

The L2 proficiency level effect in L3 lexical learning: high-proficiency L2s do not transfer

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Abstract

In this case study, we investigate the role of the proficiency level in an earlier, formally-learned, L2 for the transfer source in L3 learning at the lexical level by comparing two pairs of learners with different proficiency levels in their L2s - English, French, Spanish, and Italian. The data were gathered with a mirror design: L1 German/L3 Swedish and L1 Swedish/L3 German. The learners were absolute beginners of the L3. Both pairs were recorded over 6 months during conversations with a bilingual German/Swedish interlocutor. The recordings were conducted on a monthly basis. The proficiency levels of all L2s were tested in written tests based on the CEFR scale. The results show that the proficiency level in the L2 impacts the transfer source. The L2s at C1+ level were not transferred, but L2s with lower proficiency levels were. These results confirm what is predicted by the L2 status factor (Bardel & Falk, 2012), namely that a high-proficiency L2 can lose its status as an L2, approaching L1 status, which makes it less susceptible to transfer. The study also confirms the value of case studies in L3 research.

Keywords

Lexical transfer, proficiency, L3 learning, oral production.

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Introduction

This study explores lexical transfer in L3 German and L3 Swedish by closely examining four learners' oral production at the initial stage of L3 learning. In this paper, L3 is defined as the language that is currently being learned after the L1 and at least one L2. While L1 is the mother tongue, L2(s) are all the language(s) other than the L1, which have been learned before the L3 (Hammarberg, 2018). Lexical transfer is the term used to refer to the influence of a background language (L1/L2) at the lexical level in L3 oral production in the present study (Lindqvist, in press).

By conducting multiple case studies, the main goal is to further our understanding of the interplay between the proficiency level in the L2 and the L2 status factor as an explanation for transfer patterns in L3 learning. As stated by Hammarberg (in press), case studies allow for detailed scrutiny of a learner's linguistic behavior, which makes this approach suitable in this study. Moreover, Denscombe argues that the "case study approach works best when the researcher wants to investigate an issue in depth and provide an explanation that can cope with the complexity and subtlety of real-life situations. In particular, it lends itself to the study of processes and relationships within a setting" (2010, p. 55).

While previous studies have emphasised the impact of the proficiency factor, few of them have singled it out as the determining factor for transfer source (e.g. De Angelis & Selinker, 2001; Williams & Hammarberg, 1998). Rather, there has often seemed to be an interplay with other factors, for instance, typology (Lindqvist & Bardel, 2014). The research design of the study will allow us to focus on the proficiency factor. The learners participating in the study are all multilingual, with knowledge of the same languages. However, they have learned these languages in different orders and know them to different degrees, which is why it is possible to examine the role of the proficiency factor. We are interested in the role played by L2 English, L2 French, and L2 Spanish (and L2 Italian to some extent, cf. Methodology) known by the learners. The role of L2 English in Swedish learners' L3 oral production has been discussed in previous research (Falk et al., 2014), which showed that high proficiency L2 English did not play a role, whereas low proficiency L2s were used to a much larger extent. According to the authors, this result can be explained when considering the status of English in Swedish society in general. In fact, it has often been put forward that English is approaching second rather than foreign language status, unlike other taught languages in school such as French, German, and Spanish (Sundqvist, 2020). The proficiency level of English is thus generally high among Swedes, and this is why the authors argue that English is close to an L1, making it less

susceptible to transfer. While French does not have that status in Sweden in general, the Swedish learners of L3 German in the present study are highly proficient in that language, to a comparable level to that of English, whereas the German learners of L3 Swedish have lower proficiency levels in both English and French. Moreover, all the learners have comparable levels of proficiency in Spanish and Italian. Thus, this particular dataset consisting of four cases will allow for a close examination of the proficiency level as an explanatory factor for transfer behavior in L3 learning.

The study will be conducted by the following research questions:

In what way does a very high proficiency in an L2 determine the lexical transfer source?

In what way does a low/intermediate proficiency level in an L2 determine the lexical transfer source?

In order to evaluate the impact of different L2 proficiency levels, two pairs of learners were studied, one pair with L1 Swedish (with both high-proficiency L2s and low-proficiency L2s) learning German as an L3 and one pair with L1 German (and lower proficiency in all their L2s) learning Swedish as an L3. Both pairs were at the initial stage of L3 learning. The different proficiency levels in the L2s allow us to evaluate if, and to what extent, the proficiency level impacts the transfer source in L3 learning. Furthermore, while the involved L1 and L3, as well as L2 English, are typologically close, the additional L2s belong to the Romance language family. The typology factor is thus constant across the data set. The study will also contribute to the ongoing discussion about the L2 status factor (Williams & Hammarberg, 1998, Bardel & Falk, 2007, Falk & Bardel, 2010, 2011, Bardel & Falk, 2012, Sánchez & Bardel, 2017). More specifically, we will suggest that the L2 status factor can be further refined by considering high L2 proficiency.

Theoretical background and previous research

In this section, we will discuss earlier research on lexical transfer in L3 learning, with the main focus on what impact proficiency in the background languages has been found to have. We will, however, start with a short summary of other factors that have often been suggested to influence transfer behavior in L3.

In the early research on transfer in L3 learning, Williams and Hammarberg (1998) identified four factors that impacted the transfer source: recency, typology, proficiency and L2 status. According to Williams and Hammarberg the language that “scores” the highest on these factors in total, is likely to be the main transfer source. These four factors have been tested and

challenged in research on transfer in L3 learning. The recency factor refers to how recently a background language has been used, with the hypothesis that if it had been used recently, it will be more likely to be transferred. However, no study to our knowledge has successfully singled out the role of recency. It only seems to be a contributing factor in Dewaele (1998), Herwig (2001), and Lindqvist and Bardel (2014), for instance, although in combination with other factors, such as proficiency and typology. Lindqvist and Falk (2016) tested the hypothesis that the most recently used L2 would act as a transfer source on 41 learners of Dutch (L1 Swedish). However, their study clearly showed that recency did not play a role for transfer source.

The typology factor, according to which a closely related language is more likely to influence the L3, has been found to be decisive in several studies. Lindqvist and Bardel's (2014) case study showed that a Romance L2 tended to influence a Romance L3 to a larger extent than a Germanic L2. Lindqvist (2015) showed that a language that the learners perceived as being closely related to the L3, namely L2 English, was the dominant transfer source in L3 French, rather than L1 Swedish. Ringbom's studies (e.g., 2007) showed that Swedish, as either an L1 or L2, was more often used as a transfer source than Finnish when learning English as an L3. There thus seems to be some evidence for this factor, but typology has rarely been identified as the decisive factor in transfer. Lindqvist and Bardel (2014), for example, argue that there is an interplay between typology and low proficiency in L2 and L3.

The L2-status factor argues for transfer from L2 in L3 learning due to the many cognitive similarities that the learning processes of L2 and L3 share (when learned in a formal setting, Bardel & Falk, 2012). According to the L2-status factor with the declarative/procedural distinction (cf. Paradis, 2004, 2009), it is possible that an L2 can reach such a high level of proficiency that it loses its L2-status, and resembles the status of an L1, in the sense that knowledge about the language has become procedural (Bardel & Falk, 2012). As discussed in Falk et al. (2014), it is, in such cases, possible that an L2 that has taken an L1 status will not be a dominant transfer source in L3 learning. This point will be further examined empirically and discussed in the present study.

Moreover, according to Paradis (2004, 2009), content words are part of the declarative knowledge in all languages (L1, L2/L3). In contrast, function words are stored together with syntax in the L1 and thus part of the procedural knowledge. In formally learned languages (L2/3) function words and syntax are part of the declarative knowledge. In Lindqvist and Falk (2014) the L2 status factor with the declarative/procedural distinction was tested on learners of L3 Swedish (L1 German, L2 English, and for some learners also French). The authors examined which transfer sources were used for syntax, function words, and content words. The results

showed that content words were transferred from both L1 and L2s, whereas the transfer source for both function words and syntax was almost exclusively from a previously formally learned L2. In short, this study corroborated the L2 status factor explained by the procedural/declarative model (similar results were found in Falk, 2015, on lexical transfer in L3 Swedish).

When discussing the impact of the proficiency factor in transfer behavior in L3 learning, we need to be aware of the fact that proficiency in both the L2 and the L3 has been the point of departure in some previous studies. In some research, the main interest has been the proficiency in the L3, where the general indication is that “transfer from the L2 is stronger at the initial stages of L3 learning” (Sanchez & Bardel, 2017, p. 228). This has been found in several studies (e.g., Singleton, 1987; Ringbom, 1987; 2007; Williams & Hammarberg, 1998; Navés et al., 2005; Lindqvist, 2009; Falk, 2015). The amount of lexical transfer tends to decrease as the proficiency level in the L3 increases.

Other studies have focused more on the proficiency in the L2(s), as is done in the present study. Already in Williams and Hammarberg’s case study (1998) it was found that an L2 in which the learner was highly proficient, according to her own estimation, was more likely to influence the L3 (see also Tremblay, 2006; Cenoz, 2008). This was explained as being a natural outcome of the fact that a learner can only transfer what has already been learnt in another L2. However, some other studies have shown that a language in which the learner has a low proficiency level is more likely to influence the L3 (e.g. Lindqvist & Bardel, 2014). In such cases, there seems to be an interplay between the proficiency factor and other factors, especially the typology factor, as mentioned above. The two case studies reported in Lindqvist and Bardel (2014) showed that a low-proficiency Romance L2 influenced a Romance L3. Furthermore, the authors suggested that low proficiency in the L3 played an important role (for similar findings see for instance the case study by De Angelis & Selinker, 2001).

This overview of previous research shows that there is no consensus regarding the impact of the suggested factors. The results seem to depend on many different variables, such as language constellations and the ways in which the different factors have been accounted for in relation to the involved languages. In the present study, the research design will allow us to examine the impact of the individual factors, focusing on proficiency and its relation to L2 status.

Methodology

Informants

All in all, four informants took part in the study; two of whom were Swedish L1 speakers learning German as an L3 (informants A and B), and two with German as an L1, learning Swedish as an L3 (informants C and D). Learners A and B were Swedish university teachers of French, both women (35 and 38 years old). They had learned all the L2s formally in school or at beginner's courses in Sweden. Learners C and D were also women and exchange students at a Swedish university (22 years old). They had also learned their L2s formally in school in Germany and Switzerland. Both learner pairs were absolute beginners of their respective L3s. Before the data collection started, they took written standardised placement tests (developed in accordance with the CEFR at the Open University in Sweden) in all their background languages in order to control for their proficiency level in the L2s. Table 1 shows the results of these tests, indicating the proficiency levels according to the CEFR scale (Council of Europe, 2001).

	L1	L2a	L2b	L2c	L3
Learner A	SW	EN: C1+	FR: C1+	SP: B2+	GE
Learner B	SW	EN: C1+	FR: C1+	IT: B1 SP: B1	GE
Learner C	GE	EN: B2	FR: B2	SP: A2	SW
Learner D	GE	EN: B1	FR: A1	SP: A2	SW

Table 1. The informants' proficiency levels in their background languages before data collection. SW: Swedish, EN: English, FR: French, SP: Spanish, IT: Italian, GE: German

Lindqvist's (in press) overview of lexical transfer in L3 learning shows that lexical transfer occurs to a larger extent in the beginning of L3 learning. It thus seems fruitful to look at the initial stages of L3 learning, especially when the number of participants is fairly low, as in the present study. At the same time, case studies are appropriate if one wants to examine a certain phenomenon closely and understand the ways in which different factors might explain linguistic behavior (Denscombe, 2010; Hammarberg, in press). As the learners of the present study are all at the initial stage, we expect a relatively high amount of lexical transfer, especially in the first recordings, which hopefully will enable us to discern clear patterns in each of the learner's productions.

Tasks and procedures

The data contains oral production in L3 Swedish and German, respectively. All recordings took place in Sweden. The informants took part pair-wise. Both pairs were recorded 5-6 times over a period of 6 months during conversations with a German/Swedish bilingual interlocutor. Each recording lasted approximately 40 minutes. The informants were absolute beginners in the target languages at the beginning of the data collection, which made the first session more like a first beginners' lesson in the language, involving prompt cards to teach the participants some basic verbs and nouns. The lessons were conducted in the target language as much as possible. Some lexical items were occasionally supplied or explained by the bilingual teacher. The following task was 'find a common time to play tennis together' with the help of an agenda containing various activities based on the verbs and nouns just learnt. With a (slowly) increasing proficiency the informants were asked to perform more and more demanding tasks, such as:

- 'decide which dog to buy', with the help of an illustration of various colored dogs
- 'tell us about Maria's day based on the notes you have'
- 'plan an expedition', with the help of an illustration with different personalities all preparing for a polar expedition.

At the end of the data collection period, all participants were given the task of retelling an episode of a mute animated film (Pingu and Shaun the Sheep) to the other participant. All tasks were designed to encourage the two learners to talk to each other as much as possible (with the interlocutor's guidance and help). The informants' input was mostly spoken L3 and some written stimulus texts. The informants did not write anything as part of the data collection. When the data collection was completed, all participants took a standardised placement test (the same type as before the start of the data collection) to establish their levels in the target language. Learners A and B had reached level A2 in German, and learners C and D had both reached B1 in Swedish – probably because they were in Sweden and exposed to the target language. Learners A and B, on the other hand, did not have regular contact with the German language during the six-month period.

Method of analysis

The recordings were transcribed, and thereafter, the informants' utterances containing lexical transfer were identified and further coded for language origin. This procedure was carried out

by two researchers independently. Then the researchers went through the transcriptions and coding together. Some mismatches were re-analyzed. Pronunciation was an important aspect when analyzing the data, as there are words, such as *que* in example 3, which exist in several languages (French and Spanish in this case) but are pronounced differently. Moreover, in order to relate the results of the present study to the studies of Lindqvist and Falk (2014) and Falk (2015), the transferred lexical items were also coded for FW (as in function word) and CW (content word), as in (1-4):

- | | |
|---|------------|
| 1. Kan vi spela tennis on @EN:FW, på måndag
'can we play tennis on, on Monday' | TL Swedish |
| 2. väntar på Pingu och sitter på couch @EN:CW
'waits for Pingu and sits on couch' | TL Swedish |
| 3. Denkst du que @SP:FW eh, dass Jana ist...
'think you that, eh, that Jana is ...' | TL German |
| 4. Plötzlich der Hund, eh, biter @SW:CW
'suddenly the dog, eh, bites' | TL German |

The analysis does not include meta comments in which the background languages were used since we focused on single lexical items.

Ethical considerations

Before the data collection started, the participants signed a consent form written in their L1s in which they agreed to participate in the project. They were informed of the procedure and that they could interrupt the data collection on any occasion. They were guaranteed anonymity and were told that the data would only be used in scientific publications. The data collection thus followed the ethical guidelines for research practice from the Swedish Research Council (2017).

Results

In this section, the results from the longitudinal data collection are presented first case-by-case and then on pair level.

L3 German

Starting with the first case, learner A, who is learning German as an L3, the vast majority of transferred lexical items stem from Spanish (her L2 with the lowest proficiency level). There is no transfer from French, which is her strongest L2 besides English (cf. Table 2).

Language <i>Proficiency level</i>	L1:SW	L2:EN <i>C1+</i>	L2:FR <i>C1+</i>	L2:SP <i>B2+</i>
rec.1	4 (2 CW/2 FW)	1 (1 CW)	0	16 (2 CW/14 FW)
rec.2	5 (5 CW)	1 (1 CW)	0	15 (4 CW/11 FW)
rec.3	2 (2 CW)	1 (1 CW)	0	8 (3 CW/5 FW)
rec.4	6 (5 CW/1 FW)	1 (1 CW)	0	1 (1 FW)
rec.5	5 (4 CW/1 FW)	2 (1 CW/1 FW)	0	11 (3 CW/8 FW)
rec.6	12 (12 CW)	5 (3 CW/2 FW)	0	20 (4 CW/16 FW)
Total	34 (30 CW/4 FW)	11 (8 CW/3 FW)	0	71 (16 CW/55 FW)

Table 2, *Lexical transfer, learner A (L3 German)*

Transfer from L2 Spanish comes in various shapes, sometimes almost a whole utterance is in Spanish. The majority of the transferred words are function words (55 out of 71 occurrences). Consider the following example, from the second recording:

5. Eh, meine **interpretación**@SP:CW **de**@SP:FW **la**@SP¹:FW **situación**@SP:CW.

‘Eh, my interpretation of the situation’

In this utterance, the only TL word is *meine* (my) and then it continues in Spanish. Transfer from L1 Swedish is in most cases (30 out of 34) transfer of content words (or in Meta-comments, which were excluded from the data, for reason see method section). An example of L1 transfer is the following:

6. Eine **häst**@SW:CW

‘A horse’

¹ The transferred “la” could of course come from Italian or French, but since being between Spanish words (this is apparent when considering the pronunciation of the words) it is not likely to be the case. Furthermore, it is of no relevance for the study’s result if coming from either Spanish or Italian.

In this example from the fourth recording the Swedish word for horse is transferred. Instances of transfer from L2 English are very rare, and just like the Swedish transferred items they are more frequent in the last recording, in which the task (see methodology section above) was more demanding than the others.

The following example from the sixth recording shows an adaptation of a Swedish word into German:

7. ...und mit die, die Schwanze, eh, **viften**@SW:CW, **viften**@SW:CW!

‘... and with the tail, eh, wag, wag.’

As can be noticed, the Swedish verb has been conjugated with German morphology (-en, which should be -ar in Swedish) and the verb is also phonetically adapted to German by substituting the voiced labiodental fricative Swedish /v/ with the unvoiced labiodental fricative German /f/.

Below we will turn to the second case of L3 German, Learner B.

Language <i>Proficiency level</i>	L1: SW	L2:EN <i>CI+</i>	L2:FR <i>CI+</i>	L2:SP/IT <i>B1</i>
rec.1	2 (2 CW)	1 (1 CW)	0	3 (1 CW/2 FW)
rec.2	-	1 (1 FW)	0	2 (2 FW)
rec.3	1 (1 CW)	1 (1CW)	0	3 (2 CW/1 FW)
rec.4	2 (2 CW)	1 (1 CW)	0	3 (3 FW)
rec.5	2 (2 CW)	0	0	2 (2 FW)
rec.6	3 (3 CW)	2 (2 CW)	0	13 (3 CW/10 FW)
Total	10 (10 CW)	6 (5 CW/1 FW)	0	26 (6 CW/20 FW)

Table 3, Lexical transfer, learner B (L3 German)

The second case of L3 German, Learner B, shows a similar transfer pattern to learner A, i.e. most transferred items come from her weakest L2s (Spanish and Italian, here the two languages are treated as one since in most cases it is not possible to establish which of the languages are being transferred, as “sí”, “no”). 20 out of 26 cases are function words (cf. Table 3). Below are two examples of transfer from SP/IT.

8. **Es@SP:FW un@SP/IT:FW tradizione@IT:CW !**

‘is a tradition’

In this example from the sixth recording, the learner not only transfers the lexical item for tradition, but she also omits the subject pronoun, as is correct in Spanish and Italian, but not in Swedish, English, French or German.

She makes use of Swedish in the same manner as learner A, trying to create a German word, as in example 9 from the first recording.

9. Ich kann es nicht, eh, **betalen@SW:CW**

‘I can it not pay’

Here, in example (9), just like example (7) above, the Swedish verb has been given a German verb ending.

In short, both learner A and B primarily make use of low-proficiency L2 Spanish/Italian as a transfer source, and in some cases, content words from L1 Swedish and high-proficiency L2 English are transferred. High proficiency L2 French is absent in L3 German.

L3 Swedish

Turning to the next cases, we find a different transfer pattern for the two learners of L3 Swedish, who both had a lower proficiency in their L2s than the German learners. In Tables 4 and 5 we see that the amount of transfer from L2 English is relatively important as compared to learners A and B.

Language Proficiency level	L1	L2:EN B2	L2:FR B2	L2:SP A2
rec.1	4 (3 CW/1 FW)	9 (4 CW/5 FW)	2 (2 CW/2 FW)	0
rec.2	3 (3 CW)	1 (1 CW)	0	4 (1 CW/3 FW)
rec.3	4 (4 CW)	5 (2 CW/3 FW)	1 (1 FW)	1 (1 FW)
rec.4	4 (4 CW)	8 (5 CW/3 FW)	2 (2 FW)	1 (1 FW)
rec.5	2 (2 CW)	24 (19 CW/5 FW)	5 (2 FW)	0
Total	17 (16 CW/1 FW)	47 (31 CW/16 FW)	10 (3 CW/7 FW)	6 (1 CW/5 FW)

Table 4, Lexical transfer, learner C (L3 Swedish)

Learner C transfers both content and function words from L2 English (examples from recordings 2):

10. ja ett äpple smakar gott **and**@EN:FW och jag vet inte
 ‘yes an apple tastes nice and I do not know’

11. **that**@EN:FW vi har många fotograf **photos**@EN:CW foto
 ‘that we have many photos, photos, photos’

In the latter example we see how learner C makes use of the English word for photo, to produce the Swedish target word (foto). The same strategy is used with L1 German (recording 2):

12. måste **schäla**@GE:CW
 ‘have-to peel’

In (12) she transfers the German word for peal and adapts it morphologically to Swedish by adding the infinitive suffix -a to the verb (cf. ex 7 and 9 above).

In some cases, we find transfer from L2 Spanish, mostly function words, as in the example below (recording 5):

13. Ja, han rullar han själv [...] sig själv **para**@SP:FW komma ut
'yes he is-rolling him self, one self in-order-to get out'

Table 5 shows the results from Learner D, who had a relatively low proficiency level in her L2s English, French and Spanish. As we can see, she makes use of L2 English as a transfer source in most cases, but also L1 content words (52 out of 58 occurrences) from German to a relatively large extent as opposed to learner C.

Language Proficiency level	L1	L2:EN <i>BI</i>	L2:FR <i>AI</i>	L2:SP <i>A2</i>
rec.1	10 (8 CW/2 FW)	9 (5 CW/4 FW)	0	7 (7 FW)
rec.2	10 (10 CW)	14 (4 CW/10 FW)	0	2 (2 FW)
rec.3	17 (16 CW/1 FW)	4 (3 CW/1 FW)	1 (1 FW)	7 (7 FW)
rec.4	13 (10 CW/3 FW)	12 (4 CW/8 FW)	1 (1 FW)	2 (2 FW)
rec.5	8 (8 CW)	21 (14 CW/7 FW)	0	2 (2 FW)
Total	58 (52 CW/6 FW)	60 (30 CW/30 FW)	2 (2 FW)	20 (20 FW)

Table 5, Lexical transfer, learner D (L3 Swedish)

In example 14 (recording 3), she makes use of the German verb probieren (try), conjugated with Swedish morphology, in the same manner as we have seen the other learners do (cf. ex. 7, 9 and 12).

14. ja, jag **proberar**@GE:CW
'yes, I try'

Sometimes, English words (30 content words and 30 function words) are inserted without adaption to Swedish (cf. ex. 15, recording 5)).

15. han har flaska han söker en väg men det är **dark**@EN:CW
'he has a bottle, he looks-for a road, but it is dark'

In short, both Swedish L3 learners show a different pattern for transfer source than the L3 German learners did, above all when it comes to the considerable use of L2 English in their L3 production.

Summary of the results

Tables 6 and 7 summarize the results from the two learner pairs, with respect to transfer source.

	L1: SW	L2:EN	L2:FR	L2:SP/IT	Total
Occurrences	44 (40 CW/4 FW)	17 (13 CW/4 FW)	0	97 (22 CW/75 FW)	158
Percentages	28%	11%	0%	61%	100%

Table 6. Overall results learners A and B; absolute numbers and percentages.

	L1:GE	L2:EN	L2:FR	L2:SP/IT	Total
Occurrences	75 (68 CW/7 FW)	107 (61 CW/46 FW)	12 (3 CW/9 FW)	26 (1 CW/25 FW)	220
Percentages	34%	49%	5%	12%	100%

Table 7. Overall results learners C and D; absolute numbers and percentages

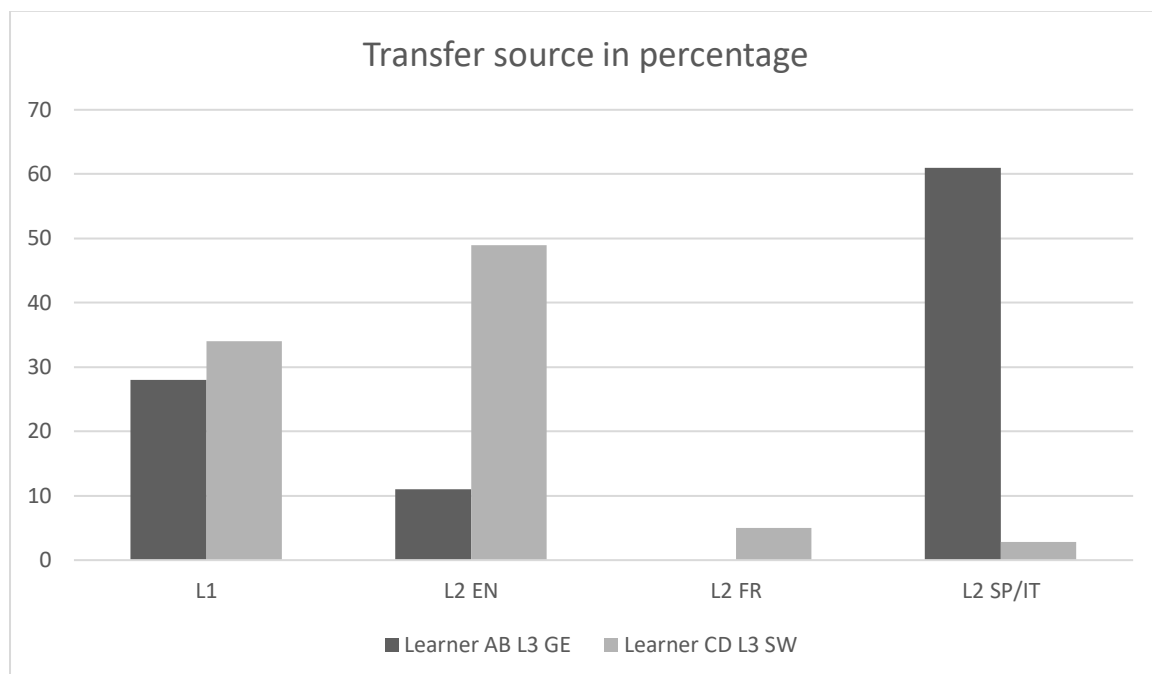


Figure 1, *Distribution of transfer from the background languages (%)*.

As can be seen in Figure 1 there are striking differences in the use of the L2s as transfer sources. Learners A and B do not transfer a single French lexical item; only 11 % of the occurrences are transferred from English. Recall that these learners had very high proficiency in both these languages (C1+). Learners C and D on the other hand, with a lower proficiency level in both English and French, see Table 1 above, transfer primarily from English (49% of the occurrences). Notable is also the frequent use of the L2s Spanish/Italian by learners A and B, who use these languages in about 60% of the cases. This transfer source is only used in about 10% of the cases by learners C and D. In the next section we will discuss these results.

Discussion and conclusion

In this study, we have examined transfer patterns at the lexical level in L3 learning at the initial state in four cases, divided into two pairs according to language constellations. Both learner pairs were absolute L3 beginners in German and Swedish, respectively. The main goal was to further our understanding of the interplay between the proficiency level in the L2 and the L2

status factor as an explanation for transfer patterns in L3 learning. The following research questions were asked:

In what way does a very high proficiency in an L2 influence the transfer source?

In what way does a low/intermediate proficiency level in an L2 influence the transfer source?

As emerged in the results section, the two learner pairs displayed different transfer patterns. Learners A and B (learning German as an L3) transferred no words from their very high-proficient L2 French, and they made use of their same high-proficient L2 English only in 11% of the cases. Instead, they used their weakest L2s (Spanish and Italian) as a transfer source in almost two-thirds of the cases. On the contrary, learners C and D (learning Swedish as an L3) resorted to their L2 English (at intermediate proficiency levels) in almost 50% of the transferred words. They also transferred from their L1 to a relatively large extent, almost exclusively content words (68 out of 75 cases). In response to the research questions, it is clear that very high-proficiency L2s do not transfer into L3, while L2s with low or intermediate proficiency do transfer to various degrees and in different ways. Lexical transfer from the L2s comes in all shapes, both with and without morphological and phonological adaptations to the target language.

Furthermore, according to the L2 status factor with the declarative/procedural distinction (Bardel & Falk, 2012) the source language for transfer of content words can be either L1 or L2 since content words are part of the declarative knowledge in all known languages. On the other hand, function words and syntax are assumed to be part of procedural knowledge in the L1 but declarative knowledge in L2/L3 (Paradis, 2004; 2009). This can explain the transfer behavior for all learners in the present study. In this respect, the results are similar to those in Lindqvist and Falk (2014) and Falk (2015), where content words were transferred from both L1 and L2s, and the function words (and syntax) were, in almost all cases, transferred from a previously learned L2. When briefly mentioning syntactic transfer in this study on the lexical level it is of interest that the data from learners A and B has previously been examined in another study by Falk (2017). She examined subject pronouns, or rather the absence of them. The learners transferred the null-subject parameter from their weakest L2s (Spanish/Italian) with the result that many clauses did not contain a subject, as in the following example:

16. Bist, ist eine Argument wichtig.²

‘is, is, an argument important’

An Obligatory Occasion Analysis (Ellis & Barkhuizen, 2005) showed that the subject was omitted in about 40% of the obligatory cases. These results were also explained in terms of the L2 status factor with the declarative/procedural model (Paradis, 2004; 2009).

It thus seems that there is an interplay between the proficiency level factor and the L2 status factor. According to the L2 status factor (e.g., Bardel & Falk, 2012), there is a possibility that an L2 might reach such a high proficiency level that it takes on a role that resembles that of an L1 and therefore is not used as a transfer source in L3 learning (cf. also the results in Falk et al., 2014, regarding high-proficiency L2 English). Learners A and B are highly proficient, C1+ according to the CEFR scale (Council of Europe, 2001), in both their L2s English and French, and there is no transfer from French in the data, only some instances of English. Low-proficiency L2s transfer is also in line with the L2 status factor with the declarative/procedural distinction.

Other influencing factors, recency and typology, have been put forward in previous studies (e.g., Williams & Hammarberg, 1998; Lindqvist & Bardel, 2014; Lindqvist, 2015, Ringbom, 2007). However, in the present study, nothing suggests that these factors can explain transfer behavior. As for recency, the results from the present study show that learners C and D, who do transfer from L2 English which is present in their everyday life, while being German exchange students in Sweden, but still there is also a fair amount of transfer from L2 Spanish and French, which had not been recently used at all. And learners A and B, who are university teachers of French, use this language daily but do not transfer it at all. This is in line with the results from another study by Lindqvist and Falk (2016) on Dutch L3, in which it was shown that recency did not impact the transfer source. As regards the typology factor, which has been shown to impact the transfer source in some earlier studies (Ringbom, 2007; Lindqvist & Bardel, 2014, Lindqvist, 2015), it cannot explain transfer behavior in the present study. The learners show a transfer pattern, which is hard to attribute to typology: learners A and B transfer lexical items mainly from L2 Spanish/Italian into L3 German. Learners C and D, for their part, do exhibit a more varied transfer pattern with lexical items coming from all their background

² We also see that the adjective is post nominal, a structure that also only can be derived from the L2s Spanish or French.

languages – L1 German and L2 English, French, and Spanish – in their L3 Swedish, which makes it difficult to single out typology as a decisive factor.

In conclusion, in this study, we have seen that the proficiency level of the L2 strongly impacts the transfer source in L3 learning. Moreover, there is an interplay between the proficiency and L2 status factors. Crucially, the L2s in which the learners are highly proficient seem to have lost their status as L2s, approaching L1 status, as suggested in the L2 status factor with the declarative/procedural model (Paradis, 2004, 2009; Bardel & Falk, 2012; Falk et al., 2014). This is why these languages are not available for transfer, as it were, while lower-proficiency L2s are, especially regarding function words. While the study indisputably presents evidence for the interplay between high-proficiency L2 and L2 status factor model, the number of informants is limited. It is therefore impossible to generalize the findings to a larger population. However, as Hammarberg (in press) and Denscombe (2010) discussed, generalization is not the goal of case studies. On the contrary, case studies aim to explore and analyze certain phenomena in detail to single out what occurs in a learner's language production rather than looking at what is common to a large group of learners. Thus, this case study is worthwhile in presenting findings on lexical transfer patterns in L3 learning and how L2 proficiency and L2 status can explain these patterns. As such, it has the potential to contribute to theory development, which is also one of the assets of case studies (Denscombe, 2010; Hammarberg, in press). Similar studies can be conducted in future research, exploring the same phenomena, preferably in other cases with different language constellations.

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