

The Crosslinguistic Influence of First and Second Language on Third Language Acquisition

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Introduction

When it comes to crosslinguistic influences, the focus has often seemed to dwell on the impact a first language can have on the acquisition of a second language. Is the second language acquired in the same way as the first language, and if not, what factors set them apart? These are the central questions in second language research, and through the years many have tried to give a competent answer to these questions. One of the more influential papers on this subject has been written by Clahsen and Muysken (1989, 26), who argued that adult second language acquisition differs greatly from first language acquisition as “(...) children have direct access to UG, whereas adults only have access to UG as it is mediated through their mature LI grammar.” Here the adult “(...) can only fall back on UG principles in so far as these have instantiations in the speakers' own language”. Their knowledge of Universal Grammar (UG) would then be restricted by their first language and this restricted knowledge of UG is transferred to their acquisition of a second language. However, in terms of the acquiring of a third language, the question remains whether it is only the first language that affects language acquisition, or if a second language can also play a role in subsequent language acquisition. By examining the results of two different studies where the third language is a Germanic verb second-language (V2), this paper argues that while the first language has an effect on third language acquisition, the second language is also involved in the language acquisition process. Furthermore, to describe and analyze this process, the Cumulative-Enhancement Model and the Typological Primacy Model are applied in an attempt to determine whether Universal Grammar, as Clahsen and Muysken (1989, 23) argued, is restricted by our first language and that subsequent language acquisition is just a variety “(...) of information processing and general problem solving” or if UG transcends to subsequent language acquisition, thus mirroring a child's first language acquisition.

Root clauses and negation in V2-languages

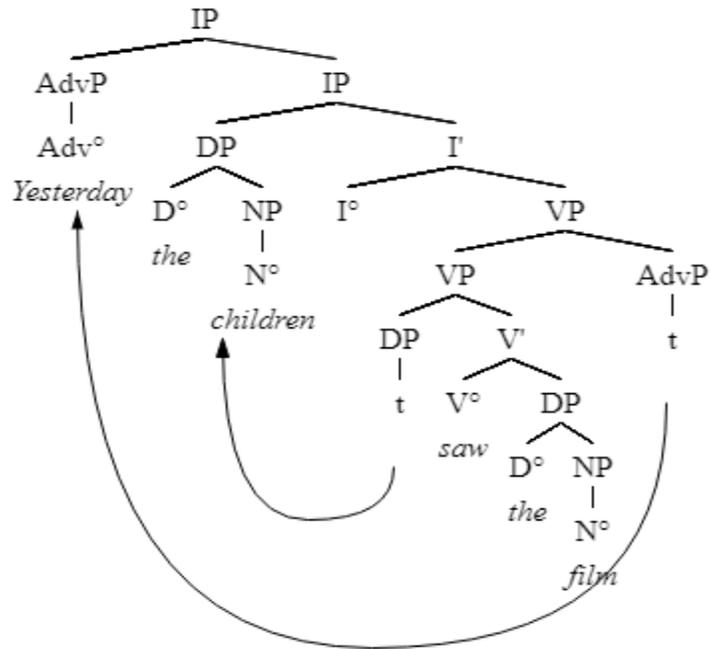
Root clauses

By studying native Swedish speakers' use of V2 in German, Bohnacker (2006) attempts to account for the ways in which first and second languages can interfere with third language acquisition. In her study Bohnacker researched two groups of elderly native Swedish speakers, who were taking a German class, for 9 months. The first group already had English as their second language and took German as their third language, while the control group could only speak Swedish beforehand, which made German their second language. In order to check for levels of first and second language interference with the third language, Bohnacker focused on a single syntactic feature that only Swedish and German would have in common: Verb second. When a language is characterized as being verb second (V2), it refers to "(...) the movement of the finite verb to the second position of the clause (...)", which always happens in V2-languages' root clauses (Vikner 1995, 39). Here the finite verb moves "(...) to a position immediately to the left of the canonical subject (...)", also known as V^o-to I^o-to C^o-movement (Vikner 1995, 40). While both Swedish and German are V2-languages, English is not. Apart from a few exceptions, the finite verb in English root clauses almost never moves to the second position, and instead of V^o-to I^o-to C^o-movement, there is V^o-to I^o-movement, where the finite verb moves "(...) to a position immediately right of the canonical position of the subject", i.e. I^o. Vikner (1995, 42) exemplifies this phenomenon:

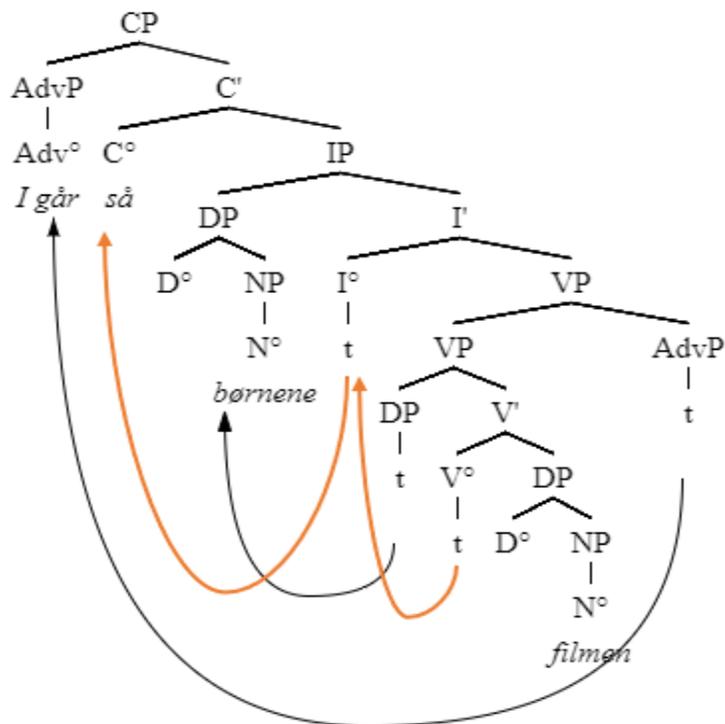
- (1) En. *Yesterday saw the children the film
- (2) Da. I går så børnene filmen
- (3) Ge. Gestern sahen die Kinder den Film.

Here it can be seen how the finite verb in both the Danish and German root clauses comes immediately after the temporal adverbial, while the English version is ungrammatical when the finite verb is in this position. In order to make the English root clause grammatical, the finite verb has to follow the subject *the children* instead of preceding it: "En. Yesterday the children saw the film" (Vikner 1995, 42). The syntactic trees below show the three grammatical root clauses in English, Danish, and German, where the finite verb movements are illustrated by colored arrows:

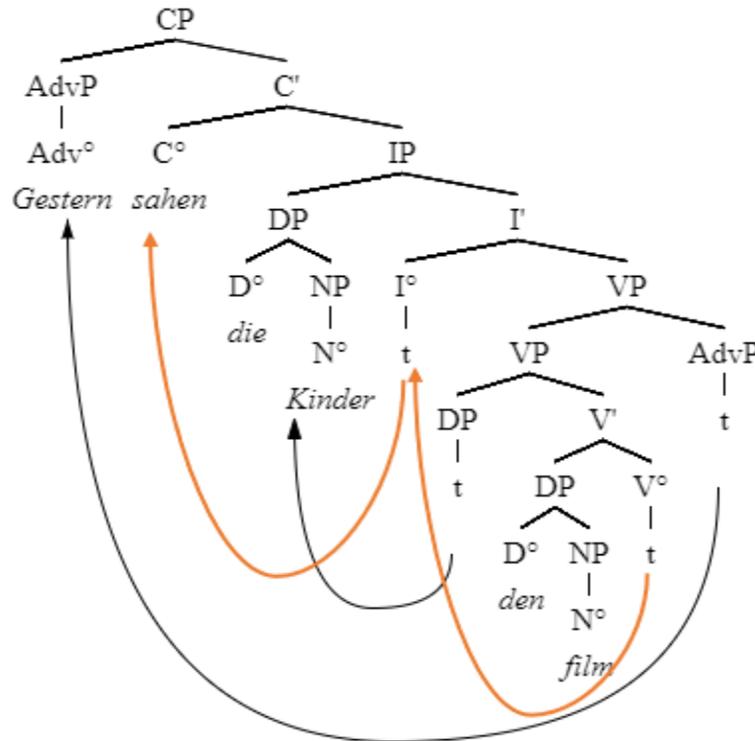
(4)



(5)



(6)



In (5) and (6), it can be seen how there is subject-verb-inversion, where the finite verb *så/sahen* moves from its base-position in V° to I° in order to get inflection, and then to C°, a position that precedes the subject *bornene/die Kinder*. Thus, the finite verb becomes the second constituent of the root clause. In contrast to the verb movements in (5) and (6), the finite verb in (4) *saw* does not move and remains in its base-position in V°. In English a distinction is made between thematic and non-thematic verbs. The finite verb *saw* in (4) is a thematic verb, which in English stays in its base-position V°, thus leaving I° empty. Furthermore, as English is not a V2-language, the finite verb cannot move to a position preceding the subject *the children*, i.e. C°. In her study, Bohnacker paid special attention to this feature in order to observe whether second language English would have an effect on the Swedish speakers' ability to form V2 root clauses in German.

In the findings of Bohnacker (2006), a strong correlation between having English as a second language and violating V2 can be observed. The group with second language English only produced non-subject-initial V2 root clauses in 50 % of the cases where it would be obligatory while the control group, just after 4 months of German lessons, would observe the V2-rule in 100 % of the instances

(Bohnacker 2006, 478). When violating the V2-rule, the group who had English as their second language produced non-subject initial root clauses with non-target V3 (XXVS) instead, as exemplified in (8). Even though this type of clause is commonly used in English, it is neither used in Swedish nor German, and while the group with second language English on average produced 41 % of these clauses, the control group who did not speak English and had German as their second language never did (0 %) (Bohnacker 2006, 466). These results support the notion that syntactic knowledge from a second language, like English non-subject initial root clauses with non-target V3, can transfer to and interfere with third language acquisition.

While non-subject initial root clauses with non-target V3 were not produced by the control group, other kinds of V3 root clauses were. Although Swedish is a V2-language, there are exceptions, and root clauses with V3 can occur under certain circumstances. One of these V3 root clauses is generated when there is an initial conclusive *så* (*so*) (Bohnacker 2006, 453). Here it is assumed that because conclusive *så* has a linking function, it acts similarly to a coordinating conjunction, which is generally not viewed as a constituent of the clause and thus does not infringe upon the V2-rule (Bohnacker 2006, 452). As conclusive *så* is an adverbial, it is regarded as a constituent in the clause, but the finite verb still behaves as if the linking adverbial were a coordinating conjunction, thus producing a V3 root clause (452). However, this exception to V2 is not allowed in German, but as seen in the example below, Algot from the control group still produced V3-clauses, using conclusive *så* after 9 months of German lessons:

- (7) ***[dann] [so]** haben ich gewart in Hamburg.
 then so have I been in Hamburg.
 'Then I've been to Hamburg.' (Bohnacker 2006, 465)

By using the German equivalent *so* to the Swedish conclusive *så*, Algot produces a sentence that is not used in German but is in Swedish. This example indicates how it might have been Algot's prior knowledge of the conclusive *så*-exception in Swedish that was the frame of reference here.

Another exception to the V2-rule in Swedish is the clause-initial temporal *sen* (*then*) (Bohnacker 2006, 454). This can be seen in Algot's utterance above, as he uses the German equivalent *dann*, but Gunnar, a member of the group with second language English, also produced V3-clauses with *sen/dann* after 9 months of German lessons:

- (8) ***[freitagmorgen] [dann]** gehen wir Boulebahn, das ist in ein Haus.
 Friday-morning then go we boules-court that is in a house.

'On Friday mornings we go to the boules court, which is indoors.' (Bohnacker 2006, 465)

In (8) it can be observed how *dann* (*then*), unlike in Swedish, is not clause-initial; however, it still induces V3, something which would not be possible in German.

The examples show how first language Swedish affects the acquisition of German for both of the studied groups. While it has been suggested that second language English can interfere with the construction of root clauses in third language German, Gunnar's example indicates that his native language also influences his acquisition of German. Even though English has V3-clauses similar to these examples, these utterances should not be disregarded; as Algot is part of the control group and does not speak English, his example could not have been influenced by it, thus supporting the implication of syntactical transfer from Swedish.

Negation

Another approach to third language acquisition of V2-languages has been presented by Bardel and Falk (2007), who studied how third language learners of the V2-languages Swedish and Dutch used negation in root clauses. The aim of Bardel and Falk (2007, 461-3)'s study was to determine whether the transfer hypothesis or the non-transfer hypothesis, the Processability Theory, would be the most applicable in describing the effects of first and second languages on third language acquisition. Here the studied group's first languages varied from the V2-languages Dutch and German to the non-V2-languages English, Albanian, Hungarian, and Italian, while the second languages only differed between Dutch, English, and German (Bardel and Frank 2007, 467). In terms of negation the languages can be divided into three different groups:

1. In the V2-languages Dutch, German, and Swedish the negation is post-verbal, i.e. after the finite verb, in declarative root clauses:

- (9)
- | | |
|---------|---|
| Swedish | a. Ginger pratar inte. (Bardel and Falk 2007, 467) |
| Dutch | b. Ginger spreekt niet. |
| German | c. Ginger spricht nicht. |
| | Ginger speaks NEG |
| | 'Ginger doesn't speak.' (Bardel and Falk 2007, 468-9) |

Even though thematic verbs are used in the examples, negation is also post-verbal when the finite verb is non-thematic as the finite verb in these languages is always

placed in the second position in a declarative root clause (Bardel and Falk 2007, 467-9).

2. In English, which is not a V2-language, verb-movement is dependent on whether a verb is thematic or not. In (9) the verb *speaks* is a thematic verb, which makes it unable to move from its base-position in V° to I° . When the clause is negated, the auxiliary verb *does* is inserted to I° , and the negation is post-verbal (Bardel and Falk 2007, 469).
3. The first languages Albanian, Italian, and Hungarian are also non-V2-languages. However, in contrast to English, the negation is always pre-verbal in root clauses, also when the finite verb is non-thematic:

- (10)
- | | | |
|-----------|----|--|
| Albanian | a. | Ginger nuk flet. |
| Italian | b. | Ginger non parla. |
| Hungarian | c. | Ginger nem beszél. |
| | | Ginger NEG speaks |
| | | 'Ginger doesn't speak.' (Bardel and Falk 2007, 469-70) |

Overall, two groups were studied, one that learned Swedish as a third language and another where both Dutch and Swedish were learned as the third language. What the groups had in common was that the participants were both proficient in a V2-language (German/Dutch/Swedish) and a non-V2-language (English/Hungarian/Albanian/Italian) and that the third language acquired was a V2-language, which was either Swedish or Dutch (Bardel and Falk 2007, 471-2).

The first group, who learned Swedish as their third language, could be divided into those who had non-V2 English as their second language and the V2-language Dutch as their first language, and those who had either V2 German or V2 Dutch as their second language and a non-V2-language (English/Hungarian) as their first (Bardel and Falk 2007, 471). In terms of forming negated root clauses in third language Swedish, it was here clear how the part of the first group with Dutch or German as their second language was more capable of doing so than those with English as their second language. While those with second language English produced 3/14 negated root clauses as post-verbal, which is the correct form in Swedish, those who had Dutch or German as their second language made 12/15 negated root clauses post-verbal (Bardel and Falk 2007, 475). Even though both groups were competent speakers of V2-and non-V2-languages, this data could indicate that a second language affects third language acquisition more than the first language. The use of thematic and non-thematic verbs was also distributed in different ways. While those with second language German and Dutch

used thematic and non-thematic verbs equally when producing post-verbal negation, the part of the group with English as their second language only produced post-verbal negation with non-thematic verbs, once again indicating that it is the second language that has the dominating effect on third language acquisition (Bardel and Falk 2007, 476).

The members of the other group had either learned Dutch or Swedish as their third language. Here the group was also divided into those who had English as their second language and those who had German/Dutch. With regard to proficiency in producing negated root clauses in Dutch/Swedish, the results were even more conclusive. The speakers of second language English used pre-verbal negation in 28 instances, mostly by using non-thematic verbs, while post-verbal negation was only used in 17 of their root clauses. On the other hand, the German/Dutch second language speakers used post-verbal negation in all instances and used both thematic and non-thematic verbs (Bardel and Falk 2007, 477-8).

Bardel and Falk (2007, 480) end their paper in favor of the transfer hypothesis with the conclusion that “(...) in L3 acquisition, the L2 acts like a filter, making the L1 inaccessible”. By examining their results, though, it can be observed how those who had a V2-language as their first language still knew how to produce negated V2 root clauses in their third language, which might have been more difficult if their first language was a non-V2. However, the fact that they still made a considerable number of mistakes compared to those who had a second language that was V2 does support Bardel and Falk’s preference for the transfer model.

Theoretical approaches to L3 acquisition

The results from the two studies of third language acquisition of V2-languages have shown that when it comes to determining whether it is the first language or the second language that plays the dominant role, there is no single conclusive answer. In Bohnacker (2006) it was shown how second language English interfered with the way in which native speakers of the V2-language Swedish acquired the V2-rule from third language German. This caused them to be more prone to make mistakes than the control group, who had no language between the two V2-languages. Similarly, according to Bardel and Falk (2007) third language acquisition was strongly influenced by the second language, as speakers who had a V2-language as their first language made mistakes in terms of negated root clauses when acquiring a third language that was V2, while speakers who had a second language that was V2 hardly made any mistakes.

To describe the effect that the second language had in these studies, Williams and Hammarberg (1998) have argued for so-called “language switches”. The term is used to describe what kind of linguistic knowledge from acquired languages that affects learners and how. When it comes to the initial stages of third language acquisition, Williams and Hammarberg (1998, 323-4) argue that the second language has the “default supplier role”, i.e. the second language is “(...) the main source of cross-linguistic influence”. While the second language certainly affects and interferes with third language acquisition in both of the studies, the first languages also seem to be important, albeit by playing a more indirect role. Although the participants in Bohnacker (2006)’s study who had English as a second language made mistakes concerning V2 root clauses in German, they also made mistakes that they had in common with the control group. V3-clauses were made by both groups, using initial *dann* and *so*, an exception to the V2-rule which is ungrammatical in German, but grammatical in Swedish (Bohnacker 2006, 465). As the mistake was so specific and made by both groups, it indicated that syntactic knowledge from first language Swedish had been transferred to third language German. Also, in Bardel and Falk (2007) it seemed that people for whom their first language and third acquired language were V2 were not completely incompetent when forming negated root clauses in their third language; while they did make mistakes, they also produced grammatical negated root clauses in their third V2-language (Bardel and Falk 2007, 475-6). If their first language had not been a V2-language, it would arguably have been more difficult for them to produce the negated root clauses, and it can be questioned whether their first language was “inaccessible” to them (Bardel and Falk 2007, 480). In order to address the inadequacies of the language switch theory in Williams and Hammarberg (1998), the Cumulative Enhancement model can be applied. Instead of viewing one language as the dominant influence on subsequent language acquisition, it characterizes the influence as a mix of the knowledge from the acquired languages which then affects the acquisition of other languages: “Patterns of acquisition in a new language will depend upon the nature of the linguistics knowledge already represented in the mind/brain of the learner” (Flynn et al. 2004, 15). Here the exceptions in the two studies can be analyzed as being part of the speakers’ existing linguistic knowledge as “(...) language acquisition is accumulative, i.e. the prior language can be neutral or enhance subsequent language acquisition” (Flynn et al. 2004, 14).

While the Cumulative Enhancement model does account for the more complex levels of transfer, the Typological Primacy Model systematizes these levels and focuses on the effect of transfer between languages. Here the distribution of transfer is categorized from a functionalist viewpoint where “(...) transfer always obtains from either L1 or L2 (...)”, and the choice of language is dependent

on the speaker's specific need or "most economical choice", also known as "typological proximity" (Rothman 2011, 121). In this sense, the level of language transfer is based on pragmatic usage, and whether it is linguistic knowledge from the first or second language that is transferred depends on the linguistic circumstances. When applying this model to the two studies, a more comprehensive analysis of the exceptions in the studies emerges as these would then be accounted for in terms of their usefulness and practicality in these specific instances and not just as deviations.

Conclusion

In conclusion, by analyzing the results of the studies made by Bohnacker (2006) and Bardel and Falk (2007), who both researched third language acquisition of V2-languages, the question of whether one language dominates another in terms of affecting subsequent language acquisition has a complicated answer. However, Bohnacker (2006) does make for a counterargument to the theory presented in Clahsen and Muysken (1989, 23) that all subsequent language acquisition derives from a combination of the UG properties within one's first language and from subdivisions of the brain concerned with "(...) information processing and general problem solving". The native Swedish speakers in Bohnacker (2006)'s study violated the V2-rule in German, something which is also a very fundamental syntactical element in Swedish, and their UG knowledge of Swedish does not, then, seem to have been as dominant in subsequent language acquisition as Clahsen and Muysken (1989) stated. This could support the notion that UG is not restricted to just the first language, and that the second language is also important when acquiring a third language. According to Bardel and Falk (2007), it even seemed that the second language had a very dominant role in the acquisition of a third language, even though the first and third languages shared the same V2-properties.

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