How to start a V2 declarative clause: Transfer of syntax vs. information structure in L2 German

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Abstract

This paper discusses V2 word order and information structure in Swedish, German and non-native German. Concentrating on the clause-initial position of V2 declaratives, the 'prefield', we investigate the extent of L1 transfer in a closely related L2. The prefield anchors the clause in discourse, and although almost any type of element can occur in this position, naturalistic text corpora of native Swedish and native German show distinct language-specific patterns. Certain types of elements are more common than others in clause-initial position, and their frequencies in Swedish differ substantially from German (subjects, fronted objects, certain adverbs). Nonnative cross-sectional production data from Swedish learners of German at beginner, intermediate and advanced levels are compared with native control data, matched for age and genre (Bohnacker 2005, 2006, Rosén 2006). The learners' V2 syntax is largely targetlike, but their beginnings of sentences are unidiomatic. They have problems with the language-specific linguistic means that have an impact on information structure: They overapply the Swedish principle of "rheme later" in their L2 German, indicating L1 transfer at the interface of syntax and discourse pragmatics, especially for structures that are frequent in the L1 (subject-initial and expletive-initial clauses, and constructions with så ('so') and object det ('it/that')).

1. Introduction

Much of the debate in second language (L2) acquisition theory concerns the extent to which the native language (L1) plays a role in the acquisition of a second or foreign language. The present paper aims to contribute to this debate by presenting new empirical data from a closely related language pair, Swedish and German, for the domains of syntax (word order) and information structure.

Certain approaches assume that the L1 grammar plays no role at the initial state of L2 acquisition, but that learners make use of a universal base or "canonical" word order (SVX) (e.g. Clahsen and Muysken 1986, Klein and Perdue 1992, Pienemann 1998). This predicts that L2 learners with

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different L1s acquiring the same L2 should show the same developmental sequence. For L2 German, the following universal path of grammatical development has been proposed (e.g. Pienemann 1998:116):

(1) Stage 1 words Stage 2 SVX
Stage 3 Adv-SVX
Stage 4 verb separation (SV_{finite}OV_{non-finite})
Stage 5 inversion (XVS)
Stage 6 V-end in subordinate clauses

However, this allegedly universal path of L2 grammar development has also been criticised: Whilst L1 Romance and L1 English speakers may exhibit the developmental sequence in (1) in their L2 German, L1 Turkish and L1 Korean learners of German clearly do not: they start producing OV_{nonfinite} right away, as shown by Schwartz and Sprouse (1994) and Vainikka and Young-Scholten (1994). Since Romance and English are VO languages, but Turkish and Korean are OV, the L1 grammar does appear to exert a crucial influence on the L2, such that L2ers with typologically different L1s acquiring the same L2 show different developmental sequences. Based on these findings, Schwartz and Sprouse (1994, 1996, 2000) developed a transfer model of L2 acquisition, according to which learners initially transfer their entire L1 syntax, lexical as well as functional categories, producing and processing L2 utterances through the L1 grammar. Only after this initial state may learners change their interlanguage syntax by abandoning L1 rules/constraints/parameter settings, acquiring new rules, constraints, and parameter settings, which may or may not be those of the target language, and eventually converge or not converge on a targetlike L2 grammar. Schwartz and Sprouse's model is well known, and its explicitness (full transfer) makes it easy to test against empirical data from beginning learners.

What about Swedish learners of German? Swedish is typologically, grammatically and lexically very close to German (with an estimated 80% of Swedish words being cognate with German). Syntactically, both Swedish and German adhere to the verb second (V2) constraint that requires the finite verb in declaratives to be the second constituent. In non-subject-initial main clauses, so-called "inversion" of the subject and the verb (XVS) is required, and V3 is generally ungrammatical (for exceptions see Bohnacker 2005:45-51).¹ The position to the left of the finite verb is

¹ Generative grammars typically model V2 as a syntactic double-movement transformation: leftward movement of the finite verb to a functional head position on the left sentence periphery, creating a V1 clause, plus movement of a constituent into the

called the 'prefield' (German *Vorfeld*, Swedish *fundament*, cf. e.g. Drach 1937:17-18, Reis 1980, Dürscheid 1989), which is also nearly always the clause-initial position.² In principle, the prefield in Swedish and German may be occupied by almost any type of constituent, irrespective of syntactic category, complexity and semantic function; what is fixed is the verb in second position.

Full transfer approaches would predict that Swedish learners of German should master V2 right away. However, Håkansson, Pienemann and Sayehli (2002) have claimed that Swedes in fact violate V2 in their L2 German, following the sequence in (1). Having long taught German at schools and universities in Sweden, we wanted to investigate this issue empirically for ourselves. In Bohnacker (2005, 2006) we showed that Swedes learning German productively use V2 in oral narratives already after 4 months of exposure, and these findings are summarised below. We also present new written data from Swedish beginning learners of German who have little difficulty with V2. We interpret these results as indicative of initial transfer of the V2 property from L1 Swedish to L2 German.

However, whilst learner productions may have targetlike word order (syntax), they are not necessarily adequate in the context they occur in. This brings us to the second, and major, aim of this paper, which is to investigate syntactically targetlike V2 clauses with regard to discourse-pragmatic (information-structural) adequacy. Rosén (2006) found that the very same Swedish learners of German that produce correct V2 clauses appear to be organising and structuring information in a way that native German readers and listeners find odd and unidiomatic. In a pilot study, she asked native speakers of German to assess advanced L2 productions, which they described as choppy, textually incoherent and simply as "it does not sound German". When asked to make the L2 texts "sound more German", native speakers unpromptedly homed in on the beginning of sentences and consistently changed them in certain ways.

Why would changing the beginnings of sentences make texts less

specifier position of that functional projection, often identified as CP (e.g. Grewendorf 1988:64-67, Dürscheid 1989). Alternatively, the prefield constituent is not moved but generated in that position. With the breaking-up of the CP domain into several functional projections in GB and Minimalism, models of where to locate that first constituent and the verb have multiplied. Here we concentrate on the linear order of constituents (SVX, V1 (= VSX), V2 (= XVS), V3 (= XSV, SXV)), since the findings to be reported on do not hinge on any specific structural account.

² We disregard coordinating conjunctions here, as they are not treated as clausal constituents, but as linking words with no influence on word-order. Utterance-initial elements separated by a pause or intonation break, e.g. left-dislocated constituents, vocatives and interjections, are not considered to be part of the prefield.

choppy and more German? The prefield is especially important for communication as it anchors the clause in discourse. At the inter-sentential level, the prefield contributes to textual coherence by linking up with preceding discourse; at the intra-sentential level, it often establishes the topic (i.e. what is being talked about), followed by the comment. Moreover, the prefield typically contains given information, the theme, i.e., an element of low informational value. New information, the so-called rheme, is usually provided later, after the finite verb in V2 clauses.³ Alternatively, the prefield can also be used to focus or contrast constituents.

By comparing native German and native Swedish corpora, we point out quantitative and qualitative differences in the way these two V2 languages make use of the prefield. For instance, Swedish appears to have a much stronger preference for "rheme later", where the prefield contains an element of no or low informational value (e.g. an expletive, or a thematic, i.e. known, element) and where rhematic (i.e. new) information is realised further to the right in the clause. These language-specific differences in information structure, we believe, lie at the heart of why native Germans change the beginnings of sentences in L2 texts to make them "sound more German". Consider the examples in (2)-(4), where German speakers prefer to start the sentence with a <u>rhematic constituent</u>, but Swedes rather do so with a thematic subject or an expletive (*det* 'it'):

- (2) Context: And have you managed to get around much yet?
 - a. Ger. Ja, ich bin schon in München gewesen und in den Alpen. yes I am already in Munich been and in the Alps <u>An den Bodensee</u> und auf die Insel Mainau bin to the Lake-Constance and on the island Mainau am ich auch gefahren. I also gone

³ Even though generations of linguists of various schools have worked on topic and theme, these terms lack generally agreed-on definitions. Theme here stands for what the speaker/writer assumes the listener/reader to know (given information); it is given in the sense that it has previously been explicitly mentioned or is inferable with recourse to the linguistic discourse or the discourse situation. Rheme stands for what the speaker assumes to be new information for the hearer, thus being of higher informational value. However, such a strict partitioning of the clause into theme and rheme is not without problems; often there is a cline from one to the other; moreover, clauses may contain several thematic elements, and some sentences contain none but are informationally allnew. (For discussion see e.g. Daneš 1970, Beneš 1971, Hoberg 1981, Lötscher 1984. Note that for Daneš and Beneš, the notion "Thema" comprises not only given information or low informational value, but also aboutness and point of departure, thus encompassing both theme and sentence topic as used above.)

- b. Swe. Ja, jag har varit i München och i Alperna. yes I have been in Munich and in Alps-the
 Jag har även varit vid Bodensjön och på Mainau. I have also been at Lake-Constance-the and on Mainau
 'Yes, I've been to Munich and the Alps, and I've also visited Lake Constance and the Isle of Mainau.'
- (3) a. Ger. <u>Mit den Übersetzungsklausuren</u> lief es nicht so gut. *with the translation-exams went it not so well*
 - b. Swe. **Det** gick inte så bra med översättningstentorna. *it went not so well with translation-exams-the* 'Things didn't go so well with the translation exams.'
- (4) a. Ger. <u>Fast</u> hätte sie ein Tor geschossen. *nearly had she a goal shot*.
 - b. Swe. **Det** var nästan att hon gjorde mål. *it was nearly that she made goal* 'She nearly scored a goal.'

Having contrasted prefields in native German and native Swedish corpora, we compare these with oral and written L2 German productions. We will show that the learners largely apply the word order frequency and information-structural patterns of their L1 Swedish to German, which results in an unidiomatic discourse structure. An experiment where native Germans rated and rewrote L2 productions supports this interpretation. We propose that L1 transfer is found not only in the domain of syntax, but also in the domain of information structure and information organisation, and that such L1 influence may persist at high L2 proficiency levels.

2. Language-specific ways of using the prefield: Quantitative evidence

2.1. Previous studies

Since *in principle* virtually any constituent can be placed in the prefield in German and Swedish V2 declaratives (e.g. Erdmann 1886:183, Zifonun et al. 1997:1576-1644; Teleman et al. 1999:431-434, 689-690),⁴ the two languages are often – tacitly or explicitly – assumed to behave alike concerning the frequency and function of prefield constituents. For instance, according to Håkansson (1997:50), 60% of all declaratives in Swedish,

⁴ Swedish and German prefield constituents vary in syntactic category and complexity – they can be phrasal or clausal, argumental or non-argumental, phonologically heavy or light (including unstressed object pronouns), and with almost any semantic function (some modal particles excluded), though subjects predominate in both languages.

German, Dutch and Icelandic begin with a subject, whilst 40% are nonsubject-initial. However, no empirical evidence is provided for this claim, and contrastive corpus studies of V2 languages are few and far between. Even single-language corpora are difficult to compare as they are often of different genres, and genre has been shown to influence the frequencies of the types of items in the prefield. For instance, in a 25,500-word corpus of colloquial spoken German collected between 1955 and 1963, Engel (1974:212-215) finds 51% subject-initial and 35% adverbial-initial main clauses, but these averages vary significantly for near-monological narratives (24%-36% SVX, 49%-60% Adv-VS) vs. more interactive dialogue data (54%-68% SVX, 17%-32% Adv-VS).

As far as we know, there are no contrastive corpus studies of German and Swedish concerning the prefield. However, a survey of existing singlelanguage corpora suggests that subject-initial clauses are considerably more frequent in Swedish than in German, especially so if genre is kept constant,⁵ whereas object-initial clauses are less frequent than in German. For instance, for a 18,000-word corpus of German newspapers, Fabricius-Hansen and Solfjeld (1994:38, 100-102) report 54% subject-initial and nearly 7% object-initial main clauses (Table 1). For Swedish by contrast, Westman (1974:155-159) finds 66% subject-initial and only 2% objectinitial main clauses in a 87,000-word corpus of newspaper articles and other non-fiction texts from high-school textbooks, magazines and brochures issued by Swedish authorities between 1962 and 1971 (Table 2).

Fabricius-Hansen and Solfje	-	· · ·	aper articles), casea on	
Subjects & expletives	Objects	Advertials	Other constituents	

Table 1: Constituents in the prefield in written German (newspaper articles) based on

Subjects & expletives	Objects	Adverbials	Other constituents
54.0%	6.6%	36.8%	2.5%
532/984	65/984	362/984	25/984

Table 2: Constituents in the prefield in written Swedish (newspapers, textbooks, brochures, magazines), based on Westman (1974:155).

Subjects & expletives	Objects	Adverbials	Other constituents
64.0%	2.3%	30.8%	3.0%
3575/5588	128/5588	1720/5588	165/5588

A very similar distribution is found in Hultman and Westman's (1977)

⁵ Subjects in the prefield also appear to be more frequent in Norwegian than in German, at least for the written genre of newspaper articles (Fabricius-Hansen and Solfjeld 1994).

study of essays written by Swedish school-leavers as part of their 1970 Alevel exams. In this 88,000-word corpus, main clauses are 66% subjectinitial and 3% object-initial (1977:212-215). Westman's (1974) figures also match those of a more recent study by Nordman (1992). In 45,000 words of Swedish technical, scientific and scholarly prose, she finds 61% subjectinitial and 2% object-initial clauses.⁶ Swedish law texts have an even higher proportion of subject-initial clauses; Benson (1974:229) reports 68% in drafts for new legislation. And Jörgensen (1976:102) reports 73% subject-initial and 1.6% object-initial main clauses for written Swedish read aloud on the 1974 radio news. Comparing such formal radio news with more informal spoken genres. Jörgensen interestingly finds a decrease in subjects and an increase in objects in the prefield the more colloquial the genre is (1976:101-105): He reports 60% subject-initial and 9% objectinitial clauses for a corpus of informal conversations and debates between native Swedish academics (8 informants, 3 hours of recording, 1968), and 62% subject-initial and 14% object-initial clauses for a large corpus of informal interviews of 32 30-45-year-olds (collected in 1968, 8-9 hours of recording). But even in such colloquial speech, Swedish seems to have more subject-initial declaratives than German does, as a comparison with a 25,500-word corpus of colloquial spoken German shows: 51% subjectinitial, 9% object-initial, 35% adverbial-initial, 4% other (Engel 1974:212).

Second most frequent in both languages are adverbial-initial declaratives (cf. Tables 1-2). Here, the types of adverbial vary depending on genre, but temporal adjuncts often appear to predominate (e.g. Westman 1974:160-163). In German, the prefield is said to mostly host locational or temporal adverbials, as well as a range of other adjuncts (e.g. Zifonun et al. 1997:1607, Carroll and von Stutterheim 2003). Least frequent in the two languages are object-initial declaratives. The abovementioned corpus studies suggest, however, that objects in the prefield are much rarer in Swedish than in German, especially in the written modality.

2.2. What our own L1 corpora show

In order to verify and further investigate these language-specific tendencies, we collected new informal written L1 corpora from native

	Subjects	Objects	Adverbials	Other constituents
Textbooks	62.4%	2.3%	31.3%	0.9%
Technical manuals	59.3%	2.1%	35.1%	0.6%
Scholarly articles	61.6%	1.8%	33.1%	0.8%

⁶ Nordman (1992:40) reports the following percentages for clause-initial constituents:

Swedish and native German speakers matched for age and text type. These written control corpora comprise 150 compositions (informal letters, summaries) that were produced by 15-year-old pupils and 20-25-year-old university students, i.e. the same age as our L2 learners (to be presented in section 4):

- 80 native Swedish controls, approximately 17,500 words.
- 70 native German controls, approximtely 28,500 words.

Table 3 shows the results for our 20-to-25-year-old informants (informal letters); the data collected from 15-to-16-year-olds in the form of informal letters and stories look very similar (see Rosén 2006:78-82).

	Subjects &	Objects	Temporal &	Other	Other
	expletives		locational	adverbials	constituents
			adverbials		
L1 Swedish	73 %	3 %	14 %	9 %	2 %
adult controls	388/535	24/535	77/535	46/535	10/535
L1 German	50 %	7 %	17 %	25 %	1 %
adult controls	587/1173	87/1173	199/1173	287/1173	13/1173

Table 3: Constituents in the prefield, written L1 data (informal letters).

Clear differences emerge concerning the frequencies of constituent types in the prefield: Swedish has a stronger subject-initial preference (73%) than German (50%); objects are fronted more often in German (7%) than in Swedish (3%), and adverbials other than temporal and locational are fronted more frequently in German (25%) than in Swedish (6%).^{7,8}

3. Qualitative differences in organising and structuring information

Both Swedish and German have a tendency to start declaratives with a subject. Both languages also tend to let the subject, a grammatical category, coincide with the information-structural categories of theme, i.e. given information, and topic, i.e. what the sentence is about (e.g. Reinhart 1982,

⁷ The differences between Swedish and German are statistically significant for subjects and expletives ($\chi^2 = 75.797$, p<0.001), objects ($\chi^2 = 15.216$, p<0.001) and other adverbials ($\chi^2 = 58.951$, p<0.001). The difference for temporal and locational adverbials is not statistically significant ($\chi^2 = 1.795$, p≤0.20), nor is it significant for other constituents. In both languages, the figures for other constituents in the prefield are low, comprising verbs, VPs and predicatives.

⁸ The figures in Table 3 are an adaptation of Rosén (2006), who also included V1 clauses with elided prefield in her counts, thereby arriving at slightly different percentages. Here we only consider *overt* constituents.

Lambrecht 1994:Ch. 4). Both languages also have a tendency to place theme before rheme, i.e., given before new, and therefore tend to place the theme in clause-initial position (e.g. Ekerot 1979, Hoberg 1981:174-176, but see Lötscher 1984). However, corpus data further suggest that Swedish has a stronger tendency than German of starting the sentence with an element of low informational value. This can be achieved by filling the prefield with the theme, i.e. given information, or with an expletive subject (det 'it'), an element of no informational value (for examples see below), or by leaving the prefield empty, as in V1 declaratives (which will not be discussed here). Swedish moreover seems to have a stronger tendency than German to start the sentence with a phonologically light element; at least this is the impression we get from our written control corpora, and results from written Norwegian vs. German corpora point in the same direction (e.g. Fabricius-Hansen and Solfjeld 1994). One would need to investigate this more in depth for spoken corpora of the same genre in the two languages. Whether it is the light phonological weight that promotes thematicity or vice versa, i.e. whether it is the phonology that influences information structure or the other way round, we don't know, but the two tendencies seem to go hand in hand.

Let's illustrate this first for the case of rhematic subjects. Swedish declaratives that contain a rhematic subject typically have an expletive subject, *det* 'it' in the prefield, as in (5). The proper subject (*många studenter* 'many students', *mycket* 'much') occurs postverbally.

- (5) a. Det bor många studenter här. *it live many students here*'Lots of students live here./There're lots of students living here.'
 - b. Det händer mycket i Växjö. *it happens much in Växjö*'Lots of things are going on in Växjö./There's a lot going on in Växjö.'

Alternatively, an element encoding new information, like the rhematic subject *många studenter* or the locational adverbial *i Växjö*, could be placed in the prefield, as in (5'). Whilst such sentences are grammatical in Swedish, they are dispreferred and rarely occur in our control corpus.

(5') a.	Många studenter bor här.	(dispreferred)
	many students live here	
b.	I Växjö händer (det) mycket.	(dispreferred)
	in Växjö happens EXPL much	

By contrast, German tends not to use an expletive subject here, but start the clause with a phonologically heavier, rhematic, element, as in (6).

We could paraphrase (6) by using an expletive as in (6'), but such constructions are dispreferred in German and rare in our control data.⁹

- (6) a. Viele Studenten wohnen hier. *many students live here* 'Lots of students live here.'
 - b. In Växjö ist viel los. in Växjö is much on 'Lots of things are going on in Växjö./There's a lot going on in Växjö.'
- (6') a. Es wohnen viele Studenten hier. (dispreferred) *it live many students here*b. Es ist viel los in Växjö. (dispreferred)
 - it is much on in Växjö

We therefore suggest that there are subtle differences between Swedish and German concerning the linguistic means used in referent introduction. These cross-linguistic differences are not categorical (grammatical vs. ungrammatical), but tendencies, yet their mastery is an integral part of language competence.

Swedish has a range of constructions with an element of low informational content in the prefield, such as *det* (or a thematic, phonologically light element, see below). Consider for instance the presentational and cleft sentences in (7) and (8), which begin with expletive *det* and a copula verb. Rhematic (new) information, such as the proper subject or a temporal or locational adverbial, is placed postverbally.

- (7) Det {är/sitter} en lapp på dörren. *it is/sits a paper on door-the*'There's a note on the door.'
- (8) Det var i förra veckan som en domare i Malmö *it was in last week-the that a judge in Malmö* fälldes för samma brott. *was-condemned for same crime* 'Last week, a judge in Malmö was condemned for the same crime.'

German has corresponding constructions, but in naturalistic discourse these are less common; the preferred way of expressing the equivalent of

⁹ Corpus studies of other genres, e.g. colloquial spoken dialogue, may yield other results, but our point here is that informal written texts by young native Germans and Swedes differ in the manner described above, and moreover, as will be shown in sections 6 and 7, that the German L2 productions resemble Swedish.

(7) and (8) in German is *not* to start with an expletive, cf. (9) and (10).¹⁰

- (preferred) (9) a. Ein Zettel {ist/hängt} an der Tür. a paper is/hangs on the door {ist/hängt} ein Zettel an der Tür. b. Da there.LOC is/hangs a paper on the door (9') Es {ist/hängt} ein Zettel an der Tür. (dispreferred) is/hangs a paper on the door it (10)Letzte Woche wurde ein Richter in Malmö (preferred) week was last a judge in Malmö für dieselbe Straftat verurteilt. for same crime condemned
- (10') ^{??}Es war letzte Woche daß ein Richter in Malmö (dispreferred) *it was last week that a judge in Malmö* für dieselbe Straftat verurteilt wurde. *for same crime condemned was*

Another "typically Swedish" construction is unstressed sa in clauseinitial position. Sa in the prefield, like expletive *det*, is of low informational value and allows rhematic information to be placed after the verb, as in (11). Connective sa conjoins clauses and may indicate temporal succession, simultaneity or consequence ('and/and then/so (then)'), but is often simply a coordinator ('and') with no particular temporal interpretation. Sa is very frequent in colloquial spoken Swedish (c.f. Ekberg 1997:99, Eriksson 1997:124), and when declaratives are coordinated, sa is one of the most common ways to introduce the second conjunct in combination with *och* 'and', cf. (11). German does have an adverb (*so*) homophonous with Swedish sa, but it does not function as a connective. As a result, literal translations of (11) into German are marginal at best, and unattested in our native controls, cf. (11').

- (11) Vi badade och så kom det häftiga regnet. *we bathed and so came the intense rain-the*'We went swimming and (then) there was heavy rain.'
- (11') ^{??}Wir badeten und **so** kam der intensive Regen. we bathed and so came the intense rain

The tendency to start Swedish sentences with an element of low informational value – which also often happens to be phonologically light – manifests itself in the case of fronted objects as well. Recall that objectinitial declaratives, though generally uncommon, are more frequent in

¹⁰ Cf. Magnusson (1995:166-170), Weinert (1998), Ahlemeyer and Kohlhof (1999:2f).

German (7%) than in Swedish (3%, Table 3). In our corpora, Swedish native speakers typically front objects that are themes (given information), mostly in the form of the definite inanimate pronoun *det* ('it/that'). Such thematic *det* is much more frequent than the German equivalent (*das/es*) in our native German controls: *det* makes up 82% of all fronted object pronouns, but *das* only 24% (Rosén 2006:99-102). We are not claiming that this distribution will hold across all genres, but we believe that it is typical of informal written texts produced by young people in the 2000s – and probably also a feature of colloquial spoken Swedish. In colloquial genres recorded in 1968, Jörgensen (1976:101-102) found 14% fronted objects in informal interviews, 9% in conversations and debates between academics, vs. only 1.6% in radio news that consisted of read-aloud formal writing. Interestingly, Jörgensen's examples suggest that fronted objects in colloquial speech mostly take the form of pronominal *det* (1976:110-113).¹¹

4. The learner data

4.1. Oral data

Our oral L2 production data come from Swedish L1 teenagers learning German as a foreign language at secondary school in Sweden, and from Swedish L1 adults, taking evening classes in German as a foreign language for beginners. Data were elicited from all learners with the same narrative task, the telling of a monologue on a given topic, as described in Bohnacker (2005:56, 2006:15-18). The 23 teenagers were tested once, at the end of their third year of German. The adults, 6 old age pensioners, were tested twice, after 4 months of German, and again after 9 months. Three adults did not know any language other than Swedish before taking up German, whilst the other three, and the teenagers, had learnt English earlier at school.

- 6 L2 beginners (60- to 70-year-olds), 45 and 90 hours of classroom German, approximately 17,500 words.
- 23 L2 intermediates (16-year-olds), 800 hours of classroom German, approximately 12,500 words.

(i) det {tror / tycker / vet} jag (inte). that {believe / think / know} I (not) 'I (don't) think so.'/'I (don't) know.'

¹¹ Ulf Teleman (p.c.), who knows these corpora well, confirms that most fronted objects in spoken Swedish are thematic pronominal *det*, pointing out frequently occurring semi-formulaic utterances of the type in (i). By contrast, fronted object *det* is rare in the formal written texts studied by Westman (1974:158-159).

4.2. Written data

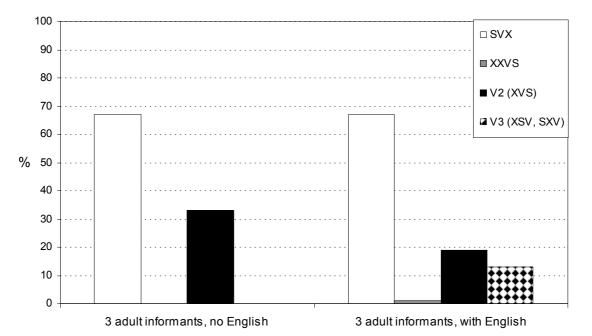
Our written L2 data consist of texts produced by teenage and young adult Swedish learners of German, at secondary schools and universities in Sweden. The informants had all learnt English at school before taking up German. 245 L2 German compositions, comprising informal letters, essays and summaries, totalling approximately 100,000 words, were collected between 1999 and 2005 (for details, see Rosén 2006:73-75).

- 55 L2 beginners (14-year-olds), 200 hours of classroom German.
- 55 L2 intermediates (17-year-olds), 830 hours of classroom German.
- 135 L2 advanced university student productions (20-25-year-olds), 6 years of classroom German.

5. L2 results: V2 word order

Our learners produce subject-initial and non-subject-initial V2 declaratives already at beginner level. Let's first look at the oral data. Fig. 1 plots the percentages of SVX and non-subject-initial declaratives for the adult beginners (old-age pensioners).

Figure 1: Beginners: Word order in declarative clauses after 4 and 9 months of German, combined (oral). Percentages.

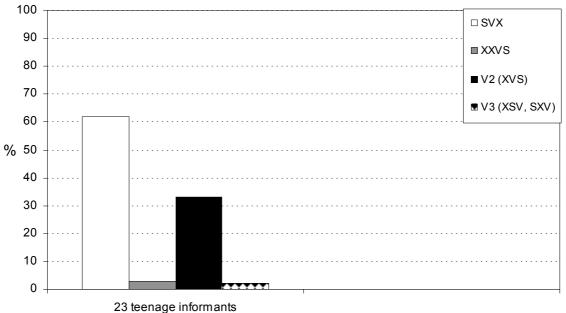


On the left-hand side of Fig. 1, we see those informants who do not speak English: They fully adhere to the V2 constraint in their L2 German, producing 68% SVX (white bar) and 32% XVS (solid black bar), but no V3. On the right-hand side, there are those informants who do speak English:

They only partially adhere to the V2 constraint in their L3 German, producing both targetlike XVS (black bar) and nontargetlike V3 (chequered black-and-white bar). This suggests that they are transferring V2 from their L1, but that prior knowledge of a non-V2 language such as English has a "detrimental" effect, slowing down full mastery of V2 in the L3. For individual results, raw figures and detailed discussion, see Bohnacker (2005:56-66, 2006:19-38).¹²

The V3 influence of English on the learners' German presumably diminishes over time: As shown in Fig. 2, after 3 years of German classes, the intermediate teenage learners produce 62% SVX and 33% targetlike XVS, but only 2% nontargetlike V3 in their spoken German (elicited by the same method as with the beginners in Fig. 1).

Figure 2: Intermediates: Word order in declarative clauses after 3 years of German (oral). Percentages.

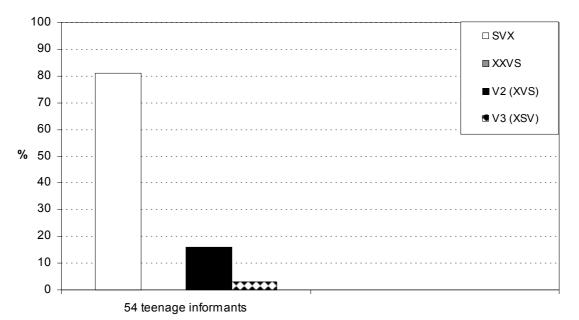


¹² Readers will notice a fourth, infrequent, word order type in the diagrams, XXVS, where the finite verb is preceded by two constituents, but followed by the subject. Bohnacker (2005:57, 62-63, 2006:22-23) traces these cases back to L1 influence from Swedish, where XXVS word order is regularly found, especially in colloquial spoken registers, cf. (i):

⁽i) a. L2 Ger. Dann so haben ich gewart in Hamburg. (Algot3, 9 months) *then so have I been in Hamburg*b. L1 Swe. Sen så har jag varit i Hamburg. *then so have I been in Hamburg*'Then I've been to Hamburg.'

In our written L2 data, word order distribution is very similar. For reasons of space, we will only present the results from our least advanced group, the 54 teenage beginners. Fig. 3 shows that these 14-year-olds produce 81% (796/984) subject-initial (white bar) and 19% (188/984) non-subject-initial declaratives. Crucially, 153/188 of these non-subject-initial clauses are XVS, i.e. targetlike V2 at the initial state (solid black bar). The group is homogeneous in that every learner produces both targetlike XVS clauses and between 0-3 instances of nontargetlike XSVO.¹³

Figure 3: Beginners: Word order in declarative clauses after 9 months of German, (written). Percentages.



In earlier studies, L2ers whose L1 is non-V2 were reported to acquire V2 late (e.g. Clahsen and Muysken 1986, du Plessis et al. 1987, Schwartz and Sprouse 1994, Vainikka and Young-Scholten 1994, 1996, Pienemann 1998:118-130). Also Håkansson, Pienemann and Sayehli (2002), in a study of Swedish teenagers learning German as an L3 (after English), report that their learners were not able to produce any XVS at first. However, their elicitation method and the small-sized database do not enable us to draw strong conclusions concerning V2 (as discussed in Bohnacker 2005:54-55). By contrast, as shown in Figs. 1-3, our Swedish learners of German master V2 early on, and they do so already after only four months of German (unless English interferes). This lends support to full transfer models of L2

¹³ A 55th informant was excluded from these aggregated counts in order to avoid skewed statistics. He produced 7 instances of XSVO, which, if included, would have marginally altered the counts as follows: 80% SVX (811/1008), 19% non-subject-initial (197/1008), where 153/197 are XVS.

acquisition (Schwartz and Sprouse 1994, 1996). Moreover, many generative syntax models invoke functional projections high up in the clause (e.g. CP) in order to capture the V2 phenomenon. Therefore, our learners' V2 utterances can be taken as evidence for functional structure in early interlanguage syntax and for the existence of CP at the initial state (*contra* earlier claims by e.g. Vainikka and Young-Scholten 1994, 1996, Platzack 2001). For discussion, see Bohnacker (2005, 2006).

But let's now look at how Swedish learners of German make use of the clause-initial position of V2 clauses, i.e. which types of constituent do they produce in the prefield as compared to native speaker controls.

6. L2 results: Constituents in the prefield

The frequencies of constituents in the prefield in our L2 German data differ significantly from those of L1 German, but resemble those of L1 Swedish. Fig. 4 illustrates this for the text type of informal letters. Solid black bars show the percentage of non-subject-initial clauses out of all declaratives for L1 Swedish (29%, 157/535) and for L1 German (50%, 586/1173). Compare this with the L2 productions (Fig. 4, white bars): For the L2 beginners, the prefield contains a constituent other than the subject only 16% of the time (88/544), for the intermediates 21% (291/1371), and for the advanced learners 35% (403/1122). Thus, non-subject-initial clauses become more common with increasing proficiency level in our learners, but even the most advanced group has not reached nativelike levels after six years of German.

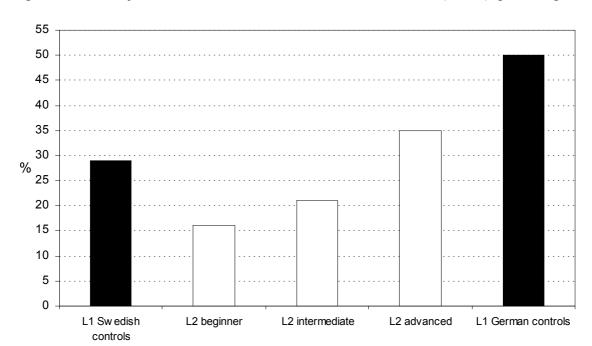


Figure 4: Non-subject-initial declaratives in L2ers and L1 controls (letters), percentages.

The *non*-subject-initial clauses of the learners can be broken down further by constituent type. This is done for the L2 beginners (oral) in Table 4, for the intermediates (oral) in Table 5, and for the age-matched intermediates (written) in Table 6. Their figures are strikingly similar.¹⁴

Table 4: Constituents in the prefield of non-subject-initial declaratives, oral L2 beginner data, 6 adults, narrative task, 4 & 9 months.

Argument	10% (37/381)	Adjunct	90% (344/381)	
Direct object	Other	Temporal	Locational	Other adverbial
100%	0%	72%	20%	8%
37/37		248/344	69/344	27/344
(all: <i>das</i>)		(incl. 146 <i>dann</i>)		

Table 5: Constituents in the prefield of non-subject-initial declaratives, oral L2 intermediate data: 23 16-year-olds, narrative task, after 3 years.

Argument	10% (39/386)	Adjunct	90% (347/386)	
Direct object	Other	Temporal	Locational	Other adverbial
95%	5%	75%	16%	10%
37/39	2/39	259/347	55/347	33/347
(incl. 22 das)				

Table 6: Constituents in the prefield of non-subject-initial declaratives, written L2 intermediate data: 55 17-year-olds, letters, after 3 years.

Argument	12% (35/295)	Adjunct 88% (260/295)	
Direct object	Other	Temporal & locational	Other adverbial
94%	6%	80%	20%
33/35	2/35	207/260	53/260
(incl. 16 <i>das</i>)			

Fronted arguments (objects) are rare (10%-12%) and largely take the form of object pronominal *das* 'it/that'. Adjuncts in the prefield are frequent (88\%-90%), but mostly temporal, especially so in the oral narrative data

¹⁴ The results from oral L2 German are included precisely because the distribution in the prefield is so similar to that of our written L2 data. Note that despite the difference in modality, our oral and written data are of related genres. Both are informal and monological (monologue narratives on a given topic vs. "monological" letters and essays on a given topic). Ideally, however, the oral L2 data should also be compared with oral L1 control corpora elicited in the same fashion, something we are planning to do in the future.

(72%-75%, with a preponderance of *dann* 'then'). Locational adverbials are also found (16%-20%), whilst other adverbials (e.g. modal, speaker attitude and connective adverbs) are less frequent in the prefield, especially so in the oral data.

7. L2 results: Rating, rewriting and discussion

Results from a rating and rewriting experiment (Rosén 2006) bolster the differences we found concerning constituents in the prefield. Three groups of adult native speakers of German (university students, language teachers, and others (mainly dentists and other professionals)), 58 in total, rated our written L2 data (see Rosén 2006:96-97, 102-138 for details). Moreover, 20 of them, the 20-25-year-old university students, were asked to rewrite 20 advanced L2 texts produced by learners their own age, to "make them sound more German". Here, they unpromptedly made the following changes in the prefield (Table 7).

	Subjects &	Objects	Temporal &	Other
	expletives		locational adverbials	adverbials
Advanced L2	68 %	3 %	16 %	8 %
German	366/538	17/538	88/538	42/538
Rewritten	55 %	7 %	18 %	14 %
by natives	363/658	43/658	120/658	95/658

Table 7. Constituents in the prefield, L2 German vs. L1 German rewritings.¹⁵

Rewritings resulted in a reduction of clause-initial subjects and expletives from 68% to 55%, a doubling of the figures for objects (from 3% to 7%) and a near-doubling of adverbials other than temporal and locational (from 8% to 14%). Thus, the distribution of constituent types in the rewritten texts became very similar to the distribution independently found in the L1 German control corpus (Table 3). This strongly suggests that the differences we found between the groups cannot be dismissed as "stylistic variation" in the sense of idiosyncratic preferences of individuals, but that they are in fact consistent, *language-specific*, differences.

In contrast to our native German controls, our L2 learners rarely start their clauses with a rhematic element, but tend to produce expletivesubject-initial clauses such as (12) and (13), which are dispreferred in native German, but correspond to the expletive-initial constructions of

¹⁵ The figures in Table 7 do not add up to 100%, as 25 subordinate clauses have been left out from the advanced L2 German, and 37 from the native German rewritings.

Swedish, recall section 3 and the discussion around examples (5)-(10).¹⁶

(12) Autobahn! Es ist nicht mehr eine gleich aggressive Stimmung motorway it is not more a same aggressive mood auf Autobahn in Deutschland, aber gewiss ist es harter on motorway in Germany but certainly is it harder als in z.B. Schweden. than in e.g. Sweden

'Motorways. There isn't this aggressive mood on the motorways in Germany any more, but it's certainly tougher than in e.g. Sweden.' (advanced L2 summary, Jen. Ref1 00)

(13) Es ist in dem königlichen Zimmern, wo den Besuchern *it is in the royal rooms where the visitors* die Motive aus Mittelalterem Märchen begegnen, *the scenes from mediaeval sagas meet* dass viele von den Wände deckt *that many of the walls covers*'In the royal rooms visitors will see scenes from mediaeval sagas, which cover many of the walls.'

(advanced L2 summary, ElliT Ref4)

This pattern of overusing clause-initial subjects and expletives was also confirmed when native speakers rewrote or commented upon the L2 texts, pointing out "zu viel *es* am Satzanfang" [too many *es* in clause-initial position], "zu oft Subjekte am Satzanfang" [too many clause-initial subjects], un-German *es*-constructions, and "zu viel *es gibt*" [too many *es gibt* 'it is/exists']. Native speakers prefer to use alternative ways of connecting sentences, for instance by fronting an adverbial, as in (13'), which is the rewritten version of the L2 sentence in (13), or by adding a connective adverb (see below).

(13') In den königlichen Zimmern begegnen den Besuchern Motive *in the royal rooms meet the visitors scenes* aus mittelalterlichen Märchen ... *from mediaeval sagas* (rewritten by native speaker)

The Swedish tendency to start sentences with an element of low informational value, which also happens to be phonologically light, also shows up in other ways: The learners produce unidiomatic *so*-initial sentences in their L2 German as in (14). Recall that the Swedish homonym of

¹⁶ The learners' choice of lexical items, grammatical gender and inflectional morphology sometimes differs from native Swedish. Such nontarget features will not be commented on here though.

so, unstressed *så* '(and) so', allows rhematic information to be placed after the verb. The occurrence of this nontarget construction in the L2 data suggests it is being transferred from L1 Swedish.¹⁷

(14)Ich war fast immer allein auf die Wochenende und was almost always alone at the weekend Ι and machte nicht. Aber so denkte ich daß ich alle in die Klasse did not(thing) but so thought I that I all in the class zu mein Haus sollte bringen und wir hatten sehr Spaß. to my house should bring and we had very fun 'I was nearly always alone during weekends and didn't do anything. But then I thought of inviting everyone in class to my house and we had a lot of fun.' (intermediate L2 essay, Aufs38Gy1)

Moreover, our L2ers rarely produce an object in the prefield, but when they do, they predominantly front pronominal *das* 'it/that' (80%), and this *das* is always thematic, as illustrated in (15)-(17). It will be recalled that the Swedish equivalent of object *das*, *det*, is by far the most common object to be fronted in native Swedish. The native raters of our L2 texts comment on such *das*: "zu viele Sätze fangen mit *das* an" [too many sentences start with *das*].

- (15) Nach Weihnachten sind wir vielleicht wieder nach Schweiz fahren. *after christmas are we perhaps again to Switzerland go*Das finde ich Spaß. *that find I fun*'After Christmas we might go to Switzerland again. That'd be fun I think.' (beginner L2 letter, NatalSL2K18)
- (16) Vielleicht kommen wir eines Tages nach Haus maybe come we one day to home aber das glaube ich nicht. but that think I not
 'Maybe we'll come back home one day, but I don't think so.' (intermediate L2 essay, Aufs11Gy1)
- (17) Ab und zu machen wir auch Sachen zusammen, das muss man. now and then make we too things together that must you 'Now and then we do things together, you have to.' (advanced L2 essay, Aufs.B LinC)

Note however that fronted object *das* as produced by our L2 learners is not ungrammatical in native German, it is simply less common in our

¹⁷ For a discussion of this and other Swedish *så*-constructions and their influence on L2 German, see Bohnacker (2005, 2006).

control corpus. So what do Germans do?

German native speakers appear to front a wider range of objects, both lexical and pronominal (e.g. die 'her, them, these, those, this.FEM, that.FEM', den 'him, this.MASC, that.MASC', mir 'me', ihn 'him'). And they make use of so-called 'pronominal adverbs' (Pronominaladverbien, proadverbials) for reference maintenance. Pronominal adverbs are thematic elements that are compounded of an anaphoric, locational adverb (typically, da 'there') and a preposition. Some examples are dazu 'there-to/with that', darauf 'there-on/on that', daran 'there-on/on that', damit 'therewith/with that', davon 'there-of/about that', darum 'there-around/about that', dafür 'there-for/for that', danach 'there-after/after that'. Their morphological complexity makes pronominal adverbs informationally more specific than simple thematic das/det 'it/that' or da/där 'there'.¹⁸ Pronominal adverbs maintain a referent in spatial, temporal and other terms, and are thus a means to establish textual coherence. In (18), for example, the rhematic information of the first clause, segeln zu lernen 'learning how to sail', is turned via *damit* 'with that' into the theme of the second clause.

(18) Außerdem habe ich vor segeln zu lernen, aber damit werde ich moreover have I PRT sailing to learn but there-with will I wohl bis zum Sommer warten. probably until to-the summer wait

'Moreover, I would like to learn how to sail, but I'll probably wait with that till the summer.' (native German, Doro)

 (19) Man muß sich hier schöne Ecken suchen. Dazu gehört one must self here nice corners seek there-to belongs ganz sicher das Hindenburgufer ... quite certain the Hindenburg-bank
 'Yeu have to go and find yourself some nice spots. One of

'You have to go and find yourself some nice spots. One of those would most certainly be the Hindenburgufer ...'

(native German, StefanieB)

Similarly, in (19), preverbal *dazu* links up with *schöne Ecken* 'nice spots' in the preceding clause. Whilst our native German controls use such pronominal adverbs in the prefield in their writing (11%), none of our

(i) Därom tvista de lärde. *there-about disagree the learned* 'On that point the learned disagree.'

¹⁸ Some pronominal adverbs also exist in Swedish but these are restricted to formal registers and archaic expressions (i). No pronominal adverbs were found in our native Swedish corpus.

L2ers do so at beginner (0%) or intermediate level (0%), and even at the advanced level, pronominal adverbs in the prefield remain rare (4%). Pronominal adverbs in the prefield are exceedingly rare in our oral L2 data too. The six beginners do not use them at all (0%), and the 23 intermediates only produce 1 clause-initial pronominal adverb (1%), and a total of 4 pronominal adverbs in the entire corpus of 12,500 words. Therefore, the differences between the native controls and the L2 learners are presumably not only due to L1 influence on information structure, but also to a vocabulary deficit: Learners can only place a pronominal adverb in the prefield if they have in fact learnt the relevant lexical item – or the morphosyntactic process of combining all-purpose anaphoric da with a more specific preposition. Since our beginning and many of our intermediate learners are not using pronominal adverbs in other, postverbal, positions, it may be surmised that they have not yet added these items to their lexicons, although in order to determine this for certain, a larger database would be needed for each individual learner. For those L2ers who do use pronominal adverbs but rarely do so in clause-initial position we believe that the overall principle of information organisation that warrants their use is not yet fully established in the learner variety. (For a proposal along similar lines, see Carroll et al. (2000), who compared picture descriptions by very advanced learners of German (L1 English, L1 Spanish) with those by German natives.)

Apart from pronominal adverbs, there are many other adverbials that can be used in the prefield to improve textual cohesion, for instance sentence adverbs such as speaker-attitude *leider* 'unfortunately'. wahrscheinlich 'probably', vielleicht 'perhaps', natürlich 'of course', and logical connectives such as *außerdem* 'moreover', *deshalb/deswegen/daher* 'therefore', allerdings 'however', trotzdem 'nevertheless'. These 'Other adverbials' are significantly more frequent in the prefield in native German (25%) than in native Swedish (9%, cf. Table 3). It would be interesting to see whether this surprising difference could be verified for larger corpora and corpora of other text types, since the Swedish language has no shortage of logical connectives in general. However, it is possible that German has such adverbials in the prefield, whilst Swedish places its connectors more often postverbally (and largely reserves the prefield for other thematic elements). Altenberg (1998) has argued along such lines for Swedish (he does not discuss German), based on a comparative study of connectives in Swedish and English original texts and in translations thereof.¹⁹ We will

¹⁹ In Altenberg's English original texts, 74% (624/845) of the adverbial connectors occur sentence-initially vs. 37% (441/1191) in the Swedish original texts. Connectives in other positions are rare in English, but common in Swedish, where 27% occur in

not investigate this any further here, but simply point out that our L2ers underuse such adverbials in the prefield, as evinced by the fact that when advanced L2 texts were rewritten by native Germans, figures increased from 8% to 14% (Table 7). Native speakers sometimes moved a connective adverbial from postverbal position to the prefield, as in (20'), the rewritten version of (20), or, more commonly, simply added a logical connective.²⁰

(20) Man weiß jetzt, mehr als früher, daß es nicht selbstklar one knows now more than before that it not self-evident eine Familie zu haben ist. Ich finde deswegen, daß ... a family to have is I think therefore that
'Nowadays people know better than before that you don't just have a family as a matter of course. Therefore I think that ...'

(advanced L2 essay MalinS 00)

(20') [...]. **Deswegen** finde ich, daß ... therefore think I that

(rewritten by native speaker)

medial position (between the subject and the main verb) and 29% postverbally (1998:122-123). Altenberg also shows that in professional English translations of Swedish texts, originally non-initial connectives are fronted, whilst in Swedish translations of English texts, clause-initial connectives are postponed, cf. (a) and (b).

 (i) a. Eng. However, Copernicus's theory was much simpler.
 b. Swe. Kopernikus teori var emellertid mycket enklare. Copernicus theory was however much simpler (Altenberg 1998:126)

 20 Such a connective is added in (ii), the rewritten version of the L2 original, (i).

 (i) Das Lieblingstier von Ludwig II war der Schwan, weil der Schwan so viel the favourite-animal of Ludwig II was the swan because the swan so much symbolisiert. Man kann Schwäne überall in dem Schloß finden, z.B. symbolises one can swans everywhere in the castle find e.g. an Wasserhähne und Türgriffe.

on water-taps and door-knobs

'Ludwig the Second's favourite animal was the swan, because it symbolises so much. One can find swans everywhere in the castle, e.g. on taps and doorknobs.' (advanced L2 summary ElliT Ref4)

 (ii) Das Lieblingstier von Ludwig II war der Schwan, weil dieses Tier the favourite-animal of Ludwig II was the swan because this animal so viel symbolisiert. Deshalb sind überall in dem Schloß, z.B. an den so much symbolises therefore are everywhere in the castle e.g. on the Wasserhähnen und Türgriffen, Schwäne zu finden. taps and doorknobs swans to find
(nouritten bu notive medicer)

(rewritten by native speaker)

Native raters also repeatedly characterise the L2 texts as un-German. criticising a lack of adverbials in clause-initial position: "Adverbiale am Satzanfang fehlen" [clauses should more often begin with an adverbial], "es gibt zu wenig kommentierende Wörter wie leider, zum Glück etc. am Satzanfang" [there are not enough commentary words like leider 'unfortunately', zum Glück 'fortunately', etc. in clause-initial position], "Noch mehr Übergänge mit Deshalb, Daher, Da... wären schön" [more links with deshalb, daher, da would be nice], "Der Gebrauch von Dadurch, Deshalb etc. würde den Text flüssiger machen" [using dadurch, deshalb etc. would improve textual coherence]. Our impression of the L2 texts is that cohesion-building adverbials are not only rare in the prefield, but also relatively rare in other clausal positions (though we have not quantified them there). Therefore, a lack of coherence is presumably not only attributable to L1 influence in the domain of information structure, but also due to lexical deficits, concerning both connective adverbials and pronominal adverbs.

7. Conclusions

In this paper, we have pointed out some diverging tendencies in the way Swedish and German employ the prefield in V2 declaratives for structuring information and organising text. These cross-linguistic differences concern the linguistic means used in referent introduction and referent maintenance and of linking sentences with each other. On the basis of corpus data, we have suggested that Swedish has a stronger tendency than German to fill the prefield with a thematic subject or a phonologically light all-purpose element of low informational value (expletive *det* 'it', thematic pronominal object *det* 'it/that', *so* 'and/and then/so', etc.) to establish texual coherence. German also allows these options, but often also places rhematic subjects, as well as phonologically heavier object and adverbial constituents in the prefield, including morphologically complex thematic pronominal adverbs and a range of connective and sentence adverbials.

We have tried to show that native speakers of Swedish learning German are able to master V2 early on, both in the oral and written modality. This supports models of L2 acquisition that assume full transfer of the L1 syntax at the initial state (e.g. Schwartz and Sprouse 1996) – and also beyond the initial state.

However, even though V2 syntax is largely targetlike, our L2ers, at all proficiency levels, have a tendency to fill the prefield with elements that are somewhat different in form and function from that of native German speakers. Our L2ers overuse subject-initial and expletive-*es*-initial clauses and fronted thematic object *das* 'it/that', as well as constructions with sa/so

'so', structures that are typical of and frequent in their Swedish L1. They underuse typically German ways of introducing a sentence with objects other than pronominal *das*, with specific pronominal adverbs and a range of connective adverbials.

The results indicate that our learners, both at lower and higher proficiency levels, have problems with the acquisition of the Germanspecific linguistic means that have an impact on information structuring. Some of these problems may be due to vocabulary deficits, but most of them can be traced back to the language-specific tendencies of structuring information in Swedish, i.e. the learners' L1. We thus propose that L1 transfer is found not only in the domain of syntax, but also in the domain of information structure and information organisation, and that such L1 influence persists even at high L2 proficiency levels.

Throughout this paper, we have talked of information-structural or discourse-pragmatic patterns, but one may ask what kind of knowledge in fact lies behind these patterns. We have tried to link prefield constituent patterns to a principle of information structure that we called "rheme later", where informationally new (i.e. rhematic, focal) material is kept out of the clause-initial position, and instead is placed further to the right, i.e. post-verbally. We have claimed that this principle is stronger in Swedish than it is in German.²¹ Crosslinguistic research on languages other than German and Swedish has shown that languages may choose to implement quite different information-structural principles. Swedish and German, which are typologically close, do not implement information-structural principles that are diametrically opposed, but only slightly different from each other: Rheme later, as we have argued, is somewhat stronger in Swedish than in German, and this is what second language learners will need to learn.

Alternatively, one might say that what we are dealing with here are simply different *frequencies* of particular syntactic constructions and transfer of such frequencies. Successful L2 learners would then have to adjust these frequencies (e.g. by stochastic learning) to those they

²¹ Diachronic research suggests that the heavy preponderance of SVX (approximately 70%) and high proportion of expletive-initial clauses in Swedish is a relatively recent phenomenon. Studies of earlier versions of written Swedish, such as Old Swedish (Platzack 1980, Håkansson 2006) and 19th century Modern Swedish (Wieselgren 1971), found considerably lower rates of SVX (approximately 40%-50%) and a more varied distribution of prefield constituents – in short, a distribution closer to the one found in German today. The reasons behind the diachronic change towards predominant SVX and less variation in the prefield in Swedish remain unclear. Morphological change, such as the loss of case or subject-verb agreement morphology, does not appear to be a promising avenue to pursue as an explanation, as such morphology disappeared from the Swedish language many centuries earlier.

encounter in the input. Yet in line with much generative work (e.g. Bley-Vroman 2002:210-212) we regard statistical frequencies as more of an epiphenomenon of underlying structural differences. We do realise, however, that it may be difficult to distinguish between transfer of information structure and transfer of frequencies of syntactic constructions. Moreover, it is conceivable that for reasons outside the grammar proper, such as historical coincidence, Swedish *happens* to use syntactic forms that coincide with a Rheme later principle more than German does. In that case, second language learners would not be transferring principles of information structure per se but the frequencies of syntactic constructions that are used to express information structure. At present, we do not see a good way of distinguishing between these two things.

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