The effect of age of acquisition on L1-transfer from Russian to L2-German

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1. Introduction

Crosslinguistic influences play an important role in explaining initial patterns in L2 (or L3) learner varieties. If learners find patterns in the L2 (or L3) that are – at least superficially – similar to their L1, they start with the plausible hypothesis that these structures are the same in both languages (Andersen 1983; Müller 1998). This means that learners do not transfer L1 structures, if the difference to L2 is obvious in the input. For example, Santos & Flores (this volume?) show that adult German speaking learners of Portuguese do not transfer V2 to Portuguese, as there are no similar structures (Santos and Flores 2012). To determine whether two structures in language A and B are similar, we do not simply have to look at typological considerations, we have to take into account how learners perceive these two languages (Kellerman 1983). Following Kellerman’s idea of “psychotypology”, we have to look at the actual input learners receive, i.e. mostly oral language, and consider the frequency of certain constructions in the input.

Studies show that transfer is bidirectional and takes place in all multilingual settings of language acquisition: In language attrition, we find transfer from the dominant L2 to the non-dominant L1 (Flores 2010; Montrul 2010). In untutored second language acquisition, transfer can occur from L1 to L2 and L2 and from L2 to L3 (Rothman 2011). In mixed settings, we find transfer from untutored L1 or L2 acquisition to a foreign language (Long 2003), and also from a foreign language to an L2 or L3 (Bohnacker 2006).

In the generative literature, there are different perspectives to transfer and verb placement: The Full Transfer/Full Access hypothesis assumes that the initial state of L2 acquisition corresponds to the full syntactic structure transferred from L1 (Schwartz and Sprouse 1996). In this view, L2 learners have access to the structure-building principles of UG and the parameters have to be reset to the new parameters of L2. This view predicts that we find initial transfer in all domains of clause structure and that its impact diminishes gradually with time. The Minimal Trees hypothesis, on the other hand, allows for initial transfer only in the lexical domain and not in the functional domain (Vainikka and Young-Scholten 1994, 2011). In this view, lexical structures are built up first, and learners start with a VP that is inspired by their L1. Functional structures are added step by step by analyzing the input. According to the Fundamental Difference hypothesis (adult) L2 learning is fundamentally different from L1-acquisition and does not involve access to the principles and parameters of universal grammar at all (Bley-Vrom 1990; Clahsen and Penke 1992; Meisel 1997; Bley-Vroman 2009). Adult L2 learners use general problem solving strategies (as opposed to the language acquisition device), and they may or may not transfer structures from L1. In this view, transfer is optional, dependent on individual factors such as knowledge and awareness of L1.

Earlier studies on verb placement in L2 German show that learners speaking Romance languages transfer the SVO-property of their L1 to their initial German varieties (Clahsen, Meisel, and Pienemann 1983; Müller 1998). In contrast to SVO languages as French or English, word order is quite free in Russian. It is largely determined by information structure. Nevertheless, Russian is often classified as an SVO-language, as SVO is both, the most frequent and the neutral word order (Timberlake 2004; Bailyn 2012; Siewierska and Uhlflová 1997). In embedded clauses the word order is largely the same as in main clauses, but shows less word order variation (Bailyn 2012).

German on the other hand is classified as a V2-language with SOV base order. SOV-orders are typical of embedded clauses, but OV-orders also show up in main clauses with periphrastic verb constructions, as the German VP is clearly head-final. Nevertheless, due to the V2-constraint, main clauses frequently display SVO-orders, as the finite verb has to move to the second position of the clause. A useful theory-neutral representation of the German clause structure is the Topological Model (Höhle 1986; Drach 1937; Wöllstein-Leisten et al. 1997; DUDEN 2006): The finite and infinite verb form a so-called Sentence Bracket that is preceded by the Prefield and embraces the Middle Field. The Left Bracket contains the finite verb in main clauses and the complementizer in embedded clauses. The Right Bracket hosts the infinite verb and in embedded clauses also the finite verb. Any constituent can be fronted to the Prefield, depending on discourse context and information structure, but due to the V2-constraint it can be only one. If this constituent is a non-subject, e.g. an adverbal phrase or object, inversion of the subject and the verb must take place, resulting in a XVS structure. Table 1 exemplifies the Topological Model for the German clause “(that/because) Petra reads/has read a story today”: 
Table 1: The Topological Model for German

<table>
<thead>
<tr>
<th>clause</th>
<th>word order</th>
<th>Prefield (Spec CP)</th>
<th>Left Bracket (C°)</th>
<th>Middle Field</th>
<th>Right Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>main declarative</td>
<td>V2 = “SVO”</td>
<td>Petra</td>
<td>liest</td>
<td>heute eine Geschichte.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V2 = SV+OV</td>
<td>Petra</td>
<td>hat</td>
<td>heute eine Geschichte</td>
<td>gelesen.</td>
</tr>
<tr>
<td></td>
<td>V2 = XVS+OV</td>
<td>Heute</td>
<td>hat</td>
<td>Petra eine Geschichte</td>
<td>gelesen.</td>
</tr>
<tr>
<td>embedded</td>
<td>VE = SOV</td>
<td>--</td>
<td>dass / weil</td>
<td>Petra heute eine Geschichte</td>
<td>gelesen hat</td>
</tr>
</tbody>
</table>

This short overview already suggests that the superficial similarities of Russian and German word order might mislead L2 learners of German with L1 Russian to assume that both are SVO-languages. This assumption might be strengthened even further, if they have already learned English as a foreign language. And indeed, Haberzetl shows that Russian learners of German start out with target-like SVO-structures, but take some time to discover the underlying structure of German. This is different for learners with L1 Turkish, an SOV-language, who take a more direct route: They may produce more non-target-like structures in the beginning, but they start out with the right underlying SOV-structure (Haberzetl 2005).

Usually, L2 learners of different ages are divided into two groups, based on the order of acquisition: Early L2 learners with first exposure at age 3 to 4, who acquire the L2 very much like an L1, and late L2 learners, who acquire it in a different way than L1 learners (Rothweiler 2006; Meisel 2009; Tracy and Thoma 2009). In a ground-breaking study Meisel, Clahsen & Pienemann showed that adults acquire German verb placement in roughly the following order (Meisel, Clahsen, and Pienemann 1981): Adult learners start out with SVO-orders, then they expand these simple clauses with fronted adverbs, yielding non-target-like V3-orders. Then they acquire the correct OV-order and the Sentence Bracket (XV). Only then they acquire inversion (V2) and at last verb placement in embedded clauses (VE). This order of acquisition has been corroborated in many different studies. Here I give a summary using my own labels:

(1) order of acquisition in L2 German by adult learners


Comparing different longitudinal studies on the acquisition of verb placement in German, we can conclude that early L1 learners (up to age 4) acquire verb placement more in the fashion of L1 learners (Kostyuk 2005; Tracy and Thoma 2009; Şenyıldız 2010), whereas older L2 learners rather follow the order in (1) (Müller 1998; Haberzetl 2005; Ahrenholz). But there are important differences between child, adolescent and adult learners, most notably differences in rate (Bast 2003; Dimroth 2008; Pagonis 2009; Czinglar in press). All late learners of German start out with word order patterns influenced by their L1. But how long they adhere to their initial hypotheses may depend on many factors, such as age of exposure, amount and quality of input and motivation. To find out more about what learners do, we have to look at longitudinal corpora of very comparable learners.

In this study, I will present longitudinal data comparing the untutored L2 acquisition of German in two learners with L1 Russian, who grow up together as half-sisters. They mainly differ in age of exposure: Nastja started to acquire German before puberty and her older sister Dasha after puberty (see section 2). As usual some properties co-vary with age, e.g. only the older sister has already learned English as a foreign language in school. By comparing their developmental paths, I will show that both learners transfer structures from their L1 Russian (and Dasha also possibly from English), but the extent to which they transfer is conditioned by two factors: age of exposure and the syntactic structures involved.
2. Methods and Materials

In this paper, I present new longitudinal data from two very comparable learners documented in the spontaneous speech corpus DaZ-AF⁴ (Czinglar in press; Dimroth 2008; Pagonis 2009; Bast 2003). The half-sisters Nastja and Dasha grow up in a highly educated family living together with their mother and their grandparents in St. Petersburg. Nastja is 8;7 and Dasha is 14;2 years old, when they arrive in Germany with their mother. They live in Cologne for one and a half years, where they continue to speak Russian as their family language and attend a Russian school once a week. Both sisters learn German for only 8 hours shortly before their departure to Germany. Apart from this, they do not attend any courses for German as a foreign/second language, but immediately start to attend a regular German school. Regarding their socio-economic status, first language and input the two learners are very well comparable.

But of course, there are some age-specific and individual differences: In her St. Petersburg school, Dasha has already learned English as her first foreign language, and was able to practice it on several trips to the USA to visit her father. For her younger sister, German is her first second language. Also their German input varies according to school type: For Nastja who attends the 2nd grade of elementary school language input is likely to be less abstract and complex than for her older sister attending the 9th grade of high school. The simpler input might foster her acquisition of German. Also, Nastja has a higher motivation to learn German than her older sister: She does not already have a lingua franca at her disposal and she is less aware of the temporary nature of their stay in Germany. In addition, she is less attached to her friends and her past in St. Petersburg and she is faster and more willing to make new German-speaking friends. And last but not least, the marks Nastja is assigned in elementary school are relevant for her further school career in St. Petersburg, whereas it is success in the Russian school that counts for Dasha. The most important similarities and differences of the two learners are summarized in Table 2.

![Table 2: The two learners of the DaZ-AF-corpus](image)

Both learners are recorded weekly, often on the same day, during separate sessions in spontaneous interaction with a native speaker, often the same for both of them. For this study, 21 parallel recordings each of 60 minutes length were selected per learner. The recordings cover the period from the 2nd to the 18th month of exposure (ME), before that the relevant verbal structures are not yet used. The first four months are more densely documented than the rest to obtain enough data for comparison. The recordings can be pooled to 12 months, but not every month of exposure is covered by a recording. The transcriptions of the DaZ-AF-corpus comply with the standards of the CHAT-transcription format of the CHILDES system (MacWhinney 2000). The transcriptions of this subcorpus were double-checked with the recordings and recoded for a clause-based analysis. Table 3 gives an overview of the subcorpus used for this study.

![Table 3: Parts of DaZ-AF-corpus coded for this study](image)
The overview in Table 3 which comprises all utterances shows that the younger learner Nastja (NAS) speaks a lot more in the same time and produces longer sentences (MLU in words, calculated over the main tier). In these CHAT-transcripts all sentences containing a verb form were coded for verb placement. Utterances which are unintelligible or not spontaneously produced such as repetitions, imitations and read passages were excluded just like incomplete sentences lacking important material, e.g. a part of the verb. All main tiers containing a verb code were extracted to Excel, where the constituents were coded in detail for morphosyntactic, lexical and other properties.

In total 10,487 clauses containing verb forms (matrix and embedded clauses) are coded together for both learners. 25% of these clauses are excluded from all further analyses, because they might be prefabricated chunks containing a subject and a finite verb, such as *ich weiß nicht* “I don’t know”, *weißt du* “(do) you know?”, *es gibt/gibt es* “there is (exist.)”, *da ist* “there is (loc.)”, *das ist* “this is” and *ich glaube* “I think”. Interrogative and imperative clauses make up about 10% of all main clauses and are produced mostly with correct word order. For verb placement, only main clause declaratives and embedded clauses are analyzed, if they contain a verb form and an overt subject. For the analysis of SVO, V2 and inversion in German, clauses containing a copula (and a non-verbal predicate) were excluded, as they might have a different clause structure altogether. Also, it is sometimes difficult to distinguish between subject and predicate, which is necessary to correctly identify inversion structures. For the analysis of verb position in embedded clauses, copular structures are included, but infinite embedded clauses are excluded. Also excluded are clauses embedded under bridge verbs (like *sagen* “say” or *denken* “think”), which constitute a hybrid category between main and embedded clauses in German.

The remarkable size of the corpus ensures that there are enough clauses left for reasonable comparison after excluding different clause types. In addition, it makes it possible to apply Brown’s acquisition criterion of 90% correctness in at least five obligatory contexts (Brown 1973). In addition, I will use the threshold of 50% correctness to determine the starting point of acquisition, i.e. structures are distributed above chance level. To compare the developmental paths of the two learners, I conducted a repeated measures t-test, using only recordings with at least ten obligatory contexts (Czinglar in press).

### 3. Results

In this section, I will introduce the results of my empirical study in the light of the transfer hypothesis. I will present data from four different configurations that are compatible with the transfer hypothesis: The orders SVO and OVS are transferred from Russian main clauses and VO is transferred from the Russian VP. Finally, the fact that Russian embedded clauses display the same word order as main clauses is transferred to L2 German. In accordance with Andersen’s principle of “transfer to somewhere” and Kellerman’s concept of “psychotypology”, I look out for similar strut-
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features in both languages that might mislead learners and argue on the basis of frequency of occurrence (Andersen 1983; Kellerman 1983).

Transfer I: The SVO-Hypothesis in the Main Clause

In contrast to German, word order in Russian declarative main clauses is free, i.e. all permutations in (2) are theoretically possible (Bailyn 2012, and references cited there; Jakobson 1963):

(2) SVO: Mal’čik čitajut knigi.
SOV: Mal’čiki knigi čitajut.
OSV: Knigi mal’čiki čitajut.
OVS: Knigi čitajut mal’čiki.
VSO: Čitajut mal’čiki knigi.
VOS: Čitajut knigi mal’čiki.

„Boys read books.“

Although Russian word order is in principle free, not every order is possible in every context, i.e. word order is driven by information structure: For example, given information (theme) usually precedes new information (rheme) (Bailyn 2012; Siewierska and Uhlířová 1997). As there are no definite determiners in Russian, word order is one means to code definiteness. There is an ongoing debate about whether a basic word order can be determined for Russian, but I will follow Bailyn’s (2012) detailed syntactic argumentation in favor of a basic SVO-order, from which the other orders are derived. His less theoretical arguments include the fact that SVO is the unmarked word order, which can be used in out-of-the-blue contexts, i.e. sentences without a theme. Example (3) represents an out-of-a-blue-context, as (3) can be used as an answer to the question “What happened?”:

(3) SVO: Segodnj glava gosudarstva podpišet utočnennyy bjudžet na 2011.
[head of state]-S will-sign-V [detailed budget]-O for 2011
„Today the Prime Minister will sign (into law) a detailed budget for 2011.“

That Russian has free word order does not entail that it is a non-configurational language without hierarchical structures (also word order is more restricted within NP than within the clause). It is not the superficial linear order, but the underlying hierarchical structures that determine e.g. what is a possible antecedent for a reflexive possessive pronoun (Bailyn 2012): The antecedent (Ivan) does not have to precede the anaphor (svuj) linearly in (4)a to be able to bind it, it just has to be in a structurally higher position. The nominative position (SpecIP) is higher than the accusative position in an underlying SVO structure, even though the accusative has been moved to a position preceding the subject in the derived word order:

(4) a. Svoju daču Ivan ljubit.
[self’s house]-ACC Ivan-NOM loves „His country house, Ivan loves.”

b. *Svoj dom volnuet Ivana.
[self’s house ]-NOM worries Ivan-ACC „His house worries Ivan.“

These binding data can be easily explained by assuming a basic SVO-order for Russian, from which other orders such as (4)a are derived. In addition, there is a special intonational contour for neutral word order, which is only possible for SVO-orders (Bailyn 2012). Note though, that SVO is the neutral word order only for transitive verbs, for intransitive verbs it is VS and not SV (Bailyn 2012):

(5) VS: Včera sostojalos’ sobranie.
yesterday took-place meeting-NOM „A meeting took place yesterday.“

Beside these theoretical arguments, there are also empirical arguments for a basic SVO-order: There is a consensus in the literature that SVO is the statistically dominant word order with transitive verbs in Russian (Bivon 1971; Bailyn 2012; Timberlake 2004), and in all other Slavic languages (Siewierska and Uhlířová 1997). Here are some results of different corpus studies, alas only from corpora of written language: SVO amounts to 79% of all transitive verbs in Bivon’s study of Russian, while OVS only reaches 11%, OSV 4% and all other permutations 1% each (Bivon 1971).
In Timberlake’s corpus of Russian SVO amounts to 46% which is less but still represents by far the most frequent pattern (Timberlake 2004). In Polish, 69% of all transitive verbs and 15% of all verbs occur in SVO order (Siewierska and Uhlířová 1997). In Bivon’s study, the order SV is three times more frequent than other orders, and even 15 times more frequent than other orders if the subject is a pronoun (Bivon 1971).

If we compare these frequencies to German declarative main clauses, we find that SV-orders are by far the most frequent pattern in German, too. In an extensive corpus of spontaneous spoken dialogues, the Tübingen Treebank of Spoken German (TüBa-D/S), the order is SV in 50.3% of all main clauses (Hinrichs and Kübler 2005). Due to the V2-constraint there is only one other legitimate order: XVS, where X stands for different non-subject constituents in the Prefield position (sentential modifiers, verbal modifiers, objects etc.). The most frequent non-subject Prefield elements are sentential modifiers (25.5% of all sentences in the spoken German corpus), which are almost exclusively realized as adverbial phrases. The most frequent sentential adverbs in the Prefield are dann “then”, deshalb “therefore” and also “thus” (Hinrichs and Kübler 2005).

As SV-orders are by far the most frequent, it would not be surprising if Russian learners of German adopt the initial hypothesis that German is an SVO-language very much like Russian. For the older learner Dasha this hypothesis might be even stronger, as she already speaks a strict SVO-language (English). The initial SVO-Hypothesis yields positive transfer for simple SVO-sentences and negative transfer for SVO-sentences with fronted adverbs, as these induce inversion in German:

(6) positive transfer: SVO = V2
a. RU: Ivan smotrit televizor.
   b. EN: Ivan watches TV.
   c. GE: Ivan sieht fern.9

(7) negative transfer: AdvSVO = V310
a. RU: Potom/ Segodnja Ivan smotrit televizor.
   b. EN: Then/Today Ivan watches TV.
   c. GE: *Dann/Heute Ivan sieht fern.

As predicted by the SVO-Hypothesis, the vast majority of declarative main clauses (obligatory V2-contexts) are realized with SV(O)-order. In addition, there are ungrammatical V3-orders, especially for the older learner. But both learners also produce a fair amount of V2-clauses with inversion (XVS):

<table>
<thead>
<tr>
<th>V1 (*)</th>
<th>Dasha/DAS (14;2)</th>
<th>Nastja/NAS (8;7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>0.93%</td>
<td>0.43%</td>
</tr>
<tr>
<td>V2 = SV(O)</td>
<td>1135</td>
<td>1589</td>
</tr>
<tr>
<td></td>
<td>65.76%</td>
<td>68.11%</td>
</tr>
<tr>
<td>V2 = XVS</td>
<td>371</td>
<td>611</td>
</tr>
<tr>
<td></td>
<td>21.49%</td>
<td>26.19%</td>
</tr>
<tr>
<td>V3 (*)</td>
<td>204</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>11.82%</td>
<td>5.27%</td>
</tr>
<tr>
<td>V2-contexts</td>
<td>1726</td>
<td>2333</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 4: Verb Placement in V2-Contexts

Typical examples of the three verb placement patterns are in (8) to (10). Note that it is no coincidence that all finite verbs are indeed finite and show correct agreement with the subject: Surprisingly, both learners hardly produce any root infinitives, which are typical of L1- and L2-acquisition in German (Wexler 1994; Prévost and White 2000; Philips 2010). There are only 28 infinitival forms that are combined with an overt subject (which is not the 1st or 2nd person plural) in the whole corpus. Because they were so few, root infinitives were not analyzed as a category in its own right, but as agreement errors. Nonetheless, both learners produce few agreement errors, from the beginning on their error rates are below 10%, which suggests that they acquire subject-verb-agreement unusually fast.

(8) SV(O) = V2
a. und # tamagochi lebt nicht ein tag.
   and Tamagotchi lives not one day “And Tamagochi does not live a day.” ME 02 NAS-07.cha
b. ja ich habe das gesehen.
   yes I have this seen “Yes, I have seen that.” ME 05 DAS-18.cha
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(9) AdvSV(O)= V3 (*)
   a. jetzt ich kann spielen.  
      now I can play             ME 02      DAS-06.cha
      “Now I can play.”
   b. und dann machst du apfelsaft.  
      and then you make apple juice ME 05      NAS-17.cha
      “And then you make apple juice.”

(10) XVS = V2 plus Inversion
   a. so, jetzt kannst du deine wohnung beschreiben.  
      so, now can you your flat describe ME 03      DAS-09.cha
      “So, now you can describe your flat.”
   b. und dann kommt die Dascha.  
      and then comes the Dasha ME 03      NAS-10.cha
      “And then Dasha comes.”

Both learners start out with SV(O) and ungrammatical V3-orders, sentences with V2-inversion (XVS) are used from the third month of exposure (ME) onwards. One month later, the younger learner NAS already uses more XVS-structures, while this takes more than six months for the older learner DAS. Figure 1 shows the development of verb placement in V2-contexts (for missing ME a mean value was calculated):

Figure 1: Development of Verb Placement in V2-Contexts

The V2-constraint is obeyed in both SV(O)- and XVS-orders, but because of positive transfer of SV(O) from Russian only XVS can be used as an indicator of whether V2 has been acquired or not. The rate of inversion indicates how many obligatory inversion contexts were realized with inversion as opposed to V3. An obligatory inversion context is a sentence, in which a non-subject element (adverb, object or other) has been fronted to the Prefield. The most frequent Prefield elements are dann “then”, das “that”, da “there” and jetzt “now” – together they constitute more than half of all obligatory inversion contexts (N = 553 for DAS/14 and N = 722 for NAS/8), the rest being other words, phrases or sentences. In Figure 2 the correctness rate of the two learners is compared (for missing ME a mean value was calculated):
Both learning paths look quite similar: Correctness rates of DAS (M = 66, SD = 20.46) and NAS (M = 83.98, SD = 20.38) do not differ significantly, two-sample t(20) = -2.06, p = .52 (for both learners only 11 ME contained at least 10 obligatory inversion contexts). Nevertheless, there is a difference in speed: The younger learner starts to acquire inversion in the 4th month of exposure (50% threshold) and only takes four months to reach the 90% threshold, whereas the older learner starts two months later and does not reach a stable state for the acquisition of V2 at all. The order of acquisition is the same for both learners: They both start out with SV(O), also producing ungrammatical V3 in the case of Adv-SV(O), and gradually acquire inversion, i.e. the V2-constraint. But in contrast to her younger sister, the acquisition process of DAS takes considerably longer, and she does not fully acquire V2 during the observation period.

**Transfer II: The OVS-Hypothesis in the Main Clause**

For both Dasha and Nastja there is one context of inversion that does not seem to pose a lot of problems: If an accusative or dative object NP is fronted to the Prefield, they almost always correctly apply the inversion rule. In Russian, fronted objects have two options: They can precede SVO (as in topicalization constructions in English), but they can also appear in OVS-order, causing inversion of verb and subject (this is not possible in English):

(11) fronted object = OSV = V3
   a. RU: Generalov ja nenavīžu.
   b. EN: Generals, I hate.
   c. GE: *Generäle ich hasse.

(12) fronted object = OVS = inversion
   a. RU: Knigu kupil brat.
   c. GE: Das Buch kaufte mein Bruder.

OVS-structures in Russian are mainly used with rhematic subjects: (12)a. results from the application of the information structure rule that thematic information should precede rhematic information. Its meaning can be reformulated as „It was my brother, who bought a/the book.” (Bailyn 2012). Interestingly, OVS is a lot more frequent than OSV: Recall that transitive verbs mostly appear in SVO-order (79%) in Bivon’s corpus, but OVS ranges right after SVO with 11%, whereas OSV only shows up in 4% of the cases (Bivon 1971). The proportions are quite similar in Timberlake’s corpus: 49% SVO, 14% OVS und 1.7% OSV (Timberlake 2004).
In the corpus of spoken German (TüBa-D/S) only 5.9% of all sentences have accusative objects in the Prefield, dative objects are not even mentioned (Hinrichs and Kübler 2005). This is quite different with this learner corpus: In more than 50% of all V2-contexts we find sentential (and other kinds of) adverbs in the Prefield, in almost 25% we find topicalized accusative and dative objects (pronouns as well as lexical NPs) and the rest are other constituents such as PPs, CPs (also object clauses) and other XPs:

<table>
<thead>
<tr>
<th>X in Prefield</th>
<th>Dasha/DAS (14;2)</th>
<th>Nastja/NAS (8;7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V2 = XVS</td>
<td>V3 = XSV (*)</td>
</tr>
<tr>
<td>Adverb</td>
<td>193</td>
<td>107</td>
</tr>
<tr>
<td>Object (ACC, DAT)</td>
<td>136</td>
<td>1</td>
</tr>
<tr>
<td>Other (PP, CP, XP)</td>
<td>42</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>371</td>
<td>182</td>
</tr>
</tbody>
</table>

As we can see from Table 5, object NPs are topicalized to the Prefield almost exclusively in inversion structures (V2 = XVS): This is the case for 98.59% of Dasha’s and for 93.12% of Nastja’s topicalized objects. Here are some examples with topicalized objects, (13c). is one of the scarce examples with V3-order:

(13) Topicalized Objects (V2 and V3)

a. fussboden haben wir diese. ME 03 DAS-10.cha
   “This is our floor.”

b. das kann ich lesen. ME 09 DAS-32.cha
   “This, I can read.”

c. oh sprache ich hasse. ME 03 NAS-11.cha
   “Oh, language, I hate.”

d. mir gefällt das vor allem nicht so sehr. ME 11 NAS-37.cha
   “Primarily I don’t like this too much.”

To conclude, both learners acquire V2-inversion-structures much faster with topicalized objects than with fronted adverbs. This is in line with the Transfer Hypothesis, as OVS-orders are quite frequent in Russian and can be easily transferred to German. Interestingly, again the transfer seems to be stronger for the older learner, here resulting in even more correct topicalization structures.

Transfer III: The Head-initial-VP-Hypothesis (VO)

Up to now, we focused on the position of the finite verb, now let’s look at the infinite verb in the main clause: Although Russian is a language with free word order, it is a configurationally language with a head-initial VP, much like English. German in contrast has a head-final VP. The VO-property of Russian can be seen in the following examples with a fronted VP-constituent made up by an infinite verb (gerund) and its complement (example from (Isačenko 1966), cited from (Bailyn 2012)):

(14) a. Vypolnil robaut, Sereža axnul. ME 03 DAS-10.cha
   [fulfilled work-ACC]GERUND Seriozha-NOM sighed „Having done his work, Seriozha sighed.”

b. *Robaut vypolnil, Sereža axnul.
   [work-ACC fulfilled]GERUND Seriozha-NOM sighed

The infinite verb must precede its complement, yielding a head-initial VP. VP-modifiers such as “often” can appear to the left (or to the right) of the head-initial VP in Russian (and in English), but they may not intervene between V and its complement, at least not with neutral discourse status and neutral intonation (Bailyn 2012). This is the opposite for German: The preferred position of oft “often” is exactly between the finite verb (which has been fronted to the Left Bracket/C") and the VP. Due to the V2-constraint it is completely ruled out between the subject and the finite verb:
The VO-property of Russian can also be witnessed with the analytical auxiliary *budet* ‘will’: In (16) the VP is in base position and the infinite verb “watch” precedes the accusative object, and the same is true for English (Bailyn 2012). But in the German translation (16)c the infinite part of the verb follows the particle (compare the order of the verb and the particle in (6)c above), because the VP in German is head-final:

(16) a. RU: Ivan *budet* smotret’ televizor.
   b. EN: Ivan will watch TV.
   c. GE: Ivan *wird* fernsehen.

In (17) the contrast between Russian and English (SVO) and German (SOV) becomes clear. In Russian and in German, it is possible to topicalize an infinite VP to clause initial position (showing again that the VP is a constituent), preserving the base order in the VP as in (18). Note also the difference in placement of the finite verb, as topicalization induces obligatory inversion in German (V2), but not in Russian (SVO):

(17) a. RU: Ja ne *budu* [govorit’ po-francuzski vsě letο]_{VP}.
   b. EN: I will not [speak French all summer]_{VP}.
   c. GE: Ich werde nicht [den ganzen Sommer Französisch sprechen]_{VP}.

As mentioned in the introduction, the Topological Model of the German clause pictures the finite und infinite position of the verb as a bracket that holds the sentence together. If the Left and the Right Bracket are both filled (in the case of auxiliaries, modal verbs and particle verbs) it embraces the Middlefield. Of course, this is only visible if the Middlefield itself is filled, e.g. by objects, inverted subjects, adverbs, negation and other particles. Learners of German have to learn two things: First, the head-final property of the VP (OV), and second the Sentence Bracket across the Middlefield (XV). As the latter includes the former, I have collapsed them into OV/XV. Here are some examples from the learner corpus:

(19) Sentence Bracket (OV/XV)
    a. ich habe geige gespielt. “I played the violin.” ME 05 DAS-20.cha
    b. das kann ich nicht erklären. “This, I cannot explain.” ME 05 NAS-19.cha
    c. das sieht doch blöd aus. “This looks stupid.” ME 05 NAS-19.cha

Table 6 shows that both learners incorrectly use VO/VX-structures, but overall the Sentence Bracket is mostly realized correctly:

<table>
<thead>
<tr>
<th></th>
<th>Dasha/DAS (14;2)</th>
<th>Nastja/NAS (8;7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OV/XV correct</td>
<td>531 93.16%</td>
<td>820 94.80%</td>
</tr>
<tr>
<td>OV/XV incorrect</td>
<td>39 6.84%</td>
<td>45 5.20%</td>
</tr>
<tr>
<td>OV/XV contexts</td>
<td>570 100.00%</td>
<td>865 100.00%</td>
</tr>
</tbody>
</table>

This is remarkable, also because the category “OV/XV incorrect” also contains examples, where one part of the collapsed category is realized correctly, e.g. the OV-property may be correct, but the XV-property may be violated, as in example (20)b:
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(20) OV/XV incorrect
   a. meine musiklehrerin kann eh@fp sprechen russisch.  ME 02  NAS-05.cha
      my music-teacher can speak Russian
   b. man kann viele stadten macht kaputt.    ME 04  DAS-14.cha
      one can many cities make kaput “One can destroy many cities.”

To follow the development of the Sentence Bracket, a correctness rate for OV/XV-structures was calculated and compared for both learners in Figure 3 (for missing ME a mean value was calculated):

Figure 3: Correctness Rate of Sentence Bracket/OV in main clauses

![Graph showing OV/XV Rate](image)

Figure 3 shows that both learners follow exactly the same path: They both start out with incorrect VO- and VX-orders with infinite verbs, but after the 4th month of exposure they have both reached a correctness rate of over 90%. The OV/XV-rates of DAS (M = 91.12, SD = 11.17) and NAS (M = 94.18, SD = 7.27) do not differ significantly at all, two-sample t(21) = -.772, p = .449 (for NAS only 11 ME contained at least 10 obligatory inversion contexts). Interestingly, there is no difference with respect to speed of acquisition; both learners acquire the Sentence Bracket in German very quickly.

Transfer IV: The Embedded=Main Clause-Hypothesis

Subordinated clauses in Russian look like their English counterpart: They are introduced by a complementizer or subordinating conjunction and the neutral and most prominent word order pattern is SVO. This can be deduced from Bailyn’s observation, that the word order in embedded clauses is the same as in main clauses, only with less word order variation (Bailyn 2012). In German, there is a clear asymmetry between main and embedded clauses: In embedded clauses, the complementizer occupies the Left Bracket (C°) and the finite verb the Right Bracket, i.e. the position of the finite verb is at the end of the clause (VE). There is some degree of freedom with respect to the word order in the Middlefield (depending on information structure), but usually the subject comes first (SOV). In the following examples, Russian patterns with English (SVO) and contrasts with German (SOV), although the contrast is not visible if there is only a subject and a verb as in (22):
(21) declarative complement clause
   a. RU: Ja dumaju čto Ivan smotrit televizor.
   b. EN: I think that Ivan watches/is watching TV.
   c. GE: Ich glaube, dass Ivan fernsieht.

(22) interrogative complement clause
   a. RU: Nikto ne znaet gde ty rabataes.
   b. EN: Nobody knows where you work.
   c. GE: Niemand weiß, wo du arbeitest.

(23) interrogative adverbial clause
   a. RU: Saša napisal novuju pesnju kogda on vernulsja iz Tomska.
   b. EN: Sasha wrote a new song when he returned from Tomsk.
   c. GE: Sascha schrieb ein neues Lied, als er aus Tomsk zurueckkehrte.

(24) relative clauses
   a. RU: učebnik kotoryj potrjas ves’ mir
   b. EN: the textbook which shocked the entire world
   c. GE: das Lehrbuch, das die ganze Welt schockierte

Russian yes/no-questions are construed differently from English and German, but the subordinated version still mirrors the order in main clauses (V1 and the question particle li). In English and German direct yes/no-questions the finite verb is also in V1-position, but indirect questions are construed just like other embedded clauses:

(25) Yes/no questions (main and embedded)
   a. RU: Smotrit li Ivan televizor?
   a’. RU: Ja xotel uznat’ smotrit li Ivan televizor.
   b. EN: Is Ivan watching TV?
   b’. EN: I wanted to find out whether/if Ivan watches TV.
   c. GE: Sieht Ivan fern?
   c’. GE: Ich wollte herausfinden ob Ivan fernsieht.

Also in German not all embedded clauses show SOV-order: First of all, clauses embedded under bridge verbs like sagen “say”, glauben “believe” and denken “think” may appear without complementizer and in V2-order, just like in English. Because of their hybrid status between main and embedded clauses, these were excluded from the analysis altogether (see section 2). Second, one of the most frequent connective elements weil “because” optionally allows V2-order in spoken German. This has become a regional standard in spoken German, which has a high prestige and is thus widely used, even in formal contexts (Berend 2005). It is also used in written communication that makes use of the spoken registers such as SMS, chats and social media. The fact that there are embedded clauses with V2-order in the spoken input, supports the initial hypothesis of learners that the order in embedded clauses is the same as in main clauses. In the following, I will treat weil “because” to be ambiguous between a subordinating connective in the Left Bracket (on a par with wenn “if/when” and dass “that”) and a coordinating connective in the 0-Position of the Topological Model (on a par with denn “for (because)” and und “and”), as exemplified in Table 7 for the German clause “(because) Petra has read a story today”:

<table>
<thead>
<tr>
<th>Register</th>
<th>0-Position</th>
<th>Prefield (Spec CP)</th>
<th>Left Bracket (C°)</th>
<th>Middle Field</th>
<th>Right Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>written/spoken</td>
<td>denn</td>
<td>Petra</td>
<td>hat</td>
<td>heute eine Geschichte</td>
<td>gelesen</td>
</tr>
<tr>
<td>written/spoken</td>
<td>--</td>
<td>--</td>
<td>weil</td>
<td>Petra heute eine Geschichte</td>
<td>gelesen hat</td>
</tr>
<tr>
<td>only spoken</td>
<td>weil</td>
<td>Petra</td>
<td>hat</td>
<td>heute eine Geschichte</td>
<td>gelesen</td>
</tr>
</tbody>
</table>

Looking at the differences and similarities in verb placement between Russian and German, the Transfer Hypothesis predicts that our L2-learners start out with the hypothesis that the word order in embedded clauses mirrors that of main
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12 And in fact, they use the following basic types of embedded clauses: embedded clauses with target-like verb placement, either in verb-end-position (VE ok) or in V2-position e.g. with weil (V2 ok), embedded clauses with non-target-like V2-order, which I call “Pseudo-V2 (*)” and embedded clauses with the verb in some other position (including target-like as well as non-target-like structures):

Table 8: Verb Placement in Embedded Clauses

<table>
<thead>
<tr>
<th></th>
<th>Dasha/DAS (14:2)</th>
<th>Nastja/NAS (8:7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE (ok)</td>
<td>106</td>
<td>419</td>
</tr>
<tr>
<td></td>
<td>29.28%</td>
<td>68.13%</td>
</tr>
<tr>
<td>V2 (ok)</td>
<td>43</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>11.88%</td>
<td>11.54%</td>
</tr>
<tr>
<td>Pseudo-V2 (*)</td>
<td>187</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>51.66%</td>
<td>16.59%</td>
</tr>
<tr>
<td>other</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>7.18%</td>
<td>3.74%</td>
</tr>
<tr>
<td>total</td>
<td>362</td>
<td>615</td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

In Table 8 we see a striking difference between both learners regarding the amount of transferred pseudo-V2-structures in subordinate contexts: The older learner DAS uses this non-target-like pattern in more than half of her embedded clauses, while her younger sister only uses it in 16.59% of the cases.

(26) target-like VE in embedded clauses
   a. und wenn ich finger losmache, dann eh@fp schildhöte [: schildkröte]
      macht nochmal +//.
      and if/when I finger detach, then tortoise makes again +//
   b. ich habe es nicht gesehen, <weil es> [/] weil es ganz blöd aussieht.
      I have it not seen, because it very stupid (out-)looks
   c. ... schul(e)n, dass man hier also nicht sehr viel lernt.
      ... schools that one here prt not very much learns

(27) target-like V2 in embedded clauses (weil)
   a. und eh@fp der Marco ist doch # böse, weil die Heike war mit ihn.
      and (fp) the Marco is after all angry, because the Heike was with him
   b. weil er hat ein neu arbeit jetz(t).
      because he has a new work now

(28) non-target-like Pseudo-V2
   a. und wenn ich stehe auf link(s) auch.
      and if/when I stand on the left too
   b. meine mutter hat gesagt, dass er kann nicht sehr gut deutsch sprechen.
      my mother has said that he can not very well speak German
   c. wann ich war in Amerika, dann ich musst zwölf eh@fp Stunden flug.
      when I was in America/the US, then I must-PAST twelve hours fly

The first real embedded clauses appear in the 3rd month of exposure (ME). In the beginning, both learners only use the transferred pseudo-V2-order as in (28), then they start with target-like VE-structures and a little later with target-like embedded-V2-clauses introduced by weil. But Figure 4 shows that the development of verb placement in embedded clauses is quite different in the two learners: Whereas there is quite a steep and early rise of VE-order for the younger learner Nastja, Dasha prefers the transferred pseudo-V2-order for a long time.
Non-target-like pseudo-V2-orders show that the VE-property of embedded clauses has not yet been acquired. In Figure 5 the two learners are compared with respect to the rate of correctly realized VE-orders in VE-contexts (disregarding weil; for missing ME a mean value was calculated):

The acquisition paths of the two learners are quite different: The correctness rates of DAS (M = 30.84, SD = 25.32) and NAS (M = 79.22, SD = 26.0) differ significantly, two-sample t(19) = -4.312, p = .000 (for DAS only 10 and for NAS only 11 ME contained at least 10 obligatory inversion contexts). The younger learner starts to acquire VE before the 5th ME (50% threshold) and in the 9th ME she has acquired it (90% threshold). Her older sister Dasha reaches the 50% threshold after the 14th month of exposure and never reaches 90% correctness in the period of observation. Again, the order of acquisition is the same for both learners: They both start out with transferred pseudo-V2-orders and gradually acquire VE in embedded clauses. The younger learner acquires VE by the 9th ME, but the older learner DAS is much slower, she does not acquire VE at all during the observation period (18 months of exposure).
4. Discussion and Conclusions

Although verb placement is clearly different in Russian and German, there are certain similarities that lead learners to assume that German clause structure is similar to Russian. As predicted by the transfer hypothesis, both learners transfer the most frequent patterns of their L1 Russian to their learner varieties of German, yielding target-like as well as non-target-like (*) structures:

<table>
<thead>
<tr>
<th>L1 Russian = SVO</th>
<th>L2 German = SOV+V2</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive transfer</td>
<td>negative transfer</td>
</tr>
<tr>
<td>SV and SVO → SVO = subject-initial V2</td>
<td>X-SVO = V3 (*)</td>
</tr>
<tr>
<td>VO → VO with finite V (= SVO)</td>
<td>VO with infinite V (*)</td>
</tr>
<tr>
<td>OVS → OVS = object-initial V2</td>
<td>---</td>
</tr>
<tr>
<td>embedded = main → V2 with weil „because“ in embedded clauses</td>
<td>V2 in other embedded clauses (*)</td>
</tr>
</tbody>
</table>

But the fact that learners start out with SVO-structures need not necessarily be explained in terms of transfer. SVO could also be the neutral or unmarked order, which is acquired first, irrespective of word order regulations in the L1. This view is taken for example by Klein & Perdue, who adopt the concept of a Basic Variety, an early learner variety that every untutored learner goes through, whether or not his L1 is an SVO-language (Klein and Dimroth 2009; Klein and Perdue 1992, 1997). From a generative point of view, Platzack assumes that overt movement is more marked than covert movement, hence there is no movement in initial language acquisition, which also yields SVO-structures (Platzack 1996). The question whether initial SVO-structures arise because of L1-transfer or because they are less marked cannot be settled on the basis of this study. But the argument against L1-transfer is less straightforward for VO and it does not work at all for OVS-structures, as OS orders are certainly more marked than SO orders (Dressler 1994).

Both learners show the same order of acquisition: They start out with SVO- and non-target-like V3-orders with fronted adverbs in the main clause. In line with the transfer hypothesis, there are almost no V3-orders with fronted objects (OVS). First they acquire the OV/XV-property of German, then the V2-property with fronted adverbs and at last they start to acquire the VE-property of embedded clauses. As Table 10 shows, the acquisition sequence mirrors the one for adult learners in (1):

<table>
<thead>
<tr>
<th>Correctness Rate</th>
<th>Dasha/DAS (14;2)</th>
<th>Nastja/NAS (8;7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OV/XV in main clauses</td>
<td>&gt; 50%</td>
<td>&gt; 90%</td>
</tr>
<tr>
<td>V2/INV in main clauses</td>
<td>2. ME</td>
<td>4./5. ME</td>
</tr>
<tr>
<td>VE in embedded clauses</td>
<td>6. ME</td>
<td>16. ME</td>
</tr>
</tbody>
</table>

But there is a huge difference in rate of acquisition: Whereas the younger learner quickly replaces the non-target-like structures with target-like ones, the older learner retains the deviant pattern much longer. After 8 months, the younger learner Nastja has fully acquired V2 (inversion) in main clauses, and one month later VE in embedded clauses. The older learner Dasha only approximately acquires V2 after 16 months and does not fully acquire VE during the 18 months of observation. Interestingly though, there is no delay for the older learner in the case of the OV-property. OV is acquired equally fast by both learners after 4-5 months of exposure.

Interestingly, the younger learner starts to acquire the three constructions roughly at the same time and reaches the acquisition criterion (90% correct) within a few months. This suggests that she links the three verb placement properties in a systematic way. This is not exactly what the Fundamental Difference Hypothesis (Bley-Vroman 1990; Clahsen and Penke 1992; Meisel 1997; Bley-Vroman 2009) predicts: Instead of applying general problem solving
strategies, Nastja seems to build up the German clause structure in a very systematic way, albeit not in the same way as L1 children. Dasha, her older sister, does not acquire all properties simultaneously, but nevertheless she follows exactly the same path. Apart from the difference in rate (and the possibility of fossilization) there does not seem to be much individual variation. In my view, this picture is more compatible with the Full Access/Full Transfer (Schwartz and Sprouse 1996) or the Minimal Trees Hypothesis (Vainikka and Young-Scholten 1994, 2011). As the latter restricts transfer to the lexical domain and for verb placement, which only includes the OV-property, the other instances of transfer would have to be accounted for in a different way. That both learners also very quickly acquire finiteness and subject-verb agreement (Czinglar in press) can be construed as an argument in favor of the Full Access/Full Transfer Hypothesis. On the other hand, it is unclear, why it should take such a long time for the older learner to acquire VE, if the full CP-structure of German is available to her from the beginning.

Whereas early learners (age of exposure 3-4 years) do not seem to construct their hypotheses about German verb placement on the basis of their L1-knowledge, older L2 learners do. They show a different order of acquisition, depending on the properties of their L1. In contrast to order of acquisition, rate cannot be as easily compared across different subjects and studies, as there are many factors involved, such as differences in socio-economic background, input and motivation etc. Nevertheless, an overview of different studies on verb placement in German suggests that age of exposure negatively affects rate of acquisition (Czinglar in press). But the youngest learners are not always the fastest: Comparative studies on the rate of L1 and L2 acquisition show that 6-8 year-old L2 learners are very efficient learners. Not only are they young, but they are also cognitively mature and they have more language learning experience (Dimroth and Haberzettl 2012; Haberzettl et al. 2013).

The results of this longitudinal study on two very comparable learners corroborate the hypothesis that transfer is conditioned by age of acquisition: In contrast to early learners, they transfer from their L1 showing roughly the same order of acquisition than adults. But they differ with respect to rate of acquisition, as the older learner adheres to non-target-like structures transferred from her L1 much longer. It seems that L1 transfer is more robust for older learners than for younger ones. This is captured in (29):

\[ \text{(29) Generalization A: The robustness of L1 transfer increases with age of acquisition.} \]

The relationship between robustness of transfer and age of acquisition can be easily explained: For example, proponents of the Maturation Hypothesis (or the Critical Period Hypothesis) assume that the neurological structures used for grammatical representations need some time to mature. The earlier an L2 is acquired, the more learners profit from the plasticity of the brain. But this window of opportunity closes around puberty, at the latest (Long 1990; Hyltenstam and Abrahamsson 2003; DeKeyser 2011, and many others). When the relevant brain structures are less volatile, transfer becomes more robust. Alternatively, one could assume that the L1 grammar is more entrenched in older learners, because they have used their L1 for a longer time than younger learners. For the Entrenchment Hypothesis the longer period of language use is the central point, not the neurological development. The longer a person uses her L1 exclusively, the more robust will her L1 structures be when transferred to an L2. Although the two hypotheses differ with respect to the underlying cause of the age factor, both can explain the generalization formulated in (29).

There is an additional reason why L1 transfer is more robust for the older learner: Dasha already speaks English as a foreign language, which I have shown to be very similar to Russian in the relevant aspects of verb placement (except for OVS). Her knowledge about English might support her initial hypotheses about German, which makes it harder for her to abandon them in the light of new evidence than for her sister, who does not speak English. In general, the chance that learners have already acquired other languages on top of their L1 also increases with age.

The generalization on age and transfer in (29) would predict that older learners show more robust L1 transfer for all aspects of grammar. But surprisingly, not all aspects of verb placement are affected by age in the same way: There are no differences between the two learners with respect to OV/XV, small differences with respect to V2 and big differences with respect to VE. Interestingly, the differences between the two learners increase parallel to the order of acquisition for late learners mentioned in (1): OV before V2/inversion before VE (Meisel, Clahsen, and Pienemann 1981). This suggests that structures that are acquired late in the acquisition process show more robust transfer than structures that are acquired early.

In their Minimal Trees Hypothesis and in their Organic Grammar Framework, Vainikka and Young-Sholten (1994, 2001) maintain that structural representations are built up gradually during L2 acquisition. Each step in the acquisition sequence of German is associated with a new category: OV with a head-final VP, V2 with a head-initial FP/AGRP and VE with a head-initial CP and a head-final AGRP. In this view, structural complexity increases gradually with the acquisition process. This can be related to the robustness of transfer in the following way:

\[ \text{(30) Generalization B: The robustness of L1 transfer increases with structural complexity.} \]
Meisel, Clahsen et al. (1981) have shown that the developmental sequence in (1) can be construed as an implicational scale. This means that V2 can only be acquired after OV, and VE can only be acquired after V2 is fully acquired. As the older learner does not fully acquire V2 and inversion in the main clause, it is follows that her acquisition of VE in embedded clauses is even more delayed. As the generalizations in (29) and (30) are based only on two – albeit very comparable – subjects, they have to be tested with a wider range of subjects and age groups and also for different aspects of grammar. I’ll leave that for future research.

The results from this case study show that there is transfer from L1 to L2 and that its robustness is dependent on the age of exposure as well as the structural complexity of the constructions involved. Furthermore, they show that the simple distinction between early and late learners is not enough: There are important differences between early L2 learners (age of exposure 3–4 years) and all late learners in terms of order of acquisition. But there are also important differences between young school children (about 6–9 years) and adolescents (about 12-15 years) with respect to the rate of acquisition. Hence, a comprehensive explanation of the age factor in L2-acquisition needs to incorporate factors such as transfer and the complexity of the structures acquired.

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The effect of age of acquisition on L1-transfer from Russian to L2-German


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While writing this paper, the author was supported by the *Wiener Wissenschafts-, Forschungs- und Technologiefonds (WWTF)* within the framework of the Viennese Impulse Programme for the humanities, social and cultural science.

There are some complications here: First of all, in some constructions such as left dislocation and clauses introduced by *wenn-dann* “if-then”, there can be two elements in the Prefield, which has led researchers to assume an additional *Pre-Prefield (Vor-Vorfeld)*. As these constructions occur quite often in spoken language, they will most likely make it more difficult for learners to detect the V2-property of German. In addition, Müller has assembled many examples of (apparent) V3-structures in written texts (Müller 2005), but these mainly occur in newspaper articles and will most probably not constitute relevant input to L2 learners at the beginning.

I have adapted the labels from the original study to fit with the present article.

The DaZ-AF-corpus was collected under the direction of Ursula Stephany (University of Cologne) and transcribed, coded, and partly analyzed in the DFG project DaZ-AF, directed by Christine Dimroth (MPI Nijmegen) and Ursula Stephany (University of Cologne). DaZ-AF stands for *Deutsch als Zweitsprache – Altersfaktor* (German as a Second Language – Age Factor).

If not marked otherwise, Russian examples and their English translations are taken from Bailyn (2012), German translations are the author’s (CC).

He argues for example against (King 1995), who argues in favour of VSO as the basic order.

Although there are important word order differences between spontaneous dialogues and newspaper texts, they are basically the same as far as the prominence of SV-order is concerned: 52% of all sentences in the *Tübingen Treebank of Written German* (TüBaD/Z) show SV-order (Hinrichs and Kübler 2005). As the category “subject” includes nominal as well as clausal subjects, it is safe to assume that there will be considerably more subject clauses the written German corpus containing mostly newspaper articles.

In the written German corpus only 14.3% of the sentences start with a sentential modifier, and only half of them are realized as adverbial phrases, the rest being subordinate clauses and other elements (Hinrichs and Kübler 2005).

The German translation of “watch TV” does not involve a direct object, as this meaning is expressed using the particle verb *fernsehen*, literally translated as “far-watch”. But the finite part of the particle verb (*sehen* „watch”) moves to the left bracket/C° yielding a structure that looks very similar to English particle verbs (compare for example *He looked up.*)

Examples are from CC.

The fact that all these Prefield elements are deictic suggests that information structure plays an important role in inversion. Still, no specific pattern emerged from the data: Neither was a preference for either inversion or V3 found for a single element, nor could categories like given or new information predict verb placement.

Instead of assuming that learners transfer the (already acquired) German V2-structure of main to embedded clauses, one might also assume that learners transfer the SVO-structure from Russian embedded clauses to German. There is no conclusive evidence on this question, as there are too few data (Czinglar, in press #1643). But if we look at verb placement patterns in non-subject interrogative and relative clauses, most of them are modelled after their main clause counterparts in German. For example, the interrogative clause with V2 and inversion in a., which is only compatible with the *Main = Embedded Hypothesis*. Only few clauses seem to be modelled after Russian SVO clauses such as b.:

a. *NAS: ich weiss nicht, *was &m *wollte* ich fotografieren. ME 04 NAS-13.cha
   I know not, what wanted I to-photograph „I do not know what I wanted to take a photo of“

b. *DAS: und wir müssen das schreiben, *was *sie* hat gespielt. ME 05 DAS-20.cha
   and we must this write, what she has played „and we have to write, what she has played“