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Sequences in German grammar teaching: An analysis of Dutch, Finnish, and global textbooks

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Abstract: This study investigates whether sequences in which grammar topics are presented in textbooks for German as a foreign language (henceforth GFL) match empirically determined, universal acquisition sequences. Moreover, it explores what patterns course books display regarding a set of grammar structures that are particularly interesting from an L1-perspective. From the literature we know that some grammar phenomena such as verb placement display a general acquisition pattern irrespective of the learners' L1. In addition, we find L1-specific research such as studies on the acquisition of case assignment for Dutch learners of German. The current study considers a range of Dutch, Finnish, and global textbooks for young adolescent learners (13–15 years) at a beginner level to identify the sequence in which they introduce simple and complex verbal structures, tense, case, and pronouns. Across all these domains, the results display mainly similarities. When differences are found, these are often related to language-specific characteristics of the L1 and the typological distance between the L1 and L2 German, namely when Finns learn German pronouns and separable verbs. Overall, the analyzed teaching materials introduce the majority of the grammar issues in accord with the acquisition sequences but more L1-specific empirical research is necessary. We argue that analyses of grammar sequences in textbooks can be used as input for both SLA/FLA empirical research and theory development, especially concerning the teachability of grammar.

Keywords: German as a foreign language, grammar learning, grammar teaching, teaching materials, foreign language acquisition, sequence

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1 Introduction

Grammar learning and its implications for language teaching have received substantial research attention (for reviews, see Norris and Ortega 2000; Spada and Tomita 2010; also see De Graaff and Housen 2009) and include a discussion about the best time to introduce grammar issues and in what order. For example, the sequence in which grammar structures are introduced appears critical to effective foreign language teaching (FLT), such that grammar topics must be available to the learners when they are ready for them (Pienemann's 1984; teachability hypothesis; Tschirner 1996: 5). Ideally, the sequence of grammar teaching should match the natural sequence of grammar acquisition, with no skipped phases in the acquisition process (Lightbown 1998; Diehl et al. 2000: 378; Fandrych and Tschirner 2007; cf. Zhang and Lantolf 2015). The literature also shows a debate on whether learning can lead to acquisition, but in this paper we will take Pienemann's teachability hypothesis (Pienemann 1984) as a starting point and assume that learning leads to acquisition.

Although wide consensus supports the assumption that no phases should be skipped in teaching, the sequence of grammar acquisition seems to follow a fixed order, independent of the order in which the grammar is introduced to learners, even if those orders come into conflict (Pienemann 1987; Pienemann 1989; Ellis 1989). However, teaching grammar issues in a different order might give rise to learning delays or disorders (Pienemann 1984; Krashen 1985; Tschirner 1999; Diehl et al. 2000: 356; Haberzettl 2006). To prevent such disturbances, it seems reasonable to use the acquisition order as a guideline for language teaching, or at least as a framework for formulating a carefully planned curriculum.

Since language teachers have been found to heavily rely on course books (Tomlinson 2012; Guerrettaz and Johnston 2013), the way course books present grammar plays an important role in how students learn grammar. Even though teachers might not follow their course books to the letter, Maijala (2010) states that teachers are unlikely to change the order in which books introduce grammar items as it is often impractical. They will generally introduce grammar structures following the sequence in which the textbook presents them. Due to the strong influence of course books on the curriculum and classroom discourse (Tomlinson 2012; Guerrettaz and Johnston 2013), it is essential that course books are of good quality.¹ In this respect, grammar sequences in teaching materials are especially relevant because the moment at which learners receive new

¹ For the relation between high quality textbooks and students' performance, see Oates (2014).

grammar constructions influences their language learning process (see above). The grammar curriculum should orientate to acquisition orders (see e. g. Diehl et al. 2000) and so should teaching materials (Tschirmer 1999) to facilitate effective grammar teaching. Determining whether teaching materials matches with research insights is especially relevant in countries without an admission procedure for teaching materials or with only very general central curriculum guidelines.

The present study investigates the order in which grammar structures are explicitly introduced and practiced in all the textbooks for German as a foreign language, as used in the Netherlands and Finland [2015] and explores whether they present grammar in an empirically justified order. In so doing, it provides new insights into teaching materials, a domain underrepresented in language teaching research. Studying teaching materials from these two countries is particularly interesting since they represent two very different language contexts, with Dutch typologically very close to German and Finnish very distant. This might influence the sequence of grammar acquisition and hence may reveal L1 specific patterns in grammar teaching. We focus on the sequences of grammar introduction in GFL textbooks, but the research design can easily be applied to other foreign languages. Textbook analyses like ours also reveal in which grammar domains more empirical research is needed and hence can provide input for foreign language acquisition (FLA) research. Finally, our results might contribute to the FLA discussion on the teachability of grammar, as we will suggest in the discussion. On the other hand, our research has a strong pedagogical aim. Our study provides teachers of German an overview of the grammar curriculum, which they can compare against their current materials and then use to select new teaching materials if necessary. It also offers teaching material developers an increased awareness of their choices for grammar order and of their role and responsibility in the language teaching process.

2 Grammar sequences in language acquisition and teaching

2.1 Learners' grammatical development

In their meta-analysis of the acquisition of English morpheme order, Goldschneider and DeKeyser (2001) identify three factors that determine the sequence of acquisition: frequency, perceptual salience, and form–function reliability. Other widely acknowledged factors that influence foreign language

grammar acquisition, and thus should determine its sequence in language teaching, include learning load (i. e., easy to difficult, whether associated with the native language [L1] or not) and communicative relevance (e. g., Fandrych and Tschirner 2007: 202; Funk and Koenig 1991: 62).

Regarding the acquisition of German, four grammar domains display general acquisition patterns, viz. verb placement, sentence negation, tense morphology, and case assignment (see Winkler 2011 for an overview of L1 independent acquisition sequences of German). For these phenomena identical acquisition sequences have been established in various studies for different L1 learner groups, both in tutored and untutored settings and partly also for other L2 contexts.

As regards verb placement, the ZISA (*Zweitspracherwerb Italienischer und Spanischer Arbeiter*) project, as reported by Meisel et al. (1981) and Clahsen et al. (1983), has found the following acquisition sequence for German (Pienemann et al. 1988: 221):

- I
1. canonical order
 2. adverb preposing (adverbs in sentence-initial position)
 3. verb separation (non-finite verbs in sentence-final position)
 4. inversion (the verb precedes the subject with sentence-initial adverbs or interrogatives)
 5. verb-end (finite verb in sentence-final position in subordinate clause)

This sequence is confirmed in many different learning contexts and for different L1s and L2s alike (e. g. Pienemann and Hakansson 1999; Tschirner 1999; Pienemann and Kessler 2011).

The second domain that displays a general acquisition pattern concerns sentence negation and follows the pattern in II (Klein 1984; Becker 2005; Winkler 2011):

- II
- | | | |
|----|------------------------|--------------------------------|
| 1. | Neg + Vlex | [–finite] |
| 2. | Vcop + Neg | [+ finite] |
| 3. | Vaux + Neg, Vmod + Neg | [+ finite] |
| 4. | Vlex + Neg | [+ finite] (Winkler 2011: 533) |

The general acquisition patterns found for the grammar domains tense and case marking are given in III and IV, respectively. The sequences are based on a large-scale study of French-speaking Swiss students in secondary education learning German as a second language (Diehl et al. 2000) and have been confirmed for Italian learners of German (Ballestracci 2005).

- III 1. pre-conjugational phase
 - 2. present tense of regular verbs
 - 3. present tense of irregular verbs and modal + infinitive
 - 4. perfect tense
 - 5. past tense

 - IV 1. nominative
 - 2. accusative and dative
- (based on Diehl et al. 2000: 364)

In addition, Diehl et al. (2000) observe general patterns for sentence structure (similar to I), but not for plural formation, gender marking (Diehl et al. 2000: 360) and present tense morphology (Dimroth and Haberzettl 2007). They explicitly state that being at a certain level in one domain does not influence the level in another domain. Moreover, learners display differences in speed, differences in the levels reached and in the influence of L1, in that L1 knowledge may let the learner start at a higher level than the 0-level (Diehl et al. 2000: 360).

Besides studies which present acquisition sequences for German that seem to hold irrespective of the learner's L1 we find research that contradicts a universal acquisition order of a particular L2. In his state-of-the-art article on acquisition sequence research, Ellis (2015) pleads for "maintaining the long-held claim that SLA is characterized by universal, fixed sequences of acquisition" (p.183), as formulated in Long (1990). However, he acknowledges, like Long (1990), that the native language of the learner (L1) influences the L2 acquisition process, that is, the sequence in which grammar structures are acquired (see also Pienemann 1984).

Focusing only on German as a foreign language, there is already ample evidence that different L1s reveal different acquisition sequences. Haberzettl (2001; 2006) studies verb placement acquisition patterns and observes OV/VO differences between Russian and Turkish learners of German. Vainikka and Young-Scholten (1996) investigate similar verbal constructions for Turkish, Korean, Italian, and Spanish learners of German and find sequence differences between these learner groups. An L1 effect is also found in the acquisition of grammatical gender in L2 German by learners with Afrikaans, English and Italian as their L1 (see Ellis et al. 2012). Pfaff (1984) observes differences in both syntax and semantics between Greek and Turkish learners of German. As a final example, for L2 English, Murakami (2013) observes morphological acquisition differences between L1 learners (Portuguese, Chinese, German, French, Italian, Japanese, Russian, Korean, Spanish, Turkish). To conclude, all these studies find different grammar acquisition sequences for different L1 learner

groups, with examples from both syntax and morphology.² Interestingly, they relate these differences to the L1 linguistic features of the investigated grammar structures.

From the above it follows that when determining appropriate orders for grammar teaching, we must take into account general acquisition patterns as established for verb placement, sentence negation, tense, and case but, importantly, we also need to explore acquisition patterns for each L1–L2 pair (see also Kwakernaak 2007), so that we can determine the order in which speakers of a particular L1 acquire a particular L2. For the present study, L1 is either Dutch or Finnish, and L2 is German.³

We know of only three studies of Dutch speakers learning German, which are all executed in a foreign language learning setting. First, Draaijer and Reen (1994) analyze the oral production of 59 Dutch learners of German in pre-university secondary education, with a focus on case morphology, using an interview, two guided dialogues, and four picture description tasks. They find that case marking with personal pronouns is more accurate than with full noun phrases (see (1)). Moreover, the presence of a case-assigning preposition like *mit* ‘with’ improves the correct use of case morphology, see (1) vs. (2).

(1a) Er gibt **mir** ein Buch
 He gives me.DAT a book
 ‘He gives me a book’

(1b) Er gibt **meiner Mutter** ein Buch
 He gives my mother.DAT a book
 ‘He gives a book to my mother’

(2) Er spricht **mit** mir
 He speaks with me.DAT
 ‘He is talking to me’

In turn, Draaijer and Reen plead for the application of these insights to the sequence of grammar teaching and recommend presenting grammar in line with

² As one of the reviewers pointed out rightly, all these studies concern second language acquisition and these results might not be directly transferable to a foreign language context.

³ Not all scientists assume a fixed/autonomous acquisition order, partly because they observe vast learner variability in longitudinal studies (e. g., Verspoor et al. 2012; Lowie and Verspoor 2015). However, they seem to assume more general sequence tendencies, which may or may not have implications for language teaching.

the observed acquisition order. However, they also suggest introducing the accusative before the dative case, even though they observe more accurate uses of dative than accusative forms. Their recommendation for teaching case can be summarized as follows:

- V
1. pronouns < full NPs
 2. case assigned by prepositions < case assignment depending on the function of the NP in the clause
 3. accusative < dative

Second, Jordens (1983) investigates the developmental process of case marking among Dutch and English learners of German on the basis of writing products. Following Jordens' (Jordens 1983) research, Jordens, De Bot and Trapman (1989) conclude, "[c]ase marking in German meets the conditions of gradualness and a more or less fixed order of acquisition" (p. 180). Definiteness, sentence position, and the discourse function of the noun phrase (NP) appear to influence morphological correctness, such that indefinite subjects in a non-canonical word order position, e. g. in passive(-like) constructions as in (3), prompt more case marking errors.

- (3) Es wurde einen Fall erwähnt [...] (Jordens 1983: 229)
 There was a-*ACC case mentioned
 'A case was mentioned'

No explicit pedagogical recommendations were formulated on the basis of these findings.

Third, Klein Gunnewiek (2000) analyzes both oral and written products of 24 Dutch secondary school students learning German (beginner level). In their verbal syntax, the learners display the following order in terms of level of correctness: SVO < XVS0 < inversion < verbal bracket construction (German: *Satzklammer*) < V-last. All these structures are present in the initial measure and then show continuous progression over time among all students. In the morphological domain, Klein Gunnewiek investigates plural formation, possessives, past tense, and subject-verb agreement. Again, all the structures appear in the first measure, but no order was evident in the level or degree of correctness of these structures. In both syntax and morphology, she notes gradual improvement in the use of the structures, not distinct phases, let one an acquisition order. Klein Gunnewiek's lack of evidence of stages might, however, well be related to the selected structures, all of which were present at the start of the experiment, so they could not appear later and display an incremental

development. The investigated grammar structures thus might have been too easy for Dutch learners of German.

To our knowledge, no studies have investigated the order of grammar development for Finnish learners of German.⁴ In the Finnish context, previous contrastive studies of cross-linguistic influence have focused mostly on learning English, see Sajavaara and Lehtonen (1977), Ringbom (1987), and Meriläinen (2010). Thus, we conclude that L1 specific empirical evidence of acquisition orders for Dutch and Finnish learners of German is restricted to case marking, as formulated in V.

For languages other than Dutch and Finnish, empirical research is available which identifies the moment of introducing grammar structures as a factor which, among other factors like the concrete grammar structure, can influence learners' results. In an experiment, Winkler (2011) follows two groups of Italian learners of German as a foreign language and focuses on verbal structures which were available in the classroom input at different moments in the teaching process. The experimental group was exposed to German OV structures from the start, whereas VO-structures, which cause negative transfer from L1 (VO Italian), were avoided when possible. This group clearly outperforms the control group, which started with VO input, in producing target-like German verb placement patterns. Her findings plead for an introduction of grammar items that is carefully thought through and based on language acquisition research (see also Tschirner 1999: 233). Studies in second language contexts point in the same direction, such as Diehl (1999) and Diehl et al. (2000) who offer empirical support from the nominal domain. Boss (2004) and Haberzettl (2006) confirm these findings with experiments pertaining to verb placement. Several concrete suggestions about when to introduce particular grammar structures emerge from these studies. For example, Winkler (2011: 206) advises that Italian learners of German should be exposed to OV verbal structures at an early phase. Teaching should focus on these structures to avoid the early establishment of the wrong word order (SVO) hypothesis for German, which leads to a misplacement of the verb. Boss (2004) comes to a similar conclusion for English learners of German,

⁴ In a doctoral thesis, Nyqvist (2013) reports on how Finnish-speaking, 7th–9th grade pupils use definite and indefinite forms and articles in Swedish. The pupils learned noun phrases best when they did not have definite endings or articles, similar to their L1. The next easiest to learn were the definite singular forms containing a definite ending, which also suggests the influence of their L1, in which pupils already add endings to words. These teaching materials do not follow the natural order of the L1; the most difficult form for Finnish learners is the indefinite singular form, which is presented in the teaching materials for Swedish before the definite article.

advising the introduction of verb-last constructions earlier in the curriculum than is currently the case.

2.2 Grammar sequences in teaching materials

Despite the research gap associated with language-related teaching materials (Guerrataz & Johnston 2013: 779), some studies describe course books used in secondary education for learning L2/L3 German (Kwakernaak 1996; Maijala 2010; Aguado 2012; Tammenga-Helmantel 2012). All have analyzed teaching materials with respect to grammar and sequence. For example, Kwakernaak (1996) compares Dutch textbooks from three different language teaching periods that adopt grammar translation, audiolingual and communicative approaches, respectively. He identifies a shift from nominal to verbal morphology and observes a difference in the order in which tenses are introduced: from present < past < perfect to present < perfect < past.

Maijala (2010) analyzes two Finnish (*Einverstanden 1/2, Fahrplan 1/2*) and two global (*Themen 1/2 aktuell, Passwort Deutsch 1/2*) A1–A2 course books and observes many similarities in grammar sequences. In general, the verbs *haben* ‘to have’ and *sein* ‘to be’ as main verbs, the conjugation of regular verbs, personal pronouns, and definite and indefinite articles appear early. However, whereas possessive pronouns are introduced early in the global course books, they appear relatively late in the Finnish materials. The order, in both Finnish and global course materials, for case marking is nominative < accusative < dative < genitive, and that for verb tenses is present < perfect < past.

Aguado (2012) investigates a selection of verbal grammar structures to determine grammar progression in relation to acquisition order in five global textbooks (*Studio d, Berliner Platz, Logisch, Optimal, and Geni@!*). She determines some general tendencies. First, both S-V and *wh*-V-S verb patterns are found in the beginning. Second, separable verbs (so-called *Satzklammer*) and modal verbs are introduced around the same time. Third, modal verbs appear before the perfect tense. Fourth, no uniformity emerges for the relative order of past and perfect tense, in that sometimes both tenses are introduced together, sometimes perfect appears before past tense, and sometimes past tense comes before perfect tense.

Finally, in her analysis of five Dutch textbooks (*Na Klar, Neue Kontakte, Mach's gut, Salzgitter heute, TrabiTour*), Tammenga-Helmantel (2012) uses both qualitative and quantitative criteria including grammar progression, instructional approach (i. e. deductive vs. inductive), integration (i. e., the extent to which grammar is integrated in skill-based exercises), and the number of

grammatical structures. Regarding sequence, she restricts herself to the modal verb *dürfen* ‘to be allowed to’ but does not provide a general overview of the order in which grammatical structures get introduced in Dutch teaching materials. From the above, we conclude that prior studies have explored different grammar structures and domains which were considered worth investigating within the scope of the above mentioned studies and whose selection was mainly based on a certain L1 perspective. Importantly, these structures only partially overlap, making comparisons difficult.

The present study seeks to provide an overview of grammar sequences in Finnish and Dutch textbooks for German as a foreign language, as well as in global teaching materials that are produced in German-speaking countries but used all over the world. It explores to what extent the course books introduce grammar structures in accordance with universal acquisition patterns as stated in I-IV. In addition, it includes a detailed overview of all the sequences reported in the previously cited studies, which may provide new insights about sequences not only from a general but also from the L1 perspective. In doing so, the study aims to achieve a broader perspective on sequences and enables comparisons across the materials and between countries. Our research questions are:

RQ1. Are the teaching materials in line with empirically established acquisition sequences?

RQ2. In what order do Dutch, Finnish, and global German language course books introduce grammar items?

1. What similarities and differences emerge among the individual materials?
2. What similarities and differences can be observed across countries?

3 Method

3.1 Teaching materials

In Finland and the Netherlands, no strict guidelines cover teaching materials at a national level. Curricula developers have a free hand, working with very general instructions about language teaching domains and the minimum content prescribed for each domain (relevant for 2015: CVE 2012; Finnish National Board of Education 2004). In Finland, the core content for grammar teaching focuses on sentence formation and the main L2 grammatical characteristics, from the standpoint of communication. In the Netherlands, no formal instructions are available regarding grammar. Without set standards, teams of textbook authors, generally language teachers, develop teaching materials. In the Dutch context, but not the Finnish, they are sometimes supported by a pedagogical

expert, such as a teacher trainer in foreign language teaching. Considering these circumstances, it is interesting to identify their decisions about grammar and the sequence of introducing grammar structures.

When analyzing teaching materials it is important to be familiar with the teaching context of the country in question (see Abel 1988). As teacher educators and teachers of German as a foreign language we have experience in secondary education in Finland and the Netherlands. For this reason we focus on teaching materials for young adolescent learners in these countries (beginner level, CEFR-level A1-A2). This study includes all course books for German available in both countries for these learners. To select global teaching materials, produced in Germany and used all over the world, we contacted the Goethe-Institut in Amsterdam to determine which global textbooks were used most regularly in the Netherlands and included them in our study. Thus, our study encompasses the following teaching materials (for details, see the References):

Dutch course materials:

- Na Klar!
- Neue Kontakte
- Salzgitter heute
- TrabiTour
- Mach's gut⁵

Finnish course materials:

- Studio Deutsch
- Super
- Kompass Deutsch Neu
- Echt!

Global course materials:

- Planet
- Geni@l
- Team Deutsch

We analyzed all these materials for the first two years of learning German since introduction of grammar issues takes place in these two years. For each year, students use both a textbook, which includes reading texts and a grammar overview, and an exercise book.

⁵ *Mach's gut* is no longer distributed but is still used in some secondary schools.

3.2 Typological distance to target language

This section briefly summarizes the main differences between Dutch/Finnish and German as the target language. These differences will be referred to when we discuss the observed differences between Dutch and Finnish GFL teaching materials.

3.2.1 Dutch and German

Both Dutch and German belong to the West-Germanic language family and are OV-languages. They display verb-second in main clauses, and the finite verb occupies the sentence-final position in subordinate clauses. Both languages allow verb splitting, i. e. the so-called *Verbklammer*, in which the prefix is found in sentence-final position in main clauses:

(4a) Ich **rufe** Jan **an** (infinitive: an-rufen) German
 I call Jan on
 ‘I phone Jan’

(4b) Ik **bel** Jan **op** (infinitive: op-bellen) Dutch
 I call Jan on
 ‘I phone Jan’

Syntactic differences are generally restricted to verbal complexes displaying mirrored verb orders, see (5ab):

(5a) Jan hat das Auto **putzen wollen** German
 Jan has the car clean want
 ‘Jan wanted to clean the car’

(5b) Jan heeft de auto **willen poetsen** Dutch
 Jan has the car want clean
 ‘Jan wanted to clean the car’

Likewise, there are only minimal morphological differences in the verbal domain since German and Dutch conjugate similarly: the verb stem gets an affix marking person and number. Regular German verbs display four options: *-e*, *-st*, *-t*, *-en*. The Dutch verbal paradigm has merely three options: *-Ø*, *-t*, *-en*. In the nominal domain, however, clear differences are found between Dutch and German. Case

- (8b) auto-lle
 car-ALLATIVE
 'onto the car'

A further striking difference between Finnish and German is that nouns do not display grammatical gender in Finnish; the German '*der-die-das*' difference does not occur (see Karlsson and Chesterman 1999, 4–8). Moreover, the male and female personal pronouns, *er* 'he' and *sie* 'she', are the same: *hän*. In addition, there are no articles in Finnish (see (7)).

3.3 Procedure

To answer RQ1, we investigate whether the observed grammar sequences are in accord with general acquisition patterns for verb placement (I), sentence negation (II), tense (III), and case assignment (IV) as described above and repeated here for convenience:

- I
1. canonical order
 2. adverb preposing (adverbs in sentence-initial position)
 3. verb separation (non-finite verbs in sentence-final position)
 4. inversion (the verb precedes the subject with sentence-initial adverbs or interrogatives)
 5. verb-end (finite verb in sentence-final position in subordinate clause)
- II
- | | |
|---------------------------|-------------|
| 1. Neg + Vlex | [–finite] |
| 2. Vcop + Neg | [+ finite] |
| 3. Vaux + Neg, Vmod + Neg | [+ finite] |
| 4. Vlex + Neg | [+ finite] |
- III
1. pre-conjugational phase
 2. present tense of regular verbs
 3. present tense of irregular verbs and modal + infinitive
 4. perfect tense
 5. past tense
- IV
1. nominative
 2. accusative and dative

Additionally, we check whether the sequence of introducing case marking in Dutch course books aligns with the more-detailed case acquisition orders established for Dutch learners of German (Draaijer and Reen 1994):

- V
1. pronouns < full NPs
 2. case assigned by prepositions < case assignment depending on the function of the NP in the clause
 3. accusative < dative

To answer RQ2, we explore all the grammar domains investigated in prior studies devoted to grammar sequences in GFL teaching materials (i. e. Kwakernaak 1996; Maijala 2010; Aguado 2012; Tammenga-Helmantel 2012), viz. (a) tense, (b) simple verbal structures, (c) complex verbal structures, (d) pronouns, and (e) case marking. Within each domain, we explore the introduction order of the constituent grammar structures, see Table 1 for an overview.

Table 1: Grammar domains with categories.

Domain	Category	Represented by
tense	present	simple present of regular verbs
	past	past simple of regular verbs
	perfect	present perfect of regular verbs
simple V structures	<i>haben/sein</i>	<i>haben/sein</i> in simple present
	simple present of weak verbs	simple present of weak verbs
	simple present of strong verbs	simple present of strong verbs with <i>a</i> in stem
	modal verbs	<i>Dürfen</i>
complex V structures	modal verbs	<i>Dürfen</i>
	separable verbs present perfect	separable verbs present perfect
pronouns	personal pronouns	personal pronouns in nominative
	possessive pronouns	possessive pronouns in nominative
case	nominative	definite article in nominative
	genitive	definite article in genitive
	dative	definite article in dative
	accusative	definite article in accusative

For tense we determine the sequence in which the books introduce the simple present, past simple, and present perfect tenses of regular weak verbs. Since

irregular weak and strong verbs are introduced after the introduction of the regular weak forms and therefore do not provide extra information about tense sequences, this study does not account for them.

For verbal morphology we selecte both simple and complex verb structures. Our analysis includes the simple present of *haben* ‘to have’, simple present of *sein* ‘to be’, the simple present of weak verbs, the simple present of strong verbs with *a* in the stem (the latter two represent regular verbs), and the simple present of modal verbs, both as auxiliaries and as main verbs. The verb *dürfen* ‘to be allowed to’ represents the modal verbs. Then, for more complex verbal constructions, we selected the simple present of modal verbs (again, using *dürfen*), separable verbs, and the present perfect of weak verbs. We restricted our analysis to the present tense, because without exception, all textbooks start with it.

For the pronouns, we determine the moment of introduction of personal and possessive pronouns. We restrict ourselves to the nominative case forms, because they are consistently introduced first, as our case marking results show (see below).

We determine the order in which nominative, genitive, dative, and accusative case marking appears for definite articles, which tend to be introduced before indefinite articles, and focus on the introduction of case as a morphological form, i. e., *der/des/dem/den* for masculine nouns. For each first introduction of a case type we recorded whether this is illustrated with pronouns or full NPs, and whether case is assigned by a preposition or not.

Finally, we define the introductory position of each linguistic structure by determining both the chapter and book number in which the structure is first explicitly discussed and practiced. In the tables in this article, we use *x/y* to refer to chapter *x* and book number *y* (where *y* is either 1 or 2). The number of chapters in each book ranges from eight to sixteen, and some of the textbooks continue the chapter numbering in the second book (*Salzgitter heute*, *TrabiTour*, *Team Deutsch*, *Planet*, *Super*). Our study shows the order in which each textbook presents the grammar structures under investigation but the different numbering of the chapters makes a direct comparison between books somewhat challenging.

4 Results

4.1 Research question

RQ1. Are the teaching materials in line with empirically established acquisition sequences?

4.1.1 Verb placement

The order in I shows the general acquisition pattern for verb placement. Table 2 displays the introduction of sentence structures in the teaching materials.

Table 2: Sequences of Verb Placement Introduction in Textbooks [x/y = chapter/book number].

Teaching Material	adverb preposing	verb separation	inversion	finite verb in subordinate clause
Mach's gut	–	–	–	–
Na Klar!	–	–	–	7/2
Neue Kontakte	–	–	–	6/2
Salzgitter heute	–	–	–	13/2
TrabiTour	–	–	–	16/2
Studio Deutsch	7/1	10/1	7/1	4/2
Super	4/1	5/1	4/1	8/2
Echt!	8/1	4/1	8/1	5/2
Kompass Deutsch Neu	3/1	2/1	3/1	10/1
Team Deutsch	–	5/1	5/1	12/2
Geni@l	–	7/1	8/1	2/1
Planet	–	10/1	13/1	20/2

The Finnish books introduce adverb preposing and inversion together when stressing that the first position in the main clause can be occupied by a subject, object or an adverb and that the finite verb directly follows. This is not in line with the acquisition sequence in I (= adverb preposing < verb separation < inversion < finite verb in subordinate clause). Two out of four books present adverb preposing and inversion before verb separation. The position of the finite verb in subordinate clauses is introduced after clarifying the position of the verb in main clauses, hence, this aligns with I. The global teaching materials do not discuss adverb preposing; verb separation, inversion and the position of the finite verb in subordinate clauses are presented in accord with the acquisition sequence in I. As regards I, research question 2 cannot be answered for the Dutch books since they only explicitly introduce the rule that the finite verb is in sentence-final position in a subordinate clause. Overall, the teaching materials introduce those verb placement structures which display differences between L1 and German. Dutch learners are acquainted with the German word order in the main clause, which is identical to their L1, and receive instruction on verb placement in subordinate clauses only. On the other hand, Finnish learners are familiar with a very free word order in their L1. Hence, they must accustom to the more strict word order in German, which is explicitly introduced and extensively practiced in the Finnish course books.

4.1.2 Sentence negation

The acquisition sequence concerning sentence negation is given in II. Table 3 shows the introduction of sentence negation in the analyzed teaching materials.

Table 3: Sequences of Sentence Negation Introduction in Textbooks [x/y = chapter/book number].

Teaching Material	Neg + Vlex	Vcop + Neg	Vaux + NegVmod + Neg	Vlex + Neg
Mach's gut	–	–	–	–
Na Klar!	–	–	–	–
Neue Kontakte	–	–	–	–
Salzgitter heute	–	–	–	–
TrabiTour	–	–	–	–
Studio Deutsch	–	–	–	4/1
Super	–	–	–	2/1
Echt!	–	–	–	3/1
Kompass Deutsch Neu	–	–	–	5/1
Team Deutsch	–	–	–	5/1
Geni@l	–	–	7/1	7/1
Planet	–	4/1	4/1	4/1

The analyzed global teaching materials introduce sentence negation with lexical verbs, sometimes combined with modal verbs (*Genial*) or with modal verbs and copula (*Planet*). This order does not reflect the acquisition sequence in II. Sentence negation with infinitives is not explicitly discussed. The Dutch teaching materials do not introduce sentence negation as a grammar structure explicitly, and the Finnish books only introduce Vlex + Neg constructions. Therefore, we cannot evaluate the Dutch and Finnish teaching materials concerning II.

4.1.3 Tense

The Dutch textbooks all start with the simple present tense, and only a subset of these textbooks offer past tense. Some introduce past tense before perfect tense (*Mach's gut*), whereas others do so after the perfect tense (*TrabiTour*, *Salzgitter heute*). Similar to the Dutch materials, all the Finnish textbooks start with the simple present tense, followed by the perfect tense. *Kompass Deutsch Neu* introduces the simple past tense after the perfect tense. The global teaching

Table 4: Sequences of Tense Introduction in Textbooks [x/y = chapter/book number].

Teaching Material	Simple present weak	Past simple weak	Present perfect weak
Mach's gut	1/1	9/1	2/2
Na Klar!	1/1	–	5/2
Neue Kontakte	1/1	–	6/1
Salzgitter heute	2/1	11/2	9/2
TrabiTour	2/1	15/2	8/1
Studio Deutsch	1/1	–	5/2
Super	1/1	–	3/2
Echt!	2/1	–	13/1
Kompass Deutsch Neu	2/1	3/2	11/1
Team Deutsch	1/1	–	10/1
Geni@l	2/1	–	3/2
Planet	2/1	–	14/1

materials start with the simple present tense; none of them introduces past tense. However, perfect tense appears toward the end of book 1 (*Team Deutsch*, *Planet*) or the beginning of book 2 (*Geni@l*), as we show in Table 4.

To summarize, all teaching materials but *Mach's gut* display the following sequence when introducing tense: present < perfect (< past). We therefore conclude that the analyzed teaching materials match with the acquisition sequence in III.

4.1.4 Case marking

The Dutch textbooks present all four case marking forms. They all start with the nominative case, and genitive case is always the last to be introduced. The following picture emerges:

- nominative < accusative < dative < genitive

All Finnish books start with the nominative case, and the accusative appears before the dative. The genitive case is presented only in *Echt!*⁶. Therefore, we note:

- nominative < accusative < dative: *Studio Deutsch*, *Super*, *Kompass Deutsch Neu*
- nominative < accusative < dative < genitive: *Echt*

⁶ The genitive case is introduced in the third book of *Kompass Deutsch Neu*, which was not included in our analysis.

The global books all start with nominative case. None of them covers genitive case marking. As Table 5 shows though, the order for accusative and dative introduction varies:

- nominative < accusative < dative: *Team Deutsch, Planet*
- nominative < dative < accusative: *Geni@l*

Hence, all teaching materials but *Geni@l* introduce case marking in the following order: nominative < accusative < dative < genitive. In so doing, they align with the established acquisition sequence formulated in IV.

For Dutch learners, Draaijer and Reen (1994) present a more-detailed, L1 specific acquisition order for case marking, see in V.

- V
- (i) pronouns < full NPs
 - (ii) case assigned by prepositions < case assignment depending on the function of the NP in the clause
 - (iii) accusative < dative

Concerning V.i, the course books introduce nominative with pronouns, although *Mach's gut* and *TrabiTour* also present full NPs with nominative. Dative and accusative are generally introduced with full NPs although some textbooks illustrate case marking with pronouns as well: *Mach's gut* (dative and accusative), *Na Klar* (dative), and *Neue Kontakte* (accusative). Hence, we conclude that the analyzed teaching materials only partly align with V.i.

Regarding V.ii., all the Dutch teaching materials present genitive case with the post-nominal possessive construction (e. g. *der Hund meines Vaters* 'the dog of my father'). *TrabiTour*, *Neue Kontakte* and *Salzgitter heute* combine this with the prepositional construction (e. g. *wegen des schlechten Wetters* 'due to the bad weather'). *Na Klar* and *Neue Kontakte* use the prepositional construction when introducing dative case. Actually, *Na Klar* opts for a joint presentation of the prepositional and the non-prepositional construction (short: +P and -P), both for dative and accusative:

(9a) Er gibt **meiner Mutter** ein Buch [-P]
 He gives my mother.DAT a book
 'He gives a book to my mother'

(9b) Er spricht **mit meiner Mutter** [+P]
 He speaks with my mother.DAT
 'He is talking to my mother'

Table 5: Sequences of Case Marking Introduction in Textbooks [x/y = chapter/book number; Pro = pronoun; NP = full noun phrase; + P/-P = with(out) a preposition].

Teaching Materials	Nominative	Pro/NP	Genitive	+ P/-P	Dative	Pro/NP	+ P/-P	Accusative	Pro/NP	+ P/-P
Mach's gut	1/1	Pro/NP	4/2	-P	11/1	Pro/NP	-P	6/1	Pro/NP	-P
Na Klar!	1/1	Pro	7/2	-P	4/2	Pro/NP	+ P/-P	4/1	NP	+ P/-P
Neue Kontakte	1/1	Pro	7/2	+ P/-P	3/2	NP	+ P	5/1	Pro/NP	-P
Salzgitter heute	1/1	Pro	11/2	+ P/-P	5/1	NP	-P	4/1	NP	-P
TrabiTour	2/1	Pro/NP	18/2	+ P/-P	10/2	NP	-P	6/1	NP	-P
Studio Deutsch	3/1	NP	-	-	11/2	Pro/NP	-P	12/1	Pro/NP	-P
Super	3/1	Pro	-	-	18/2	Pro	-P	11/1	NP	-P
Echt!	5/1	Pro/NP	9/2	-P	10/1	Pro/NP	+ P	5/1	Pro/NP	-P
Kompass Deutsch Neu	2/1	Pro/NP	-	-	6/1	Pro/NP	-P	4/1	Pro/NP	-P
Team Deutsch	4/1	Pro/NP	-	-	9/1	NP	+ P	7/1	Pro/NP	-P
Geni@l	2/1	Pro	-	-	12/1	NP	+ P	6/1	NP	-P
Planet	4/1	Pro	-	-	21/2	NP	-P	8/1	NP	-P

All other textbooks present dative and accusative case marking with examples like in (9a), i. e. without a case-assigning preposition. To summarize, morphological case is introduced with +P constructions in only a selection of the course books. Hence, the observed orders in the course books only partially match with the acquisition sequences in V.ii. All course books introduce accusative prior to dative and are therefore in line with V.iii.

We conclude that the introduction of tense and verb placement are generally in line with acquisition sequences but that not all insights from SLA research have been adopted in the analyzed teaching materials. We will deal with this issue in more detail in the Discussion.

4.2 Research question

RQ2. In what order do Dutch, Finnish, and global German language course books introduce grammar items?

1. What similarities and differences emerge among the individual materials?
2. What similarities and differences can be observed across countries?

4.2.1 Tense

As we have seen when answering RQ1, the most common pattern for tense introduction is the following:

- present < perfect (< past)

Thus, Dutch, Finnish, and global teaching materials display large similarities when introducing tenses. In so doing, the teaching materials take frequency into account; in present-day German perfect tense is more commonly used than past tense (Funk and Koenig 1991). *Mach's gut* is an exception; it introduces past tense prior to perfect tense.

4.2.2 Simple verbal structures

The Dutch course books introduce the verbs *haben* and *sein* in chapters 1 or 2, and generally together. Only in *Neue Kontakte* does *haben* follow *sein*. Regular weak present tense forms also appear in these early chapters. Modals are generally introduced in the second half of the first textbook. We find more variation with regard to the present tense of strong verbs though, including a

relatively early introduction in *Neue Kontakte* (chapter 3, book 1), but a late arrival in *TrabiTour* (end of book 2). Specifically, the sequences uncovered are of two types:

- *Haben/sein/weak* simple present < modals < strong simple present: *TrabiTour, Na Klar, Salzgitter heute*
- *Haben/sein/weak* simple present < strong simple present < modals: *Mach's gut, Neue Kontakte*

In the Finnish textbooks, *haben* and *sein* also are introduced in chapters 1 or 2 and generally together, similar to the Dutch teaching materials (see Table 6). Modals are found much later, at the end of book 1. The Finnish teaching materials also show a strong consensus in their sequence of simple verbal morphology and consistently display the sequence:

- *haben/sein/weak* simple present < strong simple present < modals

The global teaching materials introduce the verb *sein* in chapter 1 or 2, sometimes together with *haben* (*Geni@l*) and sometimes before it (*Team Deutsch, Planet*). Regular weak present tense forms are also found in chapters 1 and 2 of book 1. Modals are generally introduced in the second half of book 1. The introduction of present tense strong verbs displays more variation, in that *Team*

Table 6: Sequences of Simple Verbal Morphology Introduction in textbooks [x/y = chapter/book number].

Teaching Materials	Simple present weak	haben	Sein	Simple present strong	Modal (<i>dürfen</i>)
Mach's gut	1/1	1/1	1/1	9/1	5/1
Na Klar!	1/1	2/1	2/1	7/1	9/1
Neue Kontakte	1/1	2/1	1/1	3/1	7/1
Salzgitter heute	2/1	1/1	1/1	7/1	4/1
TrabiTour	2/1	1/1	1/1	12/2	5/1
Studio Deutsch	1/1	2/1	1/1	6/1	11/1
Super	1/1	3/1	2/1	4/1	10/1
Echt!	2/1	2/1	2/1	4/1	6/1
Kompass Deutsch Neu	2/1	1/1	1/1	2/1	5/1
Team Deutsch	1/1	2/1	1/1	4/1	6/1
Geni@l	2/1	2/1	2/1	8/1	11/1
Planet	2/1	5/1	1/1	18/2	8/1

Deutsch opts for an earlier introduction (chapter 4, book 1), than *Planet* (at the end of book 2). That is, we find the following sequences:

- *Haben/sein*/weak simple present < modals < strong simple present: *Planet*
- *Haben/sein*/weak simple present < strong simple present < modals: *Team Deutsch, Geni@l*

To conclude, similar to the findings related to tense sequences, the introduction of simple verbal morphology in Finnish, Dutch, and global teaching materials displays little variation. All course books start with the present tense of *haben/sein* and the simple present tense of weak verbs, followed by the simple present tense of strong verbs and then modals (or in a few instances, a reversed order of the latter two). In so doing, the teaching materials start with high frequent *haben* and *sein*. For the other verbs we observe an increase in morphological complexity, that is from regular to irregular verbs.

4.2.3 Complex verbal structures

Dutch teaching materials do not mention separable verb constructions, which is not surprising since this construction is identical in German and Dutch. In general, modals are introduced before perfect tense; only *Neue Kontakte* presents perfect tense prior to modals:

- modals < present perfect: *Na Klar, TrabiTour, Salzgitter heute, Mach's gut*
- present perfect < modals: *Neue Kontakte*

In contrast, all Finnish materials introduce separable verbs, as it is a grammar phenomenon which does not exist in Finnish. Consequently, they mark separable verbs with a dash (e. g., *auf/machen, an/rufen*) and thus take the differences between German and their students' L1 into account. *Studio Deutsch* presents the separable verb constructions at the end of book 1, whereas the other Finnish teaching materials introduce them earlier, such as in chapters 2, 4, or 5 of book 1. Similar to the Dutch materials, modals (here: *dürfen*) are presented prior to the present perfect. The sequences found in the Finnish materials are:

- modals < separable verbs < present perfect: *Studio Deutsch*
- separable verbs < modals < present perfect: *Echt, Super, Kompass Deutsch Neu*

Only *Team Deutsch* and *Planet* introduce separable verb constructions. Both perfect tense and modals appear initially in the second half of book 1 or the

beginning of book 2, and in all cases, modal verbs are introduced before the perfect tense. The following order of introduction thus can be observed in the selected global materials (see Table 7):

- modals < separable verbs < present perfect

Table 7: Sequences of Complex Verbal Morphology Introduction in Textbooks [x/y = chapter/book number].

Teaching Materials	Present perfect weak	Separable verbs	Modal (<i>dürfen</i>)
Mach's gut	2/2	–	5/1
Na Klar!	5/2	–	9/1
Neue Kontakte	6/1	–	7/1
Salzgitter heute	9/2	–	4/1
TrabiTour	8/1	–	5/1
Studio Deutsch	5/2	10/1	11/1
Super	3/2	5/1	10/1
Echt!	13/1	4/1	6/1
Kompass Deutsch Neu	11/1	2/1	5/1
Team Deutsch	10/1	5/1	6/1
Geni@l	3/2	–	11/1
Planet	14/1	10/1	8/1

We conclude that nearly all analyzed course books use the sequence modal verbs < perfect tense (cf. *Neue Kontakte*). In other words, they choose to first present all the verb classes in present tense before introducing perfect tense. Separable verbs are presented only when estimated difficult for the learner group, and for that reason are discussed rather extensively in the Finnish books, but do not receive specific attention in the Dutch teaching materials. In doing so, the course books adapt their grammar instruction to the target group.

4.2.4 Pronouns

As we show in Table 8, personal pronouns are introduced in chapter 1, book 1, in all Dutch course materials. *Mach's gut* introduces personal and possessive pronouns together; in all other textbooks, possessive pronouns follow the personal pronouns. In the Finnish teaching materials *Studio Deutsch* and *Super*, personal pronouns appear in chapter 1 of book 1. They are not explicitly

Table 8: Sequences of Pronoun Introduction in Textbooks
[x/y = chapter/book number].

Teaching Materials	Possessive pronouns	Personal pronouns
Mach's gut	1/1	1/1
Na Klar!	4/1	1/1
Neue Kontakte	2/1	1/1
Salzgitter heute	3/1	1/1
TrabiTour	2/1	1/1
Studio Deutsch	2/1	1/1
Super	3/1	1/1
Echt!	6/1	–
Kompass Deutsch Neu	4/1	–
Team Deutsch	2/1	1/1
Geni@l	3/1	2/1
Planet	3/1	7/1

introduced in *Echt* and *Kompass Deutsch Neu*, however. Possessive pronouns are presented after the personal pronouns in all Finnish books. Finally, global course books introduce personal and possessive pronouns in the first chapters of book 1, and possessive pronouns generally follow personal pronouns. An exception is the late explicit introduction of personal pronouns as a grammar structure in *Planet*.

Thus, in all the teaching materials, apart from *Planet* and *Mach's gut*, we encounter:

- personal pronouns < possessive pronouns.

In doing so, the analyzed teaching materials start with the high-frequent personal pronouns. In addition, the Finnish books show a relatively late introduction of possessive pronouns. As was discussed in the section on language typology, Finnish and German mark possessive differently, and this is reflected in the analyzed teaching materials.

4.2.5 Case marking

As we have seen when answering RQ1, all books but *Geni@l* introduce case marking in the following order:

- nominative < accusative < dative (< genitive)

We conclude that case introduction displays consensus across all the analyzed teaching materials. Apparently, differences in case marking between Dutch, Finnish and German do not influence the order of introducing these grammar structures.

To summarize, RQ2 shows that the results display mainly similarities across all the investigated domains. When differences are found, these are often related to language-specific characteristics of the L1 and the typological distance between the L1 and L2 German, namely when Finns learn German pronouns and separable verbs. Moreover, the course books start with high frequent structures such as *haben/sein* and display an increase in morphological complexity when introducing verbal structures.

5 Discussion and concluding remarks

This study explored the order in which grammar structures are introduced in Dutch, Finnish and global GFL teaching materials and investigated whether sequences in which grammar topics are presented in these books match the empirically determined acquisition sequences. The main results will be discussed in this section.

RQ 1: We have seen that the analyzed teaching materials present tense, verb placement, and case assignment in accord with general empirically based acquisition sequences.

On the other hand, the Dutch teaching materials are not fully in line with the case-marking acquisition sequences in Draaijer and Reen (1994). The same holds true regarding sentence negation in global and Finnish course books and verb placement in Finnish materials. Empirical evidence is not available for all the structures under investigation, e. g. concerning the order of modal verbs and perfect tense. Therefore, we conclude that the insights from foreign language acquisition research have only partly found their way into these teaching materials. This might be related to the restricted accessibility of research outcome to non-academics. The relevance of presenting findings of SLA in such a way that they are accessible to those who practice instruction, i. e. teachers, is also acknowledged in Ellis (2015: 202). For this reason, we think that the quality of teaching materials would benefit if an academic FLA expert were to join the team of textbook developers.

RQ2: With regard to sequences in grammar introduction in Dutch, Finnish, and global teaching materials we conclude the following. Tense introduction generally follows the pattern present < perfect < past. In German, the simple past

is not often used in present-day spoken language (Funk and Koenig 1991). Hence, presenting perfect tense before past tense seems to be in line with a communicative approach to foreign language teaching, in which communicatively relevant, i. e. frequently used, grammar structures are provided to the learners. For verbal constructions, we observe the following order: present tense of *haben/sein*, simple present of weak verbs < simple present of strong verbs// modals < perfect. This sequence shows that the teaching materials first focus on present tense structures, with increasing morphological complexity. In the nominal domain, personal pronouns tend to be introduced prior to possessive pronouns. This choice is another example of teaching materials taking frequency into account. Finally, morphological case is presented in the order nominative < accusative < dative < genitive. Overall, the sequences in the course books show that teaching materials seem to take the learner and their possible learning problems seriously in that they start with morphologically simple structures. Moreover, they start with frequently used grammar structures. In so doing, they foster a learner-centered and communicative approach to foreign language teaching.

With respect to differences and similarities that emerge among the individual teaching materials, we found that they display consensus in all the domains under study. We have observed some minor exceptions, for instance, when *Mach's gut* introduces past tense before perfect tense, which reflects the order in which tense traditionally is presented in descriptive grammars (see Kwakernaak 1996). Despite the many general patterns we found, no consensus arose for the relative order of modals and the present tense of strong verbs. Future foreign language acquisition (FLA) studies concerning these two verbal constructions might shed light on their relative acquisition and hence provide curriculum designers and teachers with insights into their ideal teaching sequence and in so doing promote evidence-based foreign language teaching (FLT). For example, an intervention study with variable introductions, relating the moment of introduction to the learning results, could provide clarity. In particular, we call for research that integrates FLA and FLT research (see also Tschirner 1999; Koepfel 2010; Winkler 2012), which could offer more empirical justification for the sequences that appear in current course books.

Regarding the similarities and differences observed across countries, the teaching materials display many similarities in the sequence of introducing grammar issues. A striking difference, though, between the Dutch and Finnish or global textbooks is the absence of certain grammar structures like separable verbs as explicit items. This may be explained by the fact that as teachers of German, we have observed that Dutch learners do not make mistakes with separable verbs, whereas Finns do. As was shown above, the Dutch language

shares this specific construction with German. Another difference concerns the moment of introduction, for instance with past tense; most of the Dutch textbooks present this grammar structure but global and Finnish books do not or only sparingly. We thus observe that the progression curve in Dutch materials is steeper than in Finnish and global books. The difficulties which arise when Finns learn German, e. g. with separable verbs and possessive pronouns, seem to be related to the typological distance between Finnish (L1) and German. It is tempting to generalize this assumption stating that typological proximity would lead to positive transfer from L1 to the foreign language, as we have seen with the separable verbs in Dutch and, related to this, their absence in Dutch course books. However, caution is called for because positive transfer from L1 is not guaranteed since an intervening L2 might block this transfer to L3 (Bardel and Falk 2007). In the Dutch situation, English (L2) might disturb direct positive transfer to German (L3). On the other hand, Finnish students learning German, mostly as L3 or L4, can use their prior knowledge of English and Swedish, which are the most commonly learned foreign languages in Finnish basic education.

Teaching materials produced for learners with a specific L1 background can cater to their pre-existing knowledge and use it, among other inputs, to define the order in which they present grammar structures, to select grammar structures, and to determine the progression rate. The present study shows several instances in which Dutch and Finnish teaching materials take into account their learners' L1 pre-existing knowledge and L1 characteristics. When keeping possible L1 and L2 similarities and progression rates in mind, teaching materials produced for a specific L1 audience could probably foster language learning more effectively than global materials can. This idea is in line with Tomlinson (2012: 158), who points to the restrictions of global teaching methods, noting they are often “not meeting the needs and wants of any,” and thus calls for localized textbooks and more flexible global teaching materials.

Our study includes all Dutch, Finnish, and some global GFL teaching materials available in the Netherlands and Finland. Additional research that includes course books for other L1 learners may shed light on the generalizability of our findings. Overall, we need more research on teaching materials, especially empirical research on the use of textbooks in classrooms, not just on sequences of grammar introduction. Other relevant issues in effective grammar teaching include the number of grammar structures presented, the extent to which introduced grammar should be repeated, the appropriate instructional approach (e. g. inductive versus deductive), and the types of grammar exercises to offer (see Maijala and Tammenga-Helmantel 2017). Studies incorporating these topics could improve the design of teaching materials and, as a consequence, would contribute to more effective grammar teaching.

We have argued above that cooperation between FLA and FLT research is desirable. The present study has shown that course books display striking – possibly universal – similarities in the order in which they introduce grammar structures. Especially when L1 gives rise to it, changes in this order are observed in the textbooks. Since teaching materials, written and used by language teachers, indirectly provide us more insight into what grammar teachers consider teachable at a particular time, textbook analyses might play a role in the teachability discussion. In turn, FLA research could provide empirical evidence about acquisition sequences, in particular for individual L1/L2 pairs, which can be used to improve teaching materials and thus foreign language teaching. Language teaching is but an endeavor to optimize language learning, which requires to take into account the learners prior knowledge and to empower and accelerate a systematic development (see Klein and Dimroth 2003: 158). It is therefore essential that insights from FLA research find their way into teaching practice. Teachers and learners alike need empirical evidence to elevate foreign language teaching.

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