Second Language Learning and Teaching

Cross-linguistic Influences in Multilingual Language Acquisition

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Written L3 (English): Transfer Phenomena of L2 (German) Lexical and Syntactic Properties

Tanja Angelovska and Angela Hahn

Abstract The first language has been considered the main source of transfer for the acquisition of further languages for a long time. However, studies by linguists such as Hufeisen (Tertiärsprachen, Theorien, modelle, methode, Tübingen, Stauffenburg, 169-183, 1998), Cenoz and Jessner (The english in Europe. The acquisition of a third language. Multilingual Matters, Clevedon, p. 9, 2000), Cenoz (Cross-linguistic influence in third language acquisition: psycholinguistic perspectives. Multilingual Matters, Clevedon, pp. 8-19, 2001), and Hammarberg (Cross-linguistic influence in third language acquisition: psycholinguistic perspectives. Multilingual Matters, Clevedon, pp. 21-41, 2001) found that the L3 learner has already acquired one second language (L2) and thus this knowledge plays a role in the acquisition of other foreign languages. The research aim of our whole project is to account for the ways and paths of the activation of prior languages in the multilingual acquisition of English. The foci of the present study are the negative transfer phenomena of the second language (L2) German in the third language (L3) acquisition of English. In the present study, we set forth the possibility of negative transfer in L3 interlanguage based on the 'L2 status factor' and attempt to explain whether these occurrences of L2 negative transfer can be documented in the L3 written data from learners with different L1 s and at different L3 proficiency levels.

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1 Introduction

(In a German shop)

Shop-assistant: Wie kann ich Ihnen helfen? (English translation: how can I help you?) The customer (tourist in Germany): (smiles)

The linguist (who was accompanying the tourist was trying to avoid the unpleasant situation interfered with a quick translation): Entschuldigen Sie, er kann kein Deutsch. (I am sorry, he can't speak any German)

The shop-assistant (to the tourist): Do you speak English?

The tourist (to the shop-assistant in Greek): $\lambda i \gamma o \lambda i \gamma o$ (a little bit).

The linguist from this real-life example is one of the authors of this paper. The person, who "mixed" the languages and replied in Greek after being asked in English, had spent 4 months in Greece before coming to Germany. Having learned English for 8 years and German for 4 years at school, he was exposed to Greek which he picked up to a "survival-extent". His first language (L1) is Macedonian. He speaks Bulgarian on a native-like level and he is fluent in Serbian. Having so many other languages at his disposal, he activated the non-native language in which he was least fluent. What actually happened in his mind, so that he unconsciously (as he told the linguist later) activated another non-native language in his mind? Why did he not activate his first language or other languages to which he had been exposed longer and which he spoke and understood better? The nonnative language he assessed was the one to which he was most recently exposed, i.e. the non-native language which was dominant for him most recently. Hence, the question is whether it is the recency of use that played the biggest part in his mental mind and caused a cross-linguistic "mixture" in the activation of languages? Or is it the dominance of use of the non-native language? Or maybe both?

2 Theoretical Background

2.1 Cross-Linguistic Influences

Cross-linguistic influences seem to be particularly important in providing explanations about the roles of the different languages coming into play during the third or additional language acquisition process. The question of transfer between and among the languages involved in third or additional language acquisition is of utmost importance. Previous studies suggest that language typology and linguistic distance influence cross-linguistic transfer (Ringbom 1987; Singleton 1987).

The first language has been considered the main source of transfer for the acquisition of further languages for a long time. Although its influences cannot be neglected, one cannot really claim that it inevitably and always remains the main dominant source. Some studies (e.g. Dewaele 1998; Williams and Hammarberg 1998; Flynn et al. 2004) have already suggested that other languages could be more dominant sources of transfer. Hammarberg (2010, p. 1) salutes the fact that the

complexity of the multilingual learners' language background is taken into account. Similarly, Falk and Bardell (2010, p. 1) claim that there are a few studies indicating the activation of previously acquired languages in third language (L3) performance. Studies by linguists such as Hufeisen (1998), Cenoz and Jessner (2000), Cenoz (2001), and Hammarberg (2001) found that the L3 learner has already acquired one second language (L2) and this knowledge plays a role in the acquisition of other foreign languages. In a similar sense, Hoffman (2001) stated that trilinguals are likely to have more specific uses and functions of their languages. We are interested in finding out more about this specific uses and functions of the L2 in L3 acquisition.

Exploring the nature of the L3 system is interesting and worth studying on the one hand and, on the other, complex due to the two already acquired language systems. However, as Rothman and Amaro (2010) claim,

Only by studying successive multilingual acquisition can we begin to know whether the native language (L1) system solely serves as the basis of transfer for all subsequent linguistic acquisition, if successful adult learners of non-primary languages privilege the later acquired language(s) as the basis for the next, or if they equally/actively use their entire linguistic repertoire to assist, if not facilitate, multilingual acquisition (Rothman and Amaro 2010, p. 190).

2.2 Determiners for the Transfer Source in L3

The understanding of what role the linguistic knowledge from the previously acquired languages plays in the process of third or additional language acquisition is still incomplete. Literature on multilingual acquisition is far from pinpointing one determiner for cross-linguistic interferences. Williams and Hammarberg's (1998) case study states the following determiners are influential for the activation of a language in L3 production: *typology*, *L2 status*, *proficiency and recency*. They stated that the most influential factor in competing with the target language is the prior language that scores highest on all the above mentioned determiners.

2.2.1 Language Typology

Typology refers to language distance. Cenoz et al. (2001) present one of the studies that suggest that the connection between the L3 and the L2 is stronger than that between the L3 and the L1, especially if the L2 and L3 are typologically related. Typological closeness has been found to be one of the most influential factors in the L3 acquisition of lexis (Cenoz 2001). However, differences between languages within the same language family group can be found. For instance, although English is a Germanic language at the lexical level, it shows more influences from Romance languages and at the morpho-syntactic level, it shares few similarities with the rest of the Germanic languages.

Another important aspect is the "perceived language distance", i.e. "the distance that learners perceive to exist between languages that may, or may not, correspond to the distance that actually exists between them" (De Angelis 2007, p. 22). Hence, it is possible that a background language provides the structure which is needed for the L3 but will be perceived by the L3 learner as less typologically similar no matter if the prior and the L3 language belong to a same or different language families or not.

2.2.2 The L2 Status

Williams and Hammarberg (1998) suggest that in the initial stages of acquisition the L2 language is activated together with the L3 interlanguage and that over time this role is taken over by the L3 itself. Based on Hammarberg's (2001) "L2 status factor", Bardel and Falk (2007) suggest that the L2 acts as a filter in L3 acquisition, blocking L1 transfer. The L2 status has mainly been determined in the area of vocabulary where this effect of the L2 has been deemed more influential than that of L1. However, the influence of the L2 in this domain must still be explored especially if more advanced language levels are involved. Studies dealing with L2 influences in the domain of syntax have also emerged in recent years (Bardel and Falk 2007; Flynn et al. 2004). Some of them proved that L2 syntactic transfer had no impact on L3 acquisition (Bouvy 2000; Dentler 2000; Håkansson et al. 2002). Dentler (2000) analyzed L3 German main clauses produced by native speakers of Swedish with L2 English and found that they did not use the "verb-second position" rule correctly even though the same word order rule also exists in Swedish (which is not the case for English). Thus, there is a need for further research in the area of L2 influences on L3.

2.2.3 Language Proficiency

The role of the L2 proficiency in the acquisition of a further language should not be undermined. In Williams and Hammarberg (1998) study it was found that if learners are proficient in another language, this foreign language may play a quite different role than the native language in the subsequent acquisition of a new language. In their study, the roles of Sarah's prior languages (English L1 and German L2) were different in the acquisition of the target language Swedish, i.e. English was used to rely on when asking clarifications and German (the other foreign language she was proficient in) was mainly used for creating interlanguage vocabulary. According to Bardel (2010), the L2 proficiency level and the L3 proficiency level have an influence on the activation of previously acquired languages. She assigns parallel associations between the proficiency level of the target and background languages, i.e. a low proficiency in the target L3 language activates a background language with a low proficiency and in the case of high proficiency in L3, only a high L2 or the L1 will be activated. Similarly, Bardel and

Falk (2007) claim that in order to transfer syntactic structures from L2 into L3 one needs to have a high proficiency in the L2.

2.2.4 Recency of Use

The notion of "recency of use" refers to "how recently a language was last used" (De Angelis 2007, p. 35). Due to easier access to linguistic information stored in the mind it is assumed that the most recently used other non-target language will be activated most easily. In William and Hammarberg's study (1998) "recency of use" is one of the four factors which will have the supplier role in the production process of the target language. Dewaele (1998) conducted a study in which he found "recency of use" to be the main factor explaining why a lexicon of a source language which has been more recently assessed is activated and has a priority over other competing background languages. However, other studies show that learners do not always rely upon the last language they learned, but rather they transfer also from languages, which were not used for a long time (DeAngelis and Selinker 2001; Herwig 2001; Rivers 1979).

It seems that the activation of a certain background language can be triggered not only by a language recently used but also by other higher-order psycholinguistic variables usually neglected in the research of multilingual acquisition. One of them is the notion of recency of thinking about certain language, its country of origin, culture, or personal experience with that language.

3 Research Questions

The research aim of the whole project is to account for the ways and paths of the activation of prior languages in the multilingual acquisition of English. The foci of the present study are the negative transfer phenomena of the second language (L2) German in the third language (L3) acquisition of English. We investigate what kind of L2 grammatical properties are negatively transferred in L3 (English) written productions among learners of all L3 levels (lower and higher). We operate with the term "negative transfer" referring to instances of language deviations from the target forms, which occur in L3 learners because of the activation of their highly proficient L2. According to Hammarberg (2010) the conceptualizations of the terms L2, L3 or Ln is important. By L2, we mean the first non-native language acquired successively either in a school or in a naturalistic setting (or a mixture of both). Furthermore, under L2 we understand the second language acquired chronologically and the first or second dominant language in the everyday life. By L3, we mean the target language being acquired, the second non-native language, the third chronological language and the third dominant language.

In the present study, based on the 'L2 status factor' we attempt to explain whether occurrences of L2 negative transfer can be documented in the L3 written

data from L3 learners with different L1s and at various L3 proficiency levels. It is important to justify the reason why we chose subjects with different L1s. As first, we challenge the Cumulative Enhancement Model (CEM) by Flynn et al. (2004) suggesting that language acquisition is cumulative, i.e. any previously acquired language can either help subsequent language acquisition or remain unhelpful (i.e. it brings either an acquisitional advantage or does not affect the acquisition of subsequent languages at all). In this case, the fact that L2 negative transfer could be found is completely neglected and it is assumed that it cannot happen. However, we hypothesize that L2 negative transfer can be found among learners with different L1 s at different L3 proficiency levels. Hence, if a L3 learner of English with any first language acquires an L2 (for e.g. German) grammar, then he or she can demonstrate acquisition patterns that are similar to that of an L1 German speaker acquiring English as an L2. Provided that the structure to be acquired does not exist in the L1 and his/her proficiency in the L2 is at an advanced level, i.e. the dominance of the L2 will predict the negatively transferred L2 properties. Other sub questions related to our main research focus are:

- In which language systems and at which L3 proficiency levels do the L2 negative interferences occur?
- Will learners at the same L3 level with different L1 s exhibit any similarities in the negative transfer of L2 grammatical properties?
- Does L2 negative transfer depend on the dominant language of the learner?

4 Methodology

4.1 The Subjects

We report data from 13 L3 learners of English, aged 20–25 years, at different L3 proficiency levels, with various L1s and a constant variable of L2 German acquired before their target L3 English. They all differ in the type of their L1s: 5 speakers with L1 Russian, 3 with L1 Polish and the remaining 5 with L1 Bulgarian, Croatian, Ukrainian, French and Portuguese. They all study various academic fields at a German university and they have resided in Germany for different periods. As students of a German university they are requested to prove their proficiency in German and to take the DSH (German language exam), which presupposes an advanced (C1) level of German. However, they differ in two other variables: dominance of their background languages and knowledge of other foreign languages acquired simultaneously with German or English. Seven of the participants have not learned any other foreign language other than German or English and six learners (TN, NI, AM, LK, MK and PV) have learned another foreign language(s). Two (NI and AM) of the six have learned another foreign

language simultaneously with English. NI has learned English and Spanish, while student AM English and French simultaneously.

4.2 Instruments and Data Collection

Sixty-four participants fulfilled an *online questionnaire* through the university-based learning platform *Moodle*. They were students from different disciplines who applied for English courses at the university language centre. The online questionnaire contained questions about their mother tongue(s), length of stay in Germany, other foreign languages used in everyday communication, the order of acquisition of all background languages, their frequency of use and self-assessments of the proficiency level in all foreign languages spoken. Data was evaluated and participants were chosen according to the criterion "order of acquisition". More precisely, we chose the participants by following a main criterion "order of acquisition", English after German, i.e. we chose those participants who had learned German before they started learning English. The initial number of participants who fulfilled the main criterion was 16. However, three of them did not reappear after the first meeting.

The remaining 13 subjects were tested for their English level by using the Oxford Quick Placement Test (QPT). It is a computer-based placement test of English language proficiency produced in collaboration with the University of Cambridge ESOL Examinations. During the test, the student answers multiple-choice questions testing grammar, vocabulary, reading and listening comprehension. Students are guided through an instruction period and once the test has been activated, it cannot be stopped. This prevents students from cheating and test tampering. Depending on the choices made by the student, the level of the test adapts to the student's ability. Results are presented in line with the ALTE (Association of Language Testers in Europe) Framework and correspond with the Council of Europe's "Common European Framework of reference" (CEFR).

One trainer, a female research student employed at the university language centre who is studying to become an English teacher, coached the 13 learners. The coach conducted the language reflection sessions with the participants. The coach's tasks were to help learners reflect on their problems and to make students aware of particular language problems they may encounter based on their previously submitted written assignments.

As a "preparation" for the language reflection sessions, students had to submit a written assignment (free text production) before they could attend the session. They were allowed to choose freely what they were going to write about. A native speaker of English corrected their written assignment.

5 Results

In this section, we present the empirical results of the study. The analysis of results is followed by a discussion with respect to the goals of the present article. Each of the analyses compares the performance of the subjects in terms of exhibited instances of L2 negative transfer. Inter-level and intra-level analyses were made by conducting the following analysis procedures:

- 1. All instances of L2 negative transfer with their corresponding examples (actual raw interlanguage data) for each learner were documented separately according to the type of L2 interference (for e.g. syntactic) and the sum of the occurrences of each L2 interference per student.
- 2. Those interferences that could not be identified as of a sole L2-nature but seemed to be unclear whether they were negatively transferred from the L1 were excluded from our data set. All developmental features, such as overuse or underuse of -s as a verb ending or the -ing verb ending for the progressive, or any kind of overgeneralizations of rules (e.g. to works) were also excluded.
- 3. The percentages of the L2 negative transferred properties were found for each learner by dividing the sum of the L2 interferences with the total sum of written words from each learner.
- 4. A classification was made for each language level and the occurring L2 negative transfer properties typical for that level were listed. Those L2 negative transferred properties that were not specific to one language level only but occurred at many language levels, were also displayed as such.
- 5. Linguistic contrastive analyses of the languages involved were needed in order to assure the source of the negatively transferred grammatical properties and to account for the activation of L2 in L3 written English. For this purpose, native speakers of the represented L1s in the present study were consulted to account for the reliability and validity in our interpretations. These native speakers provided the translations for each L1 interlanguage case. They confirmed the exclusion of the L1 transfer phenomena for the chosen L2 interferences.

The whole data set of 13 written texts in L3 English encompasses 3,975 words and displays a 19.04% of 50 L2 activated instances in L3 written production for all subjects. Results of the types of the L2 negatively transferred properties across this data set are consistent in revealing instances of L2 negatively transferred properties with an exception of one learner (AM) at an L3 B1 level with L1 Russian who does not display any L2 activation in L3 written production The reason for this might be the fact that she has been learning English simultaneously with Spanish. Her L3 English data was not analyzed for any Spanish interferences. The remaining 12 L3 learners activated L2 German to a certain extent. The highest percentage of L2 influences, 5.17%, was found for learner SA with L1 Croatian followed by learner NI with L1 Russian (2.30%) and learner MP with L1 Polish (2.25%). Less than 1% of L2 influences were found for learners TD with L1 Ukrainian (0.19%), LK with L1 Russian (0.36%), OC with L1 Polish (0.91%) and SB with L1 French (0.78%).

Although L3 learner TD wrote the second longest text (533 words) and she appears to have the least number of percentages of L2 negatively transferred properties, her writing revealed many errors, such as overgeneralizations of rules.

As it can be seen from Table 1 despite the fact that these L3 learners have different L1s, different length of stays in Germany and different L3 levels, 12 of them showed instances of written language data containing transferred grammatical properties from their L2 German which they all have in common. According to the factor "dominant language", these 13 subjects could be grouped into 2 groups: one who has their L1 as a dominant language, as self-reported, and a second group who has L2 as the dominant language, as self-reported. As Chart 1 shows, the means of these groups are 0.014 (L1-dominant) and 0.015 (L2-dominant). The difference between them is rather small and insignificant. Hence, there was no need for further statistical analyses of the factors. In contrast, an empirical analysis and a detailed discussion of the L2 transferred properties would account for a deeper understanding of the process of negative transfer.

There is a great variability in terms of the type of L2 properties that each of the subjects transferred into L3. The following classification according to the type of the L2 properties transferred from L2 into L3 could be traced:

- *Syntactic*: use of the German infinitive construction "haben" with the same role as a modal verb to express necessity, fronting of the object, overuse of "to" in infinitive used as second part in a sentence, post verbal position of adverb, preverbal position of adverb, subject-verb inversion, using a noun instead of a verb (-ing form) and construction error ("so") used as an intensifier in front of a noun phrase.
- *Lexical*: substitution of an intended L3 word by an L2 word, lexical inventions and incorrect prepositions transferred from the L2.
- *Morphological*: overuse of plural and over as well as underuse of def. and indefinite articles.
- Punctuation: capitalization of nouns as in German, e.g. "Office", "Manager".
- *Spelling*: German spelling of particular letters, e.g. "sch" for "sh" or linkage of two nouns such as "fitnessclub" as it is in German.

Certain types of L2 negative transfer occurred at almost all levels and among 12 out of 13 L3 learners with different L1s. Only A2 level typical property of L2 negative transfer is the use of the German infinitive construction "haben" to express necessity. The following types of L2 negative transfer characterized B1 level: underuse of the definite article, fronting of the object and subject-verb inversion. B2 level exhibited most of the various L2 syntactic transferred properties, such as: overuse of "to" in infinitive used as second part in a sentence, post verbal position of adverb, subject-verb inversion, preverbal position of adverb, using a noun instead of a verb (-ing form) and the construction error ("so"). The C1 learner in our group with L1 French exhibited one L2 transfer property specific only for her: overuse of plural for the noun "experience." Features that occurred across levels are: the capitalization of nouns (A2 and B1 level), German spelling of English words (e.g. fitnessclub instead of fitness club, cours instead of course, hier instead of here) and overuse of an indefinite article were typical for levels A2 and

Table 1 List of L3 subjects with factors (L1, L3 level, length of stay, sum of negatively transferred properties, and total number of words and percentages of L2 influences)

(coalingation)							
Learner ID L1	L1	L3 level	Dominant	Length of stay	Sum of L2 NT	Total number	L2 influences
			language	in Germany	properties per learner	of words per learner	%
SA	Croatian	A2	L2	2 years	6	174	5.17
TD	Russian	A2	L2	More than 5 yeras	1	533	0.19
NL	Ukrainian	A2	L2	2 years	3	203	1.48
N	Russian	B1	L1	4 years	8	348	2.30
AM	Russian	B1	L1	2 years	0	142	0
MP	Polish	B1	L1	Less than a year	4	178	2.25
LK	Russian	B2	L2	More than 5 years	1	275	0.36
MK	Russian	B2	L2	More than 5 years	4	365	1.10
WS	Polish	B2	L1	5 years	4	291	1.37
ST	Bulgarian	B2	L1	More than 5 years	4	386	1.04
PV	Portuguese	B 2	L2	Less than a year	5	239	2.09
OC	Polish	B 2	L2	More than 5 years	3	331	0.91
SB	French	C1	L2	Less than a year	3	510	0.78

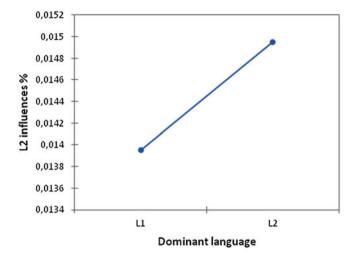


Chart 1 Means of L1-dominant and L2-dominant subjects

Table 2 Remaining negatively transferred properties from L2 into L3 with corresponding explanations and examples ordered according to L3 language levels

explanations and exal	mpies ordered according to	D L3 language levels	
Type of remaining L2 NT properties	Explanation of L2 NT properties	Example of the L2 NT properties	Language level(s)
Determiners, articles	Overuse of an indef. article	I go our for a dinner.	A2 and B2
	Overuse of the definite article	I start to cooking the dinner.	A2, B2 and C1
	Underuse of definite article	"It is great because we have THE day off and can pick you up from THE airport"	B1
	Underuse of an indefinite article	"I pass high energy and A strong belief into team"	B1 and B2
Inflectional morphology	Overuse of plural	I also have experiences"	C1
Lexical	Substitution of an intended L3 word by an L2 word	"to become a full jurist"	C1, B1 and B2
	Wrong preposition	"We are glad you can start with working by us"	B1 and B2
	Lexical inventions	"Home partnet" for "flatmate, roommate".	B2
Punctuation	Capitalization of nouns	People, office	A2 and B1
Spelling	German spelling	Fitnessclub	A2 and B2

Table 3 Negatively transferred syntactic properties from L2 into L3 with corresponding explanations and examples ordered according to L3 language levels

Type of L2 NT syntactical properties	Explanation of L2 NT properties	Example of the L2 NT properties	Language level(s)
Syntactical	Use of the infinitive construction with "haben" from German with the same role of a modal verb to express necessity.	"I have every day with difficult people to works."	A2
	Fronting of the object	"The cleaning materials you will find in the lager"	B1
	Subject-verb inversion	"Moreover, is this person injured, so it is wrong."	B1
	Overuse of "to" in infinitive used as second part in a sentence	"Children had to be brave and to do what was told."	B2
	Postverbal position of adverb	"I am certain she as (A) woman understood better my interests and needs."	B2
	Subject-verb inversion	"At that time was salt a very important mineral, like oil nowadays."	B2
	Preverbal position of adverb	"The Wieliczka Salt Mine has been the epicenter of Polish salt production since the 13th century and sill is producing table salt today."	B2
	Using a noun instead of averb (- ing form)	"According to legend, Poland can thank Queen Kinga for discovery this beautiful place!"	B2
	Construction error ("so")	" so a big travel"	B2

B2. Incorrectly transferred prepositions from the L2 and underuse of an indefinite article (as it would be used in the L2) were common for levels B1 and B2. The definite article was overused across three levels: A2, B2 and C1. Similarly, substitution of an intended L3 word by an L2 word occurred across the higher levels, B1, B2 and C1 (see Table 2).

The distribution of the types of the negatively transferred properties across L3 language levels shows that L2 negative syntactic transfer appeared not only across learners from different L3 levels (with an exception of C1 level) but also in many syntactic forms and variations depending on the L3 proficiency level (see Table 3). However, one interesting result from the distribution of the specific syntactic features across language levels can be noticed. At lower levels, syntactic constructions with the exact L2 word order are identically used in the L3. As the levels increase, main sentence constituents, such as verb and subject are inverted, whereas higher levels (e.g. B2) display negatively transferred L2 syntactic features such as position of adverbs and construction errors when building noun or verb phrases.

6 Discussion of Results

In this section we discuss our results contrastively supported by examples from the learners' source languages and attempt to verify our justification for determining negative L2 interferences: we discuss only one representative per one type (or subtype) of the selected negatively transfer structures.

6.1 Syntactic L2 Negative Transfer

• Use of the German infinitive construction "haben" with the same role as a modal verb to express necessity:

Learner SA: *I have every day with difficult People to works.

German: Ich habe jeden Tag mit schwierigen Menschen zu tun.

Croatian: Svaki dan sam zauzet sa teškim ljudima.

*[Every day (I am) busy (dealing) with difficult people].

In her L1 Croatian, the construction with "have" does not even exist and instead of using a verb (*deal with/zu tun*), a noun is used "zauzet (busy)" like in English. She accesses existing L2 syntactic material in order to express the same meaning in her L3.

• Fronting of the object

Learner NI: *The money you will also find on the kitchen table.

German: Das Geld findest du auch auf dem Küchentisch.

Russian: Вы также найдете деньги на кухонном столе.

*[(You) also find money on kitchen table].

In this case not only the head of the noun phrase "the money" is fronted, as being a typical syntactic construction for German, but the definite article is being transferred as part of the noun phrase, too. There are no definite or indefinite articles in the Russian language but the sense of nouns are determined from the context in which they appear.

• Overuse of "to" in infinitive used as second part in a sentence

Learner ST: *I would like to skip to something more interesting now and to tell you about the weekend.

German: Ich möchte jetzt zu etwas Interessanterem (über)springen und dir über das Wochenende zu erzählen.

Bulgarian: Сега бих искал да премина към нещо по-интересно и да ти разкажа за уикенда.

[I would like to skip to something more interesting now and tell you about the weekend].

As it can be seen in Bulgarian instead the verb form "to tell/μα pa3κa3βa" (infinitive form) the first person of present simple is needed, because Bulgarian no longer has an infinitive. Nevertheless, the function of the old infinitive has been taken by the particle "∂a" + conjugated verb. However, this construction is not a simple infinitive replacement, but a completely new mood, the optative-subjunctive (expressed with "may" or "would that" in English). Hence, it is obvious that she could not have transferred this form from her L1. Otherwise, if it was transferred from her L1, her L3 sentence would have been correct.

• Post verbal position of adverb

Learner PV: *What happened actually? German: Was passierte eigentlich? Portuguese: O que realmente aconteceu?

[What actually happened?]

In her L3 production, the L1 Portuguese learner of English positioned the adverb "actually" after the verb, which is untypical for her L1 Portuguese where the same sentence adverb would be put after the question word "what", as in English.

• Subject-verb inversion

Learner WS: *At that time was salt a very important mineral, like oil nowadays. German: Zu der Zeit war Salz ein sehr wichtiges Mineral, wie Öl heutzutage. Polish: W owym czasie sól była bardzo ważnym minerałem tak jak obecnie ropa naftowa.

[At that time, salt was very important mineral, as today oil].

The given example from our learner WS reveals two instances of assessing the L2: as first the subject-verb inversion she exhibited and second the position of the noun "oil". The fact that in her L3 English sentence she did not search for help from her L1 about where to position the verb and subject and even put the adverb of time "nowadays" in an end position support her activation of the L2 in both cases. If she had relied on syntactic information from her L1, her English sentence would have been "At that time, salt was very important mineral, as today oil." By transferring literally every sentence constituent from her L2 in her L3 English she positively transferred the position of adverb of time, but the negative transfer of the verb-position, i.e. the subject-verb inversion she made, is evidence that a previously acquired language can also be a hindrance.

• Construction error ("so")

Learner PV: *I know that so a big travel is expensive. German: Ich weiß, dass so eine große Reise sehr teuer ist. Portuguese: Eu sei que uma viagem tão grande é muito caro. *[I know that a trip so big is very expensive]. The Portuguese learner chooses a whole noun phrase from her L2 German and transfers this one into her L3 English. Although in her L1 Portuguese the order of the elements of the noun phrase gives a completely different picture. Namely, the adjective (*grande*) is preceded by the noun (*viagem*). Even the choice of the German word "Reise" was transferred one-to-one in her L3 English. Probably based on the existing association in her mind that the verb "reisen" in German has its corresponding noun "Reise", learner PV decided to use the form "travel" as a noun for the verb she knows "to travel". Another element she transferred is the determiner "so" (in English "such" as a determiner and adjective in this sentence would be correct).

6.2 Lexical L2 Negative Transfer

• Substitution of an intended L3 word by an L2 word

Learner MK: *Children had to be brave and to do what was told.

German: Kinder mussten brav sein und tun was gesagt wurde.

Russian: Дети должны были быть хорошо вели себя и делать то, что было сказано.

[Children had to be well behaved and do that what was told].

The translation in Russian gives clear evidence that the chosen adjective "brave" is a false fried and it derives from the German word "brav" which means "well-behaved" and is the word the learner needs. However, because of the phonological similarity (same initial consonant clusters) between the German word "brav" and the phonologically closest one from her L3 English lexicon "brave", the latest was the first to be activated in her mental lexicon.

• Wrong preposition

Learner NI: *We are glad you can start with working by us.

German: Es freut uns, dass Sie bei uns anfangen können.

Russian: Мы рады, что Вы можете начать у нас.

*[Us makes happy that you can work in us].

Similarly as the previous learner, NI uses the preposition "by" (instead of "with") for the meaning of the German preposition "bei". Again, the German preposition automatically triggers a phonologically identical preposition in the L3 lexicon, the learner accesses the English preposition "by", and uses this one in written production guided by the phonological homophony of the two prepositions, as well as by the personal pronoun "uns" and its phonologically similar English personal pronoun "us" with same initial and final sounds.

• Lexical inventions:

Our learner PV at a B2 level with Portuguese as an L1 coined one lexical invention "home partner" for "roommate" or "flatmate." Obviously, guided by the German "WG-Partner" our learner chose a new nonexistent word "home partner." In her L1 Portuguese, "flat mate" would be "companheiro de quarto." However, the Portuguese word does not contain any phonologically similar sounds to the German "WG Partner" which is why our student had to coin a new word that was phonologically similar to the existing German one.

Based on our analyses of negative transfer from L2 into L3, we can say that L3 learners rely on a phonological principle of similarity when activating L2 properties, i.e. they search in their mental lexicons for the concepts which sound similar to them (on either initial or final boundaries) and establish links based on these activated properties of the L2 system. Thus, the existing L2 word serves as a "template" to use with the target L3 word. As soon as a "suitable" match in the L3 part of the mind is found, the same template from the L2 is used for the "newly" found L3 match. This explanation does not have to do with any competition across the languages during lexical selection. It rather has to do with establishing associations based on a phonological similarity on initial or final syllables or consonant clusters. The activation of the L2 adjective ("brav") would spread some activation to its phonemes (/b/, /r/, /a/, /v/). However, the level of activation of these phonemes is strong because the L2 word already has a phonologically related adjective "brave" (despite the different meanings). The related phonemes of "brave" (initial consonant cluster /b/, /r/, and final consonant/v/) trigger activation. Hence, the L2 "distracters" serve as inhibitors for the semantic principle (meaning-based) of selection in the multilingual mind and the phonological principle wins over the semantic one. The case of "false friends" works according to the same principle, but combinations of phonologically similar L2-L3 "pairs", such as "us-uns" and "partner-Partner" (which are not false friends) followed the same principle.

The explanation for this lexical selection based on a phonologically conditioned principle of similarity being present in the writing process can at best be supported by the so-called "inner speech" (more on "inner speech" and "introspection" see Gabryś-Barker 2005).

7 Conclusion

The purpose of our study was to focus on determining the influence of the L2 in terms of explaining the types of L2 negatively transferred properties across learners with various L1 s at different L3 proficiency levels. Although we do not neglect the fact that L1 can be activated in L3 acquisition, the present study did not aim at confirming the L1 transfer hypothesis, but is supportive of the 'L2 status factor' hypothesis.

Based on our analysis, L2 syntactical properties were most often transferred into the L3, i.e. a total of 16 negatively transferred properties in various forms from L2 into L3 in the area of syntax were found in the whole set. This insight is of particular importance, especially as some previous studies did not find any impact of L2 syntactic transfer in L3 acquisition (Bouvy 2000; Dentler 2000; Håkansson et al. 2002). The present study presents counterevidence to this hypothesis from a group of learners with different L1s and German as L2. The evidence clearly indicates that syntactic structures could be even more easily transferred from L2 than from L1. This is supported by the fact that these are not only transferred in the initial state of L3 acquisition, but also at the later stages (higher levels), as our data show, however with different forms.

Our detailed compilation of L3 negatively transferred properties offers an insight into the nature of cross linguistic influences and provides new instances that L2 negative transfer does play a big role in the third language acquisition process having its influences over many language systems and stages of acquisition. Our explorative study is expected to offer valuable insights into the nature of the multilingual mind and the levels at which the L2 is being activated. We proved that contrastive analysis - adapted to L2-L3-can be used as a method to determine L2 transfer successfully (Odlin 1996). Our results offer information for existing acquisition hypotheses in the field of multilingual acquisition. Thus, in terms of syntactically transferred properties, we found out that L2 syntactical properties are activated in the multilingual minds of L2 German learners of L3 English only when these properties/structures are not existent in the L1. We have presented explanations supported by interlanguage examples, which show that the phonological principle of similarity and/or equality was found to trigger many of the L2 activated lexical properties in the L3 acquisition process. Thus, our explorative analyses of the selection of L2 properties offer "food for thought" for the psycholinguistic theories of how source language(s) is/are constituted mentally in L3 minds.

The empirical analyses of the interlanguage data may offer valuable insights for teachers dealing with multilingual learners who acquired German after their mother tongue(s). They can help teachers to understand the complex process of how an L3 is acquired.

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