out were the generally low judgements of three participants throughout conditions. Medians of their judgements for each verb classes stated either 1 or 2. Albeit such low ratings might warrant the exclusion of participants from further analyses, no such measure was taken. On the one hand, no comments indicating confounding factors were given. Obviously, the lack of such comments does not constitutes compelling evidence for the absence of confounding factors but neither for their presence. On the other hand, all three participants rated well-formed filler sentences as expected. This points to problems inherent to the stimuli sentences although the exact nature of these problems cannot be elucidated. In the light of the fact that some filler sentences contained clause-medial adverbs, it appears unlikely that these participants do

Init.	Predicate class							
$\operatorname{const.}$	A	В	$\mathbf{C}$	D	Е			
SU	5.26(1.92)	5.05(2.11)	4.50(2.07)	5.11(2.04)	4.70 (2.22)			
OB	2.47(1.57)	2.17(1.54)	1.76(1.13)	1.91(1.12)	1.77(1.08)			
AD	3.48(2.13)	3.01 (2.06)	2.49(1.52)	2.81(1.81)	2.74(1.93)			

Table 2: Mean ratings over participants for each condition. The standard deviations are given in parentheses

not allow the fronting of the finite verb across sentence-medial adverbs in stimuli sentences, which would be expected for a limited embedded V2 language. To dispel any doubt, two separate analyses – one including, one excluding the judgements in doubt – were conducted. The results of both analyses were almost identical suggesting otherwise very robust patterns. Therefore the results reported below were calculated with the problematic ratings included.

The patterns illustrated in Figure 1 were also reflected by the mean judgements for each condition averaged over participants, given in Table 2.<sup>70</sup> Stimuli sentences with subjectinitial embedded V2 clauses exhibited the highest ratings while the object-initial conditions exhibited the lowest ratings. The standard deviations in conditions with object-initial embedded clauses were the lowest, while subject-initial conditions exhibited the highest (except class A verbs). The ratings were analysed using linear mixed-effects regression models.<sup>71</sup> PREDICATE and CONSTITUENT were treated as interacting fixed effects while participants, items and lists were treated as random effects. For the analysis, the R packages 1me4 (Bates et al. 2015) and 1merTest (Kuznetsova et al. 2017) were employed. Bates et al. (2018) caution against the use of overly complex linear mixed-effect regression models. Therefore, the most parsimonious model with random intercepts constituted the basis for fitting the model. The addition of random slopes did not improve the model which was determined by the comparison of log-likelihood values calculated with the anova()function. The results showed a significant effect of PREDICATE F(4, 2046) = 18.1459, p = 1.171e-14 and of CONSTITUENT F(2, 2046) = 674.1369, p = 2.2e-16 but no interaction of PREDICATE and CONSTITUENT F(8, 2046) = 0.7886, p = 0.6127. Due to the lack of an interaction of both fixed factors, the model was adopted in that PREDICATE and CON-

<sup>&</sup>lt;sup>70</sup>The condition means over participants calculated per list are reported in Tables A1 to A3 in the appendix.

<sup>&</sup>lt;sup>71</sup>The application of parametric tests to ordinally scaled data is in the strict sense not possible. Parametric tests presuppose inter alia data measured on an interval scale. Schütze & Sprouse (2013) and Bortz & Döring (2006), however, advocate the application of parametric tests to data elicited with Likert scales as the violation of the underlying assumptions of parametric tests is tolerable. The following analysis follows their suggestion.

Contrast	Estimate	$\mathbf{SE}$	df	$\mathbf{t}$	p
AD – OB	0.891	0.0811	2054	10.994	<.0001
$\mathrm{AD}-\mathrm{SU}$	-2.016	0.0811	2054	-24.858	< .0001
OB - SU	-2.907	0.0811	2054	-35.851	<.0001

Table 3: Comparison of ratings for subject-initial (SU), object-initial and adjunct-initial (AD) embedded V2 clauses

Contrast	Estimate	$\mathbf{SE}$	$\mathbf{d}\mathbf{f}$	t	p
A - B	0.331	0.105	2054	3.162	0.0138
A - C	0.818	0.105	2054	7.814	<.0001
A - D	0.459	0.105	2054	4.381	0.0001
A - E	0.664	0.105	2054	6.346	<.0001
B - C	0.487	0.105	2054	4.652	<.0001
B - D	0.128	0.105	2054	1.220	0.7400
B - E	0.333	0.105	2054	3.184	0.0128
$\mathrm{C}-\mathrm{D}$	-0.359	0.105	2054	-3.433	0.0055
C - E	-0.154	0.105	2054	-1.468	0.5835
$\mathrm{D}-\mathrm{E}$	0.206	0.105	2054	1.965	0.2837

Table 4: Comparison of ratings for predicate classes A to E

STITUENT were specified as uninteracting. Although the refitted model showed similar results in that significant effects of PREDICATE F(4, 2054) = 18.161, p = 1.136e-14 and CONSTITUENT F(2, 2054) = 674.693, p = 2.2e-16 were obtained, the comparison of both models using the **anova()**-function yielded a higher log-likelihood for the latter model. The fit of the latter model could not be improved by adding random slopes.

The extraction of the effects was carried out using the emmeans ()-function with Tukey adjustment in the R package emmeans (Lenth 2019). The results of the comparison of all CONSTITUENT levels are reported in Table 3. All three types of clause-initial constituents differed significantly from each other with *p*-values <.0001. The results of the PREDICATE effect extraction are summarised in Table 4. Three aspects are worth pointing out. First, class A, B and E predicates differ significantly from each other. Secondly, class B and D predicates do not differ significantly. Lastly, class E predicates do not differ significantly from both class C and D predicates. In a final step, the effect size  $r^2$  was calculated using the r2()-function in the sjstats package (Lüdecke 2019). The marginal  $r^2$  which considers only the fixed effects amounts to  $r_{marg}^2 = 0.325$  while the conditional  $r^2$  which takes both random and fixed effects into account is  $r_{cond}^2 = 0.517$ .

After the stimuli analysis, the filler sentences were analysed as well. The main purpose of the inclusion of filler sentences in experiments is to distract participants from the actual

#### Filler conditions



Figure 3: Mean ratings over participants for the three filler types: acceptable (FG), degraded (FM) and unacceptable (FB)

target sentences. In addition, filler sentences can function as anchor for judgements at both ends of the scale as well as in the middle. The verification of their functionality is therefore indispensable. For this study, it was hypothesised that three different types of judgement patterns should arise in connection with the three types employed (acceptable, degraded and unacceptable). To assess the functionality of the fillers in this experiment, the mean rating for each type was calculated over all participants. As expected, the mean rating for fillers of the acceptable category was the highest (6.18). However, the mean rating for unacceptable filler items (2.05) was slightly higher than for degraded filler items (1.86). This unexpected outcome can also be seen in Figure 3. While threefourths of all judgements for acceptable items amount to 6 or higher, three-fourths of all ratings for degraded items are 2 or lower. In contrast, the IQR of unacceptable fillers is wider. Interestingly though, the whole range of the rating scale is used in all conditions as depicted in Figure 3.

A linear mixed-effect-regression model was calculated for statistical analysis. FILLER TYPE was treated as fixed factor while participants and items were treated as random factors. Similar to the analysis of the stimuli sentences, the model was calculated in R (R Core Team 2019) using the packages lme4 (Bates et al. 2015) and lmerTest (Kuznetsova

et al. 2017). The procedure for fitting the model was similar to the procedure described for the stimuli sentences. The addition of random slopes did not improve the fit of the model. The results showed a significant effect of FILLER TYPE F(2, 2052) = 2790.8, p < 0.0001. Using the emmeans()-function from the emmeans package (Lenth 2019), the effects were extracted with Tukey as adjustment method. Acceptable fillers were significantly better rated than both unacceptable fillers (estimate = 4.123, SE = 0.065, df = 2052, t = 63.241, p < 0.0001) and degraded fillers (estimate = 4.308, SE = 0.065, df = 2052, t = 66.069, p< 0.0001). The post-hoc comparison of degraded and unacceptable fillers showed also a significant difference between the two levels (estimate = -0.184, SE = 0.065, df = 2052, t = -2.828, p = 0.0131).

## 8.4 Discussion

The analysis of the judgements of the stimulus sentences outlined in the preceding subsection unearthed the existence of a considerable amount of variation between speakers but also between conditions. Nonetheless, general patterns could be established in that stimulus sentences with subject-initial embedded clauses received higher judgements than those with adjunct-initial and object-initial clauses. Stimuli with adjunct-initial embedded clauses, in turn, received partially higher ratings than those with object-initial clauses. The ratings for stimulus sentences with adjunct-initial and object-initial complement clauses embedded under class A and B verbs are higher than for those embedded under the three other verb classes. The statistical analysis showed a main effect of both the matrix verb class and the clause-initial constituent in embedded clauses. When the different preverbal constituents in the embedded clauses were compared, the analysis showed a significant difference between all of these. The comparison of the different predicate classes, however, produced more complex results. While verbs of the classes A, B and E, i.e. exactly those predicate classes for which the occurrence of main clause phenomena in their complements is considered to be possible in V2 languages, differ significantly from each other, the differences between classes B and D, E and C as well as E and D are not significant.

The crucial question then is, how these results relate to the hypotheses formulated in the introduction. The first hypothesis, the 'Icelandic B' hypothesis, states that subjectinitial and (spatio-temporal) adjunct-initial V2 complement clauses are acceptable under all predicate classes whereas object-initial complement clauses are acceptable only under matrix verbs of the classes A, B and E. This predicts that stimuli with the first two types of preverbal constituents receive high ratings irrespective of the matrix verb while stimuli with object-initial clauses receive high ratings only when embedded under class A, B and E verbs. The obtained results are only partially compatible with these predictions. Albeit participants assigned high ratings to stimuli with subject-initial embedded clauses, stimuli with adjunct-initial clauses received lower ratings. The statistical comparison between these two showed a significant difference confirming the observation. Furthermore, the object-initial conditions received always low ratings even though the ratings for verb classes A and B are slightly higher. Further problematic results are the statistical comparisons of the different verb classes. Merely the comparisons of class A with classes C and D, as well as B with C yield the expected significant differences. Given these findings, the 'Icelandic B' hypothesis cannot be maintained for Sursilvan.

According to the second hypothesis, the 'Icelandic A/Yiddish' hypothesis, no differences in acceptability exist between the conditions that is all combinations of verb classes and preverbal constituent are acceptable. The ensuing prediction that all conditions receive high ratings are not met. The significant effects of verb class and of preverbal constituent are unexpected and cannot be explained by this hypothesis. Hence, the 'Icelandic A/Yiddish' hypothesis must be rejected; Sursilvan does not behave similar to Icelandic A and Yiddish with respect to embedded V2. As the results are incompatible with these two hypotheses, the results must be interpreted differently. Despite the many significant results, the interpretation of the results is not always as straightforward as it might seem. Moreover, the observed variation must be factored. However, the general pattern will be addressed first so that the issue of variation will be covered afterwards.

Although subject-initial clauses receive clearly higher ratings, the contrast between object-initial and adjunct-initial clauses is less pronounced. Even though the difference reaches the level of significance, this result should be cautiously interpreted. The small marginal effect size indicates that the impact of both fixed factors, i.e. verb class and preverbal constituent, is relatively small. In addition, at least half of all judgements of stimuli with object-initial and adjunct-initial complement clauses is low (i.e 1 or 2). This suggests that even though adjunct-initial clauses are slightly better in Sursilvan, the differences between both types is only marginal if not even non-existent for both types of preverbal constituents. Subject-initial V2 clauses, in contrast, are generally acceptable.

With respect to the matrix verbs, the interpretation of the results proves also to be difficult. Irrespective of the preverbal constituent, stimuli with class C matrix verbs received the lowest ratings. This is also reflected in the comparisons of the different verb classes with class C which are all significant except for the comparison with class E. These circumstances suggest that the lower ratings result from a confounding factor. The nature of this factor is unclear, but a possible explanation could be a decreased semantic com-

patibility of the matrix verb with its clausal complement. The highest ratings in stimulus sentences with adjunct-initial and object-initial clauses are observed for class A and B matrix verbs. The difference between class A and B was shown to be significant which can be interpreted as indication that non-subject-initial embedded V2 is more acceptable under class A matrix verbs than with class B matrix verbs. But note again that these results should be carefully interpreted due to low effect size. That is, although embedded V2 appears to be more acceptable under class A and B predicates, the judgements are still low. The general conclusion is thus that for most speakers in the sample, embedded V2 in Sursilvan is unacceptable if a non-subject occupies the preverbal position. Note again that this conclusion does not incorporate the observed variation which will be addressed separately below after potential confounding factors are discussed.

The rejection of the two hypotheses is somewhat surprising in consideration of the otherwise strict adherence of Germanic V2 languages and Dolomitic Ladin to the four different types of V2 languages. Furthermore, these results do not conform to the findings of Grünert (2018) for Sursilvan. It must thus be determined if confounding factors distorted the results in such a way that the actual situation was obscured. The first issue arises with regard to the unexpected ratings of the filler sentences. The analysis of the filler sentences showed that the degraded sentences received lower ratings than anticipated with the consequence that two-thirds of a filler were unacceptable items. It is possible that the preponderance of unacceptable filler sentences induced a negative bias into the data. However, a negative bias would affect all conditions equally unless less acceptable constructions would be affected to a greater extent. Such an assumption, in turn, would entail that differences between the clause-initial constituents exist which is unexpected under all hypotheses. Therefore, the effect of negative bias can be disregarded.

A further confounding factor constitutes the general choice of words. Some of the comments provided by the participants indicate the unusualness of words or even their incorrectness in some contexts. Furthermore, one participant noted the use of Germanisms as well as the dialectal colouring of certain expressions. The examples she explicitly mentioned are particle verbs. It is important to note that this does not apply to the matrix verbs used in the stimulus sentences which are exclusively simplex verb forms. A further problem is observed by Arnold Spescha (p.c) who points out that the complements of certain matrix verbs require subjunctive mood instead of indicative mood. The translator of the stimulus sentences did not raise the problem in connection with the use of indicative mood. This could indicate an ongoing language change in which the requirement of subjunctive mood is weakened. This hypothesis receives further support from the fact that a teacher of Romansh double checked the work of the translator.

Wiklund et al. (2009: 1922) observe the existence of small semantic differences between equivalents of verbs with the same core meaning in different languages. The Icelandic verb *harma* 'regret' does not require that the proposition is presupposed by both the speaker and the interlocutor. This peculiarity sets *harma* apart from its equivalents in English, Swedish and Norwegian. So far, there is no evidence which suggest that the Sursilvan verbs used as matrix verbs differ from their equivalents in other languages, but it is also impossible to exclude this possibility. It is unlikely though that all verbs used in the stimuli construction exhibit semantic properties which differ from other languages. This issue cannot be addressed in this thesis as more data is needed.

It is hard to assess the impact of all of the aforementioned factors on the judgements as they presumably affect participants differently depending on their local variety and their prescriptive or liberal attitude towards language. Moreover, the participants are exposed to a varying degree to Sursilvan in their daily lives. While some are still living in Romanshspeaking regions, others are now living in German-speaking regions and are consequently more exposed to German. Future research has to determine to what extent the varying intensity of the language contact affects the acceptability of embedded V2 structures. However, it might be the case that the general low ratings of three persons noted in the results subsection are attributable to these factors. They may also provide an explanation why even stimulus sentences with subject-initial clauses received partially relatively low ratings although Grünert (2018) noted the general availability of subject-initial embedded V2 clauses.

As noted above, a central issue concerning the interpretation of the results constitutes the interpretation of the observed variation. It is conceivable that the variation is simply noise but also a meaningful interpretation in terms of dialectal variation is possible (Schütze & Sprouse 2013: 45). As Figure 1 and Figure 2 show, the variation in conditions with adjunct-initial clauses was greater than in those with object-initial clauses. The latter figure also shows that in all adjunct-initial conditions, a second, albeit smaller 'peak' exists reflecting higher ratings. Furthermore, it was noted in section 8.3 that those participants who rated stimuli with adjunct-initial embedded clauses higher compared to the remainder of the participants also provided higher ratings of stimuli with object-initial embedded clauses (albeit these ratings were lower compared to those for adjunct-initial conditions and less systematic). If the observed variation results from mere noise, the variation would be expected to be greater in object-initial embedded clauses. This, however, is not the case which suggests that dialectal differences are at least partially responsible for the variation. This of course does not mean that noise is not present in the data. Some of the comments provided by the participants indicate that the participants did not judge the stimuli consistently. In addition, one participant remarked that the sentences were not plausible, although this was not a shared opinion as one participant declared that the sentences were comprehensible. These comments can be considered as clear indicators of noise.

The conclusion that dialectal differences exist raises the question how many varieties are represented in the sample and what the differences between these varieties are. The two patterns observed in the results can be interpreted as two distinct varieties of Sursilvan. These two varieties are, following the Icelandic tradition, henceforth labelled as Sursilvan A and Sursilvan B. The first variety, i.e. Sursilvan A, refers to the pattern which was described above. That is, embedded V2 in complement clauses in Sursilvan A is possible only with clause-initial subjects. Speakers of Sursilvan B, in contrast, allow both subjectinitial and adjunct-initial V2 complement clauses irrespective of the matrix verb. In this respect, Sursilvan B is on a par with Icelandic B. The situation is more complicated for object-initial clauses though. Although speakers of Sursilvan B judged object-initial clauses better than speakers of Sursilvan A, the data is inconclusive in that no real pattern was discernible. It appears though that the judgements of object-initial clauses tend to be higher when the respective clause is complement to a verb of class A or B. This would at least partially correspond to the situation in Icelandic B. If the findings of Grünert (2018) are taken into account, object-initial V2 complement clauses appear to be actually possible in Sursilvan when embedded under assertive verbs.<sup>72,73</sup> This would further corroborate the similarity between Icelandic B and Sursilvan B. The only difference would be that object-initial V2 complement clauses are not possible in Sursilvan if these clauses are embedded under a matrix verb of class E.

A more detailed comparison with Grünert's (2018) results shows that his results are not identical with the results of this study. Grünert (2018) observed adjunct-initial V2 complement clauses only under assertive verbs. This result, however, is not necessarily incompatible with the results of this study. As aforementioned, the absence of certain phenomena in corpora does not entail their ungrammaticality. In addition, Grünert (2018) does not specify if his findings are valid for a certain type of adjunct. In this study, only spatio-temporal adjuncts were tested. It is thus conceivable that the results of Grünert

<sup>&</sup>lt;sup>72</sup>Note that Grünert (2018) does not provide a Sursilvan example of an object-initial complement clause but neither does he state that object-initial V2 clauses are unattested. That object-initial complement clauses with V2 order exist in Romansh, is shown by an example from an Engadine variety.

<sup>&</sup>lt;sup>73</sup>It can only be speculated on the reasons of the inconclusiveness of the object-initial judgements. A possible explanation could be the aforementioned confounding factors.

(2018) did simply not comprise spatio-temporal adjuncts.

A further conclusion of these findings must be that the assumption that all V2 clauses should receive high acceptability ratings irrespective of the syntactic function of the preverbal constituent can evidently not be maintained. This assumption is either not valid merely for Sursilvan or generally false. In the light of Biberauer's (2002) observation of a similar discrepancy in Afrikaans, the latter option appears more likely. Nonetheless, further research into this topic is required to settle this debate.

The conclusion that dialectal differences exist actually necessitates two separate statistical analyses. As aforementioned, the number of participants displaying this divergent pattern is too small to analyse them separately. These conclusions must thus be considered as preliminary and requiring further research. It is also necessary to determine whether age-related differences exist and whether the Sursilvan A and Sursilvan B correspond to a particular variety of Sursilvan. The consideration of age-related differences is especially relevant given the findings of Angantýsson (2017) for Icelandic and the increased language contact of Sursilvan with German of last century.

Before these results are embedded into the general discourse of V2, three issues shall be briefly addressed. First, the embedded clauses in the stimuli consisted only of subject pronouns. This, however, should not alter the generalisation that subject-initial V2 clauses are the default word order in Sursilvan embedded complement clauses. Grünert (2018) does not indicate that differences between pronominal and nominal subjects exist. Secondly, further research has to determine whether V2 complement clauses with nonsubjects in clause-initial position are truly embedded or not. As noted in section 5, there is reasonable doubt that some German and Frisian V2 clauses are truly embedded. This is also relevant for the structural analysis of embedded V2 clauses. Thirdly, the findings of this study have implications for the assertion hypothesis. The restriction of non-subjectinitial embedded V2 to complements of assertive predicates suggest that embedded V2 is not solely contingent upon the assertivity of the matrix clause but also other factors play a role. This is evidenced by the availability of embedded V2 under semi-factive predicates. The nature of these factors must be left open for further research.

## 9 General discussion

The results of the study on embedded V2 in complement clauses in Sursilvan presented in the preceding section indicated the existence of two varieties in Sursilvan which were labelled Sursilvan A and Sursilvan B. While speakers of the former variety accept merely
subject-initial V2 clauses, speakers of the latter variety, i.e. Sursilvan B, accept both adjunct-initial and subject-initial V2 complement clauses embedded under all verb classes of Hooper & Thompson (1973). The status of object-initial clauses was less clear in the results of the study. Therefore, the results of Grünert (2018) were incorporated who argued that object-initial V2 clauses are possible in clauses embedded under class A and class B matrix verbs. An intriguing observation constitutes the similarity of Sursilvan B with Icelandic B which shows an almost identical pattern. The different types of embedded V2 observed in Sursilvan necessitate two different analyses, which will be outlined below.

#### 9.1 Sursilvan A

Sursilvan A exhibits a special status within the V2 languages in that no other V2 language displays similar restrictions on the fronting of non-subjects to the preverbal position. This raises the question what can be used as starting point for the analysis. As noted in section 5.2.2, the majority of embedded contexts other than complement clauses allow only a subject-initial word order in Icelandic. The restriction to subject-initial clauses casts doubt on the actual V2 character of such 'subject-only' constructions. However, the frequently employed V2 diagnostics using lower adverbs and negation indicate the V2 character of subject-only constructions as the finite verb precedes these adverbs and the sentential negation. The same situation was observed in complement clauses of Sursilvan A. This suggests that the analysis of these clauses in Icelandic might be also applicable to Sursilvan A. This requires, however, that the negation and lower adverbs are adjoined in the same position in both languages. This will be examined for the sentential negation in the following paragraph.

The structural position of the negation in the Scandinavian languages is not mutually agreed in the literature. Angantýsson (2007: 242) argues for Icelandic that the negation occupies a position similar to lower adverbs (cf. Cinque 1999); that is the negation precedes the VP but follows the inflectional domain. This position is based on the quantificational semantics of negators which can thus be analysed as adverbs of quantification. Note, however, that Angantýsson (2007: 249) argues that negation does not project its own phrase but rather that the negation is adjoined to a phrase. This view is challenged by Wiklund et al. (2007) and Julien (2007, 2015) who assume for all Scandinavian languages a higher structural position of negation. More precisely, negative elements are the head of a negation phrase NegP which precedes all functional projections in the IP-domain (including higher adverbs) (Wiklund et al. 2007: 206). This assumption is derived from the comparison of verb movement patterns in Icelandic and Regional Northern Norwegian

dialects (henceforth ReNN). According to Wiklund et al. (2007), the finite verb does not move at all in embedded questions in Icelandic while in ReNN, the finite verb can precede lower and higher adverbs but not the negation. This pattern is duplicated in control infinitives and exceptional case-marking infinitives (ECM) in ReNN but only in control infinitives in Icelandic as can be seen in (70). Crucially, control infinitives but not ECM infinitives dispose of a CP layer (evidenced by the complementiser  $a\partial$  'that, to') (Wiklund et al. 2007: 212–213).

(70) Hún reyndi að (koma) ekki (\*koma) alltaf (koma) á réttum tíma í she tried to (come) not (come) always (come) on right time in skólann.
school.the
'She tried not always come to school on time.'
(Wiklund et al. 2007: 213)

Based on these observations, Wiklund et al. (2007) and Julien (2007, 2015) conclude that the finite verb is internally merged under Fin<sup>0</sup> in Icelandic irrespective of the possibility of V2.<sup>74</sup> This entails that the infinite verb is raised to Fin<sup>0</sup>. It is outside of this thesis to discuss the position of the negation so that a high position of the negation is assumed in the Scandinavian languages.

Assuming that Sursilvan A parallels the situation in Icelandic, the negation must exhibit a structurally high position. However, this assumption appears to be unjustified. Zanuttini (1997) compares several Romance varieties and concludes that although the position of the preverbal negation is directly above the TP, the negation is located below the TP in languages with postverbal negation. Sursilvan belongs to the latter type of languages; that is, the negation follows the finite verb (Spescha 1989: 498, Zanuttini 1997: 4, Liver 2010: 150).<sup>75</sup> Although Sursilvan is not explicitly addressed by Zanuttini (1997), the otherwise uniformity among the Romance languages with respect to the position of the negation strongly suggests that Sursilvan does not deviate from this Romance pattern. That is, the negation in Sursilvan is located below the TP.<sup>76</sup> Further evidence could come from inifinitival constructions but unfortunately, no descriptions of the relative order of the

 $<sup>^{74}</sup>$  Wiklund et al. (2007) analyse the movement of the finite verb not as head movement but as  $v{\rm P}$  remnant movement.

<sup>&</sup>lt;sup>75</sup>Negation is not a uniform phenomenon in Romansh. Puter and Vallader are languages with preverbal negation, whereas Surmiran exhibits, similar to Standard French, a combination of pre- and postverbal negation (Zanuttini 1997: 3–5). Posner (1985: 175) notes that earlier stages of Sursilvan exhibited preverbal negation. The preverbal negation marker *na* has survived in Modern Sursilvan as alone standing negative response similar to English *no* (cf. Spescha 1989: 498).

<sup>&</sup>lt;sup>76</sup>Admittedly, variation with respect to the structural position of the negation is noted by Zanuttini (1997), but this variation is confined to variance below the TP.

negation and infinite verb can be found in the literature. The only example involving negation and infinitival construction is given by Spescha (1989), which is rendered in (71).

(71) Igl ei meglier da buc allegar quei fatg it is better to not mention this fact 'It is better not to mention this fact.'(Spescha 1989: 641)

(71) is not a true instance of a control infinitive but the negation is preverbal in this case. Given this fact, it can be confidentially concluded that the negation in Sursilvan occupies a position below the TP.

A low position of the negation in the Sursilvan clause structure entails that there is no compelling evidence for the movement of the finite verb to the left periphery. The limitation to subject-initial V2 clauses rather suggests that an analysis in terms of the inflectional domain should be pursued. In Zaring's (2018) analysis of embedded V2 clauses in Old French, postverbal subjects in non-subject-initial V2 clauses reside, adopting Rizzi's (2010) framework, in the specifier of SubjP.<sup>77</sup> Crucially however, such an analysis is not applicable to Sursilvan. Rizzi (2010, 2015a, 2015b) argues that SubjP, the highest position in the IP domain, is a criterial position which means that the nominal head of SubjP bears a criterial feature which express "properties of scope-discourse semantics" (Rizzi 2015b: 21). In the case of Subj<sup>0</sup>, the criterial feature is [ABOUTNESS]. The closest nominal constituent is attracted to the specifier which is then freezed in this position which prevents the further movement of the attracted nominal phrase.

Although such an analysis could explain the situation in complement clauses in Sursilvan A, subject-initial main clauses appear mysterious since the freezing of subjects conflicts with the situation in main clauses in which subjects can be merge under a specifier position in the left periphery.<sup>78</sup> It would be necessary to stipulate that SubjP is projected only in embedded clauses which in turn would violate the assumption that to a large extent the same structure is projected in main and embedded clauses. Therefore, it is assumed that Sursilvan A (but also Sursilvan B) does not project SubjP. Instead, the subject is moved to the specifier of TP due to an [EPP] feature of T. The finite verb bears an unvalued, uninterpretable inflectional feature [*u*INFL: ] and is therefore moved to T<sup>0</sup>

<sup>&</sup>lt;sup>77</sup>Zaring (2018) actually distinguishes between pronominal and nominal postverbal subjects. While the former are internally merged under SpecSubjP, the latter remain in SpecvP, the position under which they are externally merged, and a null expletive *pro* resides in SpecSubjP.

<sup>&</sup>lt;sup>78</sup>This assumption will be fully motivated below.

where it is valued and checked.<sup>79</sup> Abandoning Rizzi's SubjP (2010, 2015a, 2015b) comes thus at the cost of the stipulation of an [EPP] feature.

The obligatory clause-initial complementiser is externally merged under  $\text{Fin}^{0}$ . As noted in section 7.1.3,  $\text{Fin}^{0}$  encodes finiteness features which entails that the Sursilvan A complementiser *che* must bear such features. There is no independent evidence from Sursilvan for this assumption except the contrast between complementisers selecting either finite or infinite clauses. Further support comes from German and Dutch varieties which exhibit complementiser agreement, i.e. overt agreement between the complementiser and the finite verb, as already noted in section 7.1. Thus, it is assumed that Sursilvan A *che* exhibits the same features.

The fact that Sursilvan A exhibits only subject-initial V2 complement clauses shows that matrix verbs generally select only a minimal structure with FinP as the topmost projection in this variety. This view is compatible with the observations from section 7.2, which showed that embedded V2 is not always contingent upon the verb class of the matrix verb. Hence, the opposite situation is conceivable, i.e. less complex embedded structures are selected by all verb classes. Main clauses, in contrast, dispose of the fullyfledged structure of the left periphery, although not every possible projection is present.<sup>80</sup> The assumption of a more elaborate structure in matrix clauses is in fact uncontroversial as it is generally accepted by scholars working within a split-CP framework.

The analysis can be easily extended to capture the situation in matrix clauses. It can be assumed that V-to-T movement also occurs in matrix clauses as the same factors triggering this movement should be present in matrix clauses. In contrast to embedded clauses, the numeration for main clauses does not comprise a complementiser. Hence, the finite verb must be merged under Fin<sup>0</sup> to check the same uninterpretable finiteness features locally which are checked by the complementiser in this position. A crucial difference between complementisers and finite verbs constitutes the presence of a preceding element, i.e. while complementisers are unpreceded, finite verbs are always preceded by another constituent. This suggests that a feature related to the finite verb is responsible for the movement to the specifier position. It will be assumed here that verbs attract only NPs and DPs to the specifier position although the exact nature of this feature must be left open for further research.

Declarative matrix clauses in Sursilvan allow different types of preverbal elements with different information structural properties. These are merged under the specifier of focus

<sup>&</sup>lt;sup>79</sup>In principle, the finite verb and subject could target a higher position but further data is needed to determine the exact position. The mechanisms would remain the same.

 $<sup>^{80}\</sup>mathrm{Section}$  9.2 will elaborate more on this issue.

or topic projections. The finite verb is moved from  $Fin^0$  to the heads of these positions to check an uninterpretable strong  $[TOP^*]$  or  $[FOC^*]$  feature. Consequently, the strength of these features explains why only one constituent can precede the finite verb.

#### 9.2 Sursilvan B

The analysis provided for Sursilvan A can be easily adapted to accommodate the data of Sursilvan B. The major difference between Sursilvan A and Sursilvan B constitutes the size of the selected structure of the matrix verb. The varying size of the selected structure is also used in analyses by e.g. Benincà & Poletto (2004) and Salvesen & Walkden (2017). Moreover, it is assumed that Sursilvan B displays independent V-to-T movement similar to Sursilvan A. Although no direct evidence exists for this assumption, the responsible factors are likely to be active in Sursilvan B as well.<sup>81</sup>

In a first step, the more restrictive contexts will be considered; that is those contexts in which only complement clauses with clause-initial subjects and spatio-temporal adjuncts are well-formed. The underlying assumption of different sizes of the selected structures entails that the structure in the more restrictive contexts is less complex, although this does not allow to draw conclusions which position in the left periphery are targeted by the finite verb and the preverbal adjunct and subject, respectively. As already noted, Sursilvan B parallels Icelandic B in many respects. Hence, an analysis of Icelandic B might be also applicable to Sursilvan B.

In the analysis formulated by Hrafnbjargarson & Wiklund (2010), subject-initial and adjunct-initial clauses are analysed as instances in which the finite verb is moved to Fin<sup>0</sup>. The verb movement is triggered by an uninterpretable [*u*PERSON] feature while an [EPP] feature is responsible for the movement of an adjunct or subject to the specifier position of FinP. Although this analysis is descriptively adequate, it raises the question about the nature of the [EPP] feature as it must be shared by spatio-temporal adjuncts and nominals while other types of adjuncts lack this feature. A potential solution could be the stipulation of a [LOW-V2] feature for which spatio-temporal adverbs (and prepositional phrases) as well as nominals are specified. This, in turn, would predict that only adjunct-initial embedded clauses are possible if the numeration comprises spatio-temporal adjuncts. As outlined above, Wiklund et al. (2007) and Julien (2007, 2015) argue for the absence of independent V-to-T movement in Icelandic. This entails that spatio-temporal adjuncts

<sup>&</sup>lt;sup>81</sup>If movement is indeed contingent upon the existence of rich agreement morphology, as posited by the Hróarsdóttir et al.'s (2007) version of the Rich Agreement Hypothesis, the existence of V-to-T movement can be confidently assumed as no differences regarding the inflectional morphology are reported to date.

occupy a higher position than subjects (which are externally merged in vP) when Fin<sup>0</sup> is merged with the already existing structure. If the [LOW-V2] feature attracts either spatiotemporal adjuncts or subjects, only the former can be merged under SpecFinP because of their closer proximity to Fin<sup>0</sup>. Unfortunately, no examples falsifying this prediction could be found, but the following example in (72) provides a first indication that this prediction may not be borne out because the clause-initial subject precedes the finite verb despite the presence of a spatio-temporal adjunct. Note, however, that the example in (72) is not fully comparable due to its main clause character and the involvement of an expletive subject.

(72) *Pað* rignir núna it rains now
'It is raining at the moment'
(Hrafnbjargarson & Wiklund 2010: 62)

A further prediction of Hrafnbjargarson & Wiklund's (2010) analysis, namely the lack of special information structural properties (e.g. contrastive focus) of fronted spatio-temporal adjuncts, cannot be verified due to lack of further information on this topic. However, given the problems concerning the stipulated [EPP] feature, another analysis will be pursued.

Icelandic B is not the only language which shows pattern comparable to the one observed for Surilvan B. As noted in section 6.2, the Dolomitic Ladin variety Badiot exhibits subject-initial and adjunct-initial V2 complement clauses irrespective of the selecting matrix verb. The situation in Badiot does not fully correspond to the situation in Icelandic though, as only adverbs can occupy the preverbal position, according to Poletto (2000, 2002). Moreover, a broader range of adverbs can be preposed in embedded clauses in that all types of circumstantial adverbs are eligible as clause-initial adverbs which, however, need to be contrastively focalised.

In the analysis of the Badiot data proposed by Poletto (2000) and Benincà & Poletto (2004), circumstantial adverbs are merged under the specifier of a functional projection which host exclusively contrastively focalised circumstantial adverbs.<sup>82</sup> The existence of such a projection is inferred from cross-linguistic comparisons of Italian varieties and Badiot. In the view of similar V2 patterns and the common ancestry, it appears reasonable to apply this analysis to Sursilvan B. In fact, this analysis can be easily adapted to Sursilvan B by assuming that the position identified by Poletto (2000) and Benincà & Poletto (2004) must be available for all circumstantial adjuncts and not only for adverbs.

<sup>&</sup>lt;sup>82</sup>Poletto (2000, 2002) and Benincà & Poletto (2004) refine the structure proposed by Rizzi (1997) in that the recursive TopPs (cf. (66)) are divided into a finite number of distinct functional projections.

It appears unlikely that there is a restriction to adverbs since also prepositional phrases can contribute a circumstantial meaning. Henceforth, this position is labelled as CircumP.

With the assumption of CircumP, the derivation of clauses in Sursilvan B proceeds similar to main clauses as outlined in the preceding subsection. The finite verb is internally merged under Fin<sup>0</sup> and the subject of the clause under SpecFinP. If the spatio-temporal adjuncts are contrastively focalised, they are merged under the SpecCircumP to check an uninterpretable [FOC] and/or [CONTRAST] feature of the finite verb. Due to the strength of this feature, the feature checking must occur locally. The implications of this analysis are that preposed adjuncts in complement clauses must be contrastively focalised and all types of circumstantial adverbs can be fronted. Unfortunately, no data is available to verify this claim so that future research needs to address this issue.

It is argued by Frey (2006a) that certain clause-initial adverbials in German are externallymerged in the C-domain. This analysis is derived from the observation that certain adverbials in German are not "integrated into the proposition expressed by the clause" (Frey 2006a: 244) which becomes manifest in their ban on occurring in a clause-medial position, as illustrated in (73).

(73) a. Am Rande bemerkt bin *ich* etwas enttäuscht von dir. at.the edge noticed am I somewhat disappointed by you 'By the way, I am somewhat disappointed by you.'
b. \**Ich* bin am Rande bemerkt etwas enttäuscht von dir. (Frev 2006a: 243)

A similar proposal is made by Walkden (2017) for scene-setting adverbs.<sup>83</sup> This analysis, however, is not adequate for the situation in Sursilvan B. The spatio-temporal adjuncts are integrated into the proposition of the clause which is also indicated by the possibility of their realisation in a clause-medial position.<sup>84</sup>

The analysis can be easily extended to capture the situation with object-initial clauses and adjunct-initial clauses with preverbal adjuncts other than circumstantial/spatiotemporal. In these cases, a more complex structure is selected which disposes of functional projections with specifier position under which the clause-initial elements can be merged. The finite verb bears an uninterpretable strong feature which causes then the movement to the higher position.

Benincà & Poletto (2004: 60–61) further argue that a further functional projection

 $<sup>^{83}</sup>$ te Velde (2017) argues that temporal adverbs are merged in a high position (above TP) but note that te Velde proposes an asymmetric analysis of V2 structures.

<sup>&</sup>lt;sup>84</sup>This was the case in subject-initial complement clauses which received high ratings in the study outlined in the previous section.

exists below CircumP which hosts new information foci. This raises the question why object-initial complement clauses are ungrammatical under certain matrix predicates. Two solutions are conceivable: Either the participants could not construe the fronted objects as new information foci or such a phrase is never projected. Holmberg (2015: 348) notes for Swedish declarative clauses that fronted objects cannot be focus but only (contrastive) topic which suggests that the availability of information structural categories is language-specific. In this light, the second alternative appears more likely, but further research on this topic is needed.

Two issues in connection with this analysis have been not addressed yet. First, the position of the complementiser has not been identified so far. Julien (2007) argues that complementisers in the Mainland Scandinavian languages resides in the head of SubjP, a phrase which exclusively hosts subjunctions. Although such a phrase is conceivable, the appropriate position for the complementiser is the head of ForceP. Complementisers encode the clause type so that Force<sup>0</sup> is the appropriate position. If the complementiser in Sursilvan B is generally merged under Force<sup>0</sup>, the question is raised if this complementiser differs from the one in embedded interrogatives. The unavailability of embedded V2 indicates that only a low structure is selected. The assumption that Sursilvan disposes of two homophonous complementiser is not new for the Romance languages. Paoli (2007) notes the existence of Romance varieties in which the same complementiser occurs twice in a clause. A similar observation is made by Salvesen & Walkden (2017) for Old French.

Secondly, the bare phrase structure, which has been tacitly assumed so far, conflicts with the multiple projections which are assumed in cartographic approaches. Several proposal have been made, e.g. by Branigan (2016), who proposes a combination of cartography and phase theory with Chomsky's (2015) labelling theory and by Hsu (2017), who pursues a feature-scattering approach, in which several features are bundled on one head in the Cdomain. In this thesis, a different assumption will be made. The possibility that different matrix verb classes select different structures suggests that certain projections can be simply omitted. It will thus be assumed that no head with the respective features will be contained in the numeration.

The analysis for Sursilvan B can also be applied to the Germanic languages. This, however, does not include the V-to-T movement. Holmberg (2015) argues that the Germanic languages do not display independent V-to-T movement, but this does not constitute a problem since the existence of independent V-to-T movement is not a prerequisite for this analysis. A potential problem arises in connection with German as the deletion of the complementiser is not always possible. It must therefore be stipulated that complement clauses of certain verb classes must be introduced by an overt complementiser. A further problem could arise in connection with the facultativity of embedded V2 in Mainland Scandinavian complement clauses. This entails that verb classes which can select larger phrasal units do not always select large complements. This issue must be left open for future research.

Returning now to the questions formulated in the introduction to this thesis, the following answers can be given: The answer to (II) must be that the confinement of the finite verb to the second position is the result of strong features on the heads of the functional projections in the left periphery. Importantly, the clause-initial elements do not occupy the same position. Languages which can fill the left periphery with multiple constituents have therefore no such requirement that features must be checked locally. With respect to (I), the analyses suggest that strong discourse relational features borne by the finite verb are rare.

## 10 Summary

Verb-second (V2) is a descriptive definition of a word order phenomenon which is characterised by the obligatory position of the finite verb in the second position of the clause. The verb occupies the second position irrespective of the functional or categorical status of the preverbal constituent. V2 is not restricted to declarative clauses but occurs also in wh-interrogatives. The number of V2 languages is relatively small. In fact, the majority of all V2 languages is of Germanic origin, albeit some other V2 languages of non-Germanic origin exist. Among the Germanic languages, only English does not show a general V2 pattern.

V2 is not confined to main clauses, but occurs also in embedded clauses. V2 languages, however, differ to which extent embedded V2 is permitted. For instance, Yiddish displays a general V2 pattern in that complement clauses, adverbial clauses and embedded questions exhibit V2, whereas more restrictions exist in the Mainland Scandinavian languages. In Mainland Scandinavian complement clauses, V2 is possible only in clauses embedded under certain matrix predicates. Furthermore, in contrast to matrix clauses, V2 is not mandatory in these contexts.

Research into V2 has been focused on the Germanic varieties to date. Although this has produced important results which have contributed to a better understanding of V2 and syntactic processes in general, a broader empirical base is desirable. A major goal of this thesis was therefore to examine the situation in a non-Germanic V2 language. One of

these languages is Romansh, which is spoken in the Canton of the Grisons in Switzerland. An online acceptability study was conducted in which the availability of embedded V2 in complement clauses of the Romansh variety Sursilvan was examined. The results indicated the existence of two varieties in Sursilvan which differ with respect to the generality of embedded V2. While the first variety, referred to as Sursilvan A, exhibits V2 only with subjects preceding the finite verb, the second variety, Sursilvan B, displays a more general pattern. The results indicate that under all tested classes of complement-taking matrix verbs, adjunct-initial and subject-initial clauses are possible. The status of object-initial V2 clauses was not totally clear in the results. In combination with Grünert's corpus study results, it was concluded that object-initial V2 complement clauses are possible under assertive predicates.

For each variety of Sursilvan, a split CP-domain analysis is proposed. The underlying assumption of both analyses is the varying size of the selected phrasal unit depending on the matrix verb class. It is argued for Sursilvan A that all verbs select only FinPs as complements. The subject-initial V2 instances are analysed as movement of the finite verb and the subject to TP. Matrix verbs in Sursilvan B, in contrast, select a more complex phrasal unit. All matrix verbs select a structure which comprises a projection called CircumP. Preverbal adjuncts are merged under the specifier of CircumP while the finite verb is internally merged under Circum<sup>0</sup>. In subject-initial V2 clauses of Sursilvan B, the finite verb and the subject are moved to FinP. Accordingly, in contexts in which object-initial clauses are possible, the size of the select phrasal unit is greater.

The outlined analysis constitutes a first approach to the syntactic description of embedded V2 in Sursilvan. Although the analyses capture the observed patterns, further research is required. At several points, assumptions were made which require empirical support. Furthermore, this analysis does not capture all the data in the Germanic languages. Hence, the finding of this thesis can be used as starting point for further research into embedded V2 in Sursilvan and the V2 property in general.

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# Appendix A

## Stimuli

$\mathbf{List}$	Pred	Cond	Sentence					
1	А	SU	Fadri di ch'el maglia permanent tschugalatta egl auto.					
2	А	OB	Fadri di che tschugalatta maglia el permanent egl auto.					
3	А	AD	Fadri di ch'egl auto maglia el permanent tschugalatta.					
3	В	SU	Fadri suppona ch'el maglia permanent tschugalatta egl auto.					
1	В	OB	Fadri suppona che tschugalatta maglia el permanent egl auto.					
2	В	AD	Fadri suppona ch'egl auto maglia el permanent tschugalatta.					
2	$\mathbf{C}$	SU	Fadri evitescha ch'el maglia permanent tschugalatta egl auto.					
3	С	OB	Fadri evitescha che tschugalatta maglia el permanent egl auto.					
1	С	AD	Fadri evitescha ch'egl auto maglia el permanent tschugalatta.					
1	D	SU	Fadri condemnescha ch'el maglia permanent tschugalatta egl auto.					
2	D	OB	Fadri condemnescha che tschugalatta maglia el permanent egl					
3	D	AD	Fadri condemnescha ch'egl auto maglia el permanent tschugal- atta.					
3	Е	SU	Fadri sa si ch'el maglia permanent tschugalatta egl auto.					
1	Е	OB	Fadri sa si che tschugalatta maglia el permanent egl auto.					
2	Е	AD	Fadri sa si ch'egl auto maglia el permanent tschugalatta.					
2	А	SU	Ladina declara ch'ella perda adina sia clav el curtin.					
3	А	OB	Ladina declara che sia clav perda ella adina el curtin.					
1	А	AD	Ladina declara ch'el curtin perda ella adina sia clav.					
1	В	SU	Ladina schazegia ch'ella perda adina sia clav el curtin.					
2	В	OB	Ladina schazegia che sia clav perda ella adina el curtin.					
3	В	AD	Ladina schazegia ch'el curtin perda ella adina sia clav.					
3	С	SU	Ladina dubitescha ch'ella perda adina sia clav el curtin.					
1	С	OB	Ladina dubitescha che sia clav perda ella adina el curtin.					
2	$\mathbf{C}$	AD	Ladina dubitescha ch'el curtin perda ella adina sia clav.					
2	D	SU	Ladina deplora ch'ella perda adina sia clav el curtin.					
3	D	OB	Ladina deplora che sia clav perda ella adina el curtin.					
1	D	AD	Ladina deplora che'el curtin perda ella adina sia clav.					
1	Ε	SU	Ladina auda ch'ella perda adina sia clav el curtin.					
2	Ε	OB	Ladina auda che sia clava perda ella adina el curtin.					
3	Ε	AD	Ladina auda ch'el curtin perda ella adina sia clav.					
3	А	SU	Curdin pretenda ch'el ha adina duvrau il falliu tilastrubas per la montascha.					
1	А	OB	Curdin pretenda ch'il falliu tilastrubas ha el adina duvrau per la montascha.					
2	А	AD	Curdin pretenda che per la montascha ha el adina duvrau il falliu tilastrubas.					

2	В	SU	Curdin crei ch'el ha adina duvrau il falliu tilastrubas per la montascha
3	В	OB	Curdin crei ch'il falliu tilastrubas ha el adina duvrau per la
1	В	AD	montascha. Curdin crei che per la montascha ha el adina duvrau il falliu
T	D	ПD	tilastrubas.
1	С	SU	Curdin dementescha ch'el ha adina duvrau il falliu tilastrubas
2	$\mathbf{C}$	OB	per la montascha. Curdin dementescha ch'il falliu tilastrubas ha el adina duvrau
			per la montascha.
3	С	AD	Curdin dementescha che per la montascha ha el adina duvrau il falliu tilastrubas.
3	D	SU	Curdin accepta ch'el ha adina duvrau il falliu tilastrubas per
1	D	OB	Curdin accepta ch'il falliu tilastrubas ha el adina duvrau per
-	2	012	la montascha.
2	D	AD	Curdin accepta che per la montascha ha el adina duvrau il falliu tilastrubas
2	Е	SU	Curdin vesa ch'el ha adina duvrau il falliu tilastrubas per la
3	Е	OB	Curdin vesa ch'il falliu tilastrubas ha el adina duvrau per la
1	Е	AD	montascha. Curdin vesa che per la montascha ha el adina duvrau il falliu
1	۸	SU	tilastrubas. Ursina rignunda ch'olla ha savons gudignau in promi tior lot
T	Л	50	terias.
2	А	OB	Ursina rispunda ch'in premi ha ella savens gudignau tier lot-
3	А	AD	Ursina rispunda ch'en lotterias ha ella savens gudignau in
0	Ð	att	premi.
3	В	SU	Ursina manegia ch'ella ha savens gudignau in premi tier lot- terias.
1	В	OB	Ursina manegia ch'in premi ha ella savens gudignau tier lot-
2	В	AD	Ursina manegia ch'en lotterias ha ella savens gudignau in
			premi.
2	C	SU	Ursina snega ch'ella ha savens gudignau in premi tier lotterias.
3	С	OB	Ursina snega ch'in premi ha ella savens gudignau tier lotterias.
1	С	AD	Ursina snega ch'en lotterias ha ella savens gudignau in premi.
1	D	SU	A Ursina plai ch'ella ha savens gudignau in premi tier lotter-
0	Л	OD	las. A Urgina plai ch'in promi ha alla garrang mudienau tier latter
Δ	D	UD	ias.
3	D	AD	A Ursina plai ch'en lotterias ha ella savens gudignau in premi.

3	Ε	SU	Ursina discuviera ch'ella ha savens gudignau in premi tier lotterias
1	Е	OB	Ursina discuviera ch'in premi ha ella savens gudignau tier
2	Е	AD	lotterias. Ursina discuviera ch'en lotterias ha ella savens gudignau in
			premi.
2	А	SU	Andri grescha ch'el sto savens schubergiar il plantschiu cuort
9	٨	OP	avon la fin dalla lavur.
5	A	OB	dalla lavur schubergiar
1	А	AD	Andri grescha che cuort avon la fin dalla lavur sto el savens
			schubergiar il plantschiu.
1	В	SU	Andri smina ch'el sto savens schubergiar il plantschiu cuort
			avon la fin dalla lavur.
2	В	OB	Andri smina ch'il plantschiu sto el savens cuort avon la fin
			dalla lavur schubergiar.
3	В	AD	Andri smina che cuort avon la fin dalla lavur sto el savens
9	G	OLI	schubergiar il plantschiu.
3	С	SU	Andri impedescha ch'el sto savens schubergiar il plantschiu
1	С	OP	Andri impedeseba ch'il plantachiu sta al sevens quert aven la
T	U	OB	fin dalla lavur schubergiar
2	$\mathbf{C}$	AD	Andri impedescha che cuort avon la fin dalla lavur sto el
-	e		savens schubergiar il plantschiu.
2	D	SU	Andri supporta ch'el sto savens schubergiar il plantschiu cuort
			avon la fin dalla lavur.
3	D	OB	Andri supporta ch'il plantschiu sto el savens cuort avon la fin
			dalla lavur schubergiar.
1	D	AD	Andri supporta che cuort avon la fin dalla lavur sto el savens
			schubergiar il plantschiu.
1	Ε	SU	Andri capescha ch'el sto savens schubergiar il plantschiu cuort
0	Б	OD	avon la fin dalla lavur.
2	E	OB	Andri capescha ch'il plantschiu sto el savens cuort avon la fin
9	F		dalla lavur schubergiar.
3	E	AD	Andri capescha che cuort avon la lin dana lavur sto el savens
3	Δ	SII	Cada declara ch'alla ha jor buca schuborgiau la casa
0 1	$\Delta$	OB	Gada declara che la casa ha alla ier buca schubergiau la casa.
$\frac{1}{2}$	Δ	AD	Gada declara che la casa na cha lei buca schubergiau.
$\frac{2}{2}$	B	SU	Gada schazegia ch'ella ha jer buca schubergiau la casa.
3	B	OB	Gada schazegia che la casa ha ella ier buca schubergiau
1	R		Gada schazegia ch'ier ha ella huca schubergiau la casa
1 1	C	SII	Gada dubitescha ch'alla ha jer buca schubergiau la casa.
1 9	C	OR	Gada dubitescha che la casa ha ella ier buca schubergiau
4	$\cup$	UD.	Gada dubitescha ene la casa na ena lei buca senubergiau.

3	С	AD	Gada dubitescha ch'ier ha ella buca schubergiau la casa.
3	D	SU	Gada deplora ch'ella ha ier buca schubergiau la casa.
1	D	OB	Gada deplora che la casa ha ella ier buca schubergiau.
2	D	AD	Gada deplora ch'ier ha ella buca schubergiau la casa.
2	$\mathbf{E}$	SU	Gada auda ch'ella ha ier buca schubergiau la casa.
3	Е	OB	Gada auda che la casa ha ella ier buca schubergiau.
1	Е	AD	Gada auda ch'ier ha ella buca schubergiau la casa.
1	А	SU	Reto pretenda ch'el ha buca sittau ier il capricorn.
2	А	OB	Reto pretenda ch'il capricorn ha el ier buca sittau.
3	А	AD	Reto pretenda ch'ier ha el il capricorn buca sittau.
3	В	SU	Reto crei ch'el ha buca sittau ier il capricorn.
1	В	OB	Reto crei ch'il capricorn ha el ier buca sittau.
2	В	AD	Reto crei ch'ier ha el il capricorn buca sittau.
2	С	SU	Reto dementescha ch'el ha buca sittau ier il capricorn.
3	С	OB	Reto dementescha ch'il capricorn ha el ier buca sittau.
1	С	AD	Reto dementescha ch'ier ha el il capricorn buca sittau.
1	D	SU	Reto accepta ch'el ha buca sittau ier il capricorn.
2	D	OB	Reto accepta ch'il capricorn ha el ier buca sittau.
3	D	AD	Reto accepta ch'ier ha el il capricorn buca sittau.
3	Е	SU	Reto vesa ch'el ha buca sittau ier il capricorn.
1	Е	OB	Reto vesa ch'il capricorn ha el ier buca sittau.
2	Ē	AD	Reto vesa ch'ier ha el il capricorn buca sittau.
2	Ā	SU	Flurina rispunda ch'ella organisescha quest onn buca la fiasta.
3	A	OB	Flurina rispunda che la fiasta organisescha ella quest onn
0		02	buca.
1	А	AD	Flurina rispunda che quest onn organisescha ella buca la
-			fiasta.
1	В	SU	Flurina manegia ch'ella organisescha quest onn buca la fiasta.
2	B	OB	Flurina manegia che la fiasta organisescha ella quest onn buca.
3	B	AD	Flurina manegia che quest onn organisescha ella buca la fiasta.
3	Ē	SU	Flurina snega ch'ella organisescha quest onn buca la fiasta.
1	Č	OB	Flurina snega che la fiasta organisescha ella quest onn buca.
2	Č	AD	Flurina snega che quest onn organisescha ella buca la fiasta.
2	D	SU	A Flurina plai ch'ella organisescha quest onn buca la fiasta
3	D	OB	A Flurina plai che la fiasta organisescha ella quest onn buca
1	D	AD	A Flurina plai che quest onn organisescha ella buca la fiasta
1	E	SU	Flurina discuviera ch'ella organisescha quest onn buca la
1	Ц	00	fiasta
2	$\mathbf{E}$	OB	Flurina discuviera che la fiasta organisescha ella quest onn
4	Ц	0D	buca
3	$\mathbf{E}$	AD	Flurina discuviera che quest onn organisescha ella buca la
0	Ы		fiasta
3	А	SU	Peider grescha ch'el astga la sera buca bandunar la casa
1	Δ	OR	Peider grescha che la casa astoa el la sera huca bandunar
т	11		i order Sresenta ene la casa asiga er la sera suca sandunar.

2	А	AD	Peider grescha che la sera astga el buca bandunar la casa.
2	В	SU	Peider smina ch'el astga la sera buca bandunar la casa.
3	В	OB	Peider smina che la casa astga el la sera buca bandunar.
1	В	AD	Peider smina che la sera astga el buca bandunar la casa.
1	$\mathbf{C}$	SU	Peider impedescha ch'el astga la sera buca bandunar la casa.
2	$\mathbf{C}$	OB	Peider impedescha che la casa astga el la sera buca bandunar.
3	$\mathbf{C}$	AD	Peider impedescha che la sera astga el buca bandunar la casa.
3	D	SU	Peider supporta ch'el astga la sera buca bandunar la casa.
1	D	OB	Peider supporta che la casa astga el la sera buca bandunar.
2	D	AD	Peider supporta che la sera astga el buca bandunar la casa.
2	Ε	SU	Peider capescha ch'el astga la sera buca bandunar la casa.
3	Ε	OB	Peider capescha che la casa astga el la sera buca bandunar.
1	Ε	AD	Peider capescha che la sera astga el buca bandunar la casa.

#### **Statistical analysis**



#### Acceptability judgements of stimuli sentences

Figure A1: Acceptability ratings of each list (1, 2, 3) for subject-initial (SU), object-initial (OB) and adjunct-initial (AD) embedded V2 clauses across predicate classes A to E

Init.	Predicate class				
const.	А	В	С	D	Е
SU	5.21(1.79)	4.92(2.16)	4.21 (2.22)	5.19(1.95)	4.77(2.03)
OB	2.11(1.24)	2.00(1.34)	1.81(1.02)	2.00(1.05)	1.60(0.79)
AD	3.58(2.18)	2.88(2.00)	2.27(1.28)	2.71(1.82)	2.96(1.92)

Table A1: Mean ratings over participants for each condition in List 1. The standard deviations are given in parentheses

Init.	Predicate class				
const.	А	В	С	D	Е
SU	5.25(1.84)	5.02(2.14)	4.58(1.89)	4.83(2.06)	5.42(2.01)
OB	2.75(1.73)	2.19(1.71)	1.52(0.92)	1.71(0.97)	1.65(1.14)
AD	3.25(2.01)	2.33(1.67)	2.44(1.58)	3.04(1.92)	2.06(1.60)

Table A2: Mean ratings over participants for each condition in List 2. The standard deviations are given in parentheses

Init.	Predicate class					
const.	А	В	С	D	Ε	
SU	5.31(2.17)	5.22(2.07)	4.73(2.10)	5.31(2.13)	3.84(2.38)	
OB	2.56(1.67)	2.29(1.58)	1.96(1.38)	2.04(1.33)	2.09(1.22)	
AD	3.62(2.24)	3.87(2.23)	2.78(1.66)	2.67(1.69)	3.24(2.08)	

Table A3: Mean ratings over participants for each condition in List 3. The standard deviations are given in parentheses