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CROSS-LINGUISTIC INFLUENCE – A FRIEND OR A FOE?

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Abstract

The present paper aims to review the role that Cross-Linguistic Influence (CLI) plays in the process of a third language acquisition (L3). It also contributes to the need for the greater lucidity of CLI impact on L3 acquisition, which begins with some clarification of terminology connected to relationships between languages. Further, the diverse factors that enhance L3 learning are named and briefly discussed. As in the light of the previous findings it has been argued that CLI might have facilitative, neutral and non-facilitative effect on L3 acquisition, this paper offers some instances of a language transfer, particularly in the L3 production process. In addition, a review of three L3 acquisition models is offered, since it is hypothesized that any one of these models can be accurate for a particular L1/L2 combination yet might be incompatible in cases of a different L1/L2 pair. This notion will be used as an axiom in a future study when all three models will be tested in order to establish the most compatible one with the goal of the investigation. However, the necessity to define a completely new model might arise as a result of new data analysis.

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Keywords: Cross-linguistic influence, L3 acquisition, CEM, TPM, LPM.



1. Introduction

The topic of L3 acquisition has drawn much of researchers' attention within the last decade (Mykhaylyk, Mitrofanova, Rodina, & Westergaard, 2015), while the connection between previously acquired languages and the target language was of a great interest to many of them for quite some time (Cenoz, 2001; Hammarberg, 2001; Tremblay, 2006; Westergaard, Mitrofanova, Mykhaylyk, & Rodina, 2017, among others). Many scholars aspired to understand how formerly acquired languages affect the process of L3 learning (Mykhaylyk, Mitrofanova, Rodina, & Westergaard, 2015; Tremblay, 2006; Cenoz, 2001; Hammarberg, 2010; Slabakova, 2016) and asked to determine the circumstances of linguistic transfer occurrences (Oldin, 1989; Mykhaylyk et al., 2015; Schmidt, 2015; Slabakova, 2016; Neuser, 2017).

Moreover, studies on the topic pinpointed a variety of factors that might define the scope of L1 and L2 influence on L3 acquisition process (Tremblay, 2006). For instance, it was claimed that intentional switches as well as non-intentional ones, might occur due to typological proximity among languages, L2 recency, L2 status as a foreign language as well as learners' proficiency in previously acquired languages (Cenoz, 2003). As a result, multiple hypotheses and models were proposed in order to interpret the processes that take place "beyond the initial state of acquisition" (Slabakova, 2016, p.651) and the way diverse factors might affect the process of L3 acquisition. Only the most pertinent for the further research models will be presented and discussed within these pages after providing some background for the phenomenon in question, whereas other existing models of L3 acquisition will remain out of scope of this review.

Furthermore, facilitative, neutral and non-facilitative effects of cross-linguistic influence (CLI) on the process of L3 acquisition will be presented in order to lay a solid groundwork for the future research in the field.

Therefore, the current paper aims to examine the role that Cross-Linguistic Influence (CLI) plays in the process of a third language acquisition (L3). It also contributes to the need for greater lucidity of CLI impact on L3 acquisition and the diverse factors that enhance L3 learning by offering some clarification of terminology connected to relationships between languages.

2. Main Body

2.1. Terminological Clarification

The concept *cross-linguistic influence* (CLI) was initially introduced by Kellerman and Sharwood Smith (1986) in order to address various types of linguistic phenomenon in the context of L2 acquisition. This umbrella term was used to describe the relationships among languages and the way the constituents of one language are integrated into another language, leading to such linguistic phenomena as borrowing, transfer, avoidance, interference, etc. (Kellerman & Sharwood Smith, 1986).

In the later studies, the phenomenon of CLI was also explored in the context of L3 acquisition (Hammarberg, 2001; Hammarberg, 2010; Slabakova, 2016; Westergaard et al., 2017) and different patterns of CLI were found. For instance, it was established that in the area of phonology L1 is the only source language for CLI occurrence, thus, most learners even the most advanced ones, keep their L1-based accent in their oral production, whereas in the area of grammar, L2 influence is more frequent,

especially if L3 learners are extensively exposed to L2 and have reached a proficiency level in it (Ringbom, 2001).

Moreover, the concept *CLI*, in its broader sense, is used to address numerous linguistic phenomena investigated in the context of L3 acquisition, e.g., *lexical inventions* (Dewaele, 1998), the phenomenon concerned with words “which are morpho-phonologically adapted to the TL [target language] but which are never used by native speakers” (1998, p. 471).

In literature, the term *CLI* is quite often replaced by the term *transfer*, while discussing relationships between previously acquired languages and L3 (Neuser, 2017). Interestingly, one of the earlier definitions of *transfer*, *interference*, carried a negative connotation while pointing out the shortcomings of the linguistic transfer rather than its facilitative effect on L2 acquisition (Weinreich, 1953). The phenomenon used to be treated as “instances of language deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language” (Weinreich, 1953, p. 1). Hence, transfer from a previously acquired language to a target language used to be seen as an example of negligence (Neuser, 2017). Yet, Weinreich (1953) and Lado (1957) spoke of *transfer* as linguistic, psycholinguistic, and sociolinguistic phenomenon inseparable from language learning and use (Neuser, 2017), and today, the term *interference*, in its general sense, has been replaced by such concepts as *linguistic transfer* (LT) or *cross-linguistic influence* (CLI) (Neuser, 2017).

Nevertheless, certain unclaritys regarding the definition of *transfer* are still existent, but despite some evident dissimilarities, they are not conflicting (Neuser, 2017). Firstly, it was claimed that *transfer* is a process (Weinreich, 1953) since a learner undergoes a process of identifying equivalent elements between formerly acquired languages and a target language (Neuser, 2017). However, this claim contradicts the one made by Schachter (1983) who advocated for transfer as being “a constraint on the learner’s hypothesis testing process” (p. 32), inasmuch as learners tend to design and test their own hypotheses regarding the new language based on their knowledge of previously acquired languages.

In the context of L2 and L3 acquisition, *transfer* can be also seen as a strategy applied by learners in order to surmount obstacles they encounter (Neuser, 2017) at the early phase of a target language acquisition (Hammarberg, 2001), e.g., “cope with the still too unfamiliar phonetic form of L3” (Hammarberg, 2001, p. 35). However, it was argued that not all learners apply transfer strategies while acquiring an additional language (Neuser, 2017).

Oldin (1989) also maintained that there is a certain lack of accuracy in defining the concept, pointing out that linguistic transfer is a result of either likeness or dissimilarity between formerly acquired languages and a target language, therefore providing an additional support to Jordens and Kellerman’s theory of psychotypology (1981).

Neuser (2017) suggests treating *transfer* as “a snapshot of processes occurring at that moment in time, given the particular circumstances surrounding the learner and the given task” (2017, p. 10), since every learner might employ various types of transfer dictated by circumstances.

As it becomes clear from the present chapter, the phenomenon of transfer has drawn much of linguists’ attention and produced numerous definitions. For the convenience of the present article, the

terms *linguistic transfer* (LT), *transfer* and *cross-linguistic influence* (CLI) will be used interchangeably in accordance with varied sources this paper was based upon.

2.2. CLI in L3 Acquisition

As can be seen from the literature, CLI is a phenomenon caused by interaction between different languages in the mind of bilingual and multilingual speakers (Cenoz, 2001; Tremblay, 2006; Slabakova, 2016; Hammarberg, 2001; Ringbom, 2001; Neuser, 2017). From previous studies, it became evident that CLI might have either positive or negative effect on L3 acquisition (Ringbom, 2001), yet Flynn and others (2004) spoke of a neutral influence as well. Foremost, former studies indicate that transfer from L1 and L2 can occur in both comprehension and production processes (Cenoz, 2001; Ringbom, 2001) and in various areas of language; however, it appears in different ways and at sundry rates (Neuser, 2017; Ringbom, 2001). For instance, in L3 comprehension process learners of a target language make an attempt to associate a new lexical form with the one they are already familiar with either in L1 or L2, based on similarity or perceived similarity between the acquired languages and a target language (Ringbom, 2001; Tremblay, 2006), especially when L2 and L3 share certain features, e.g., common cognates (Ringbom, 2001). Thus, once learners presume that a proper equivalent is found, they tend to transfer both a form and a meaning either from their L1 or L2 into the target language (Ringbom, 2001). Surprisingly, very little research was conducted in the field of L3-comprehension, but from the available research data, it becomes rather clear that any type of linguistic similarity might facilitate the process of comprehension at its initial stages (Ringbom, 2001).

The same is applicable to the production process, i.e. L3 learners tend to resort to previously acquired languages while acquiring L3, yet learners' proficiency in the formerly acquired languages as well as the extent of exposure to those languages, will affect the transfer (Tremblay, 2006). For example, in a study conducted among learners of German as L3, with English as L1 and French as L2, it was found that the level of L2 proficiency affects the frequency of L2 interference with L3 production (Tremblay, 2006). Moreover, L2 proficient learners apply their knowledge of L2 in order to cope with the challenges of L3 acquisition (Tremblay, 2006). However, unless L3 learners are proficient in L2, it will have a very insignificant influence on L3 production if any. This claim contradicts the one made by Ringbom (2001) who advocates for the primacy of L1 in any type of lexical transfer despite the proximity between L2 and L3. She also claims that learners' L2 proficiency and the extent of exposure to L2 are of little significance in the case of a lexical transfer, e.g., phrasal verbs or semantic extensions, as learners tend to mistakenly believe that L3 lexical items have a meaning "corresponding to what is most commonly the core meaning of the equivalent L1 word" (Ringbom, 2001, p. 62). Nevertheless, the psychotypological distance between the target language and any other languages a learner has previously mastered, will determine the extent of phonological and grammatical transfer (Ringbom, 2001).

On the other hand, Hammarberg (2001) maintains that L3 learners usually transfer lexical items from the language they have most recently acquired and probably use on a regular basis, e.g., the participant in Hammarberg's study tends to use German, the most recently acquired language, as a source language. This claim corresponds with the one made by Williams & Hammarberg (1998) who also assert that at the early stages of L3 acquisition, a competent user of L2 will rely on his/her L2 knowledge,

especially in the use of grammar (Ringbom, 2001). Yet, in the case of Hammarberg's subject, similarity in phonetic structure, vocabulary and syntax (Cenoz, 2000) between L2 and L3 probably led to the cross-linguistic transfer when the research participant relied on her knowledge of German (L2) while acquiring Swedish (L3) (Hammarberg, 2001). Hammarberg's study also adds to the knowledge that transfer most often occurs during the early stages of L3 acquisition when "new input is connected to already established representations in the L1 and L2" (Neuser, 2017, p.14), since the participant of the study leans on her knowledge of L2 at the primary steps of L3 learning, but the situation changes once she reaches a satisfactory level of proficiency in L3 (Hammarberg, 2001).

Even though similarities of forms among certain lexical items may be of a great assistance to L3 learners at the initial stages of L3 learning, one has to be aware of the fact that these similarities might also cause errors (Ringbom, 2001) like "in the case of partially overlapping meaning or false cognates" (Neuser, 2017, p.14) or transfer of meaning as it happens with calques and semantic extensions (Ringbom, 2001). Also, in the case of deceptive cognates, L3 learners might use single lexical items from their L1 or L2, the ones they believe to be analogous in their form to the words in L3 (Ringbom, 2001), which will evidently result in an error, thus having a non-facilitative effect on L3 acquisition. Another example of non-facilitative effect can be found in the case of code-switching, when learners resort to their L1 or L2, depending on their psychotypological similarity to L3, and transfer a whole lexical item into L3, sometimes altering its form according to the rules of L3, thus "producing hybrids or blends that do not exist in L3" (Ringbom, 2001, p. 60).

As opposed to the earlier statement which was arguing for the primacy of the most recently acquired language, Cenoz (2001) asserts that L3 speakers generally borrow lexical items from typologically close languages, i.e. either from L1 or L2 (Cenoz, 2001). In her study of Basque and Spanish speakers as their L1 and L2, in this order or other way around, who were in the process of learning English as L3, Cenoz (2001) noticed that learners used to transfer terms from Spanish, which is typologically closer to English, rather than Basque, which is typologically distinct to Indo-European languages. This phenomenon could be clearly spotted among older students (9th grade) probably due to the fact they have reached "the higher metalinguistic awareness" (Cenoz, 2001, p. 16) than their younger peers, and thus were able to perceive the typological distance between Basque and English. Another explanation could be found in the L2 status, whereas learners with Basque as their L1 tended to use Spanish for transfer due to its status as L2 in addition to its typological proximity to English (Cenoz, 2001). As for the Spanish native speakers, the findings were quite contradictory, i.e., despite Basque being their L2, and thus was expected to act as a preferred language due to its L2 status, Spanish had a stronger influence due to its typological proximity to English. Therefore, it can be assumed that perceived typological closeness between previously acquired languages and a target language has a greater influence on L3 production than L2 status (Kellerman, 1995; Cenoz, 2001).

2.3. L3 Acquisition Models

In order to explain the impact that L1 or/and L2 might have on L3 acquisition, varied models were defined, whereas three of them can contribute to the future investigation this paper is part of. The first one is the Cumulative Enhancement Model (CEM) (Flynn, Foley, & Vinnitskaya, 2004) which maintains that

both of previously acquired languages might have either positive or neutral effect on L3 acquisition as in the study of L1 Kazakh / L2 Russian / L3 English adult learners. However, from this model it is not quite clear which of the factors, typological or structural proximity, plays the most crucial role in a positive transfer, (Mykhaylyk et al., 2015).

The second model to be considered is Rothman's (2011) Typological Proximity Model (TPM), which is based on Kellerman's (1979, 1983 in Westergaard et al., 2017) idea of psychotypology. The TPM addresses an impact of typological proximity (Westergaard et al., 2017) on L3 syntactic transfer, and points out that transfer occurs as a wholesale and might have facilitative as well as non-facilitative effect (Rothman, 2010). The data for this model was drawn from the comparative study of "successful [...] L1 Italian learners of English as [...] L2 at the low to intermediate proficiency level of L3 Spanish, and successful L1 English learners of L2 Spanish at the same levels for L3 Brazilian Portuguese" (Rothman, 2010, p.1). Both groups of participants demonstrated a greater knowledge of a semantic structure under study achieved due to typological proximity among L1/L2 and L3.

The third model is Linguistic Proximity Model (LPM) (Mykhaylyk et al., 2015; Westergaard et al., 2017) which includes some of the CEM and TPM elements, but at the same time suggests that "structural similarity at an abstract level should be considered an important factor in third language acquisition" (Westergaard et al., 2017, p.667). It also maintains that CLI occurs "on a property-by-property basis" (Westergaard et al., 2017, p.678) and might have facilitative as well as non-facilitative impact. Moreover, according to LPM, neither order of L1/L2 acquisition nor typological grouping have any impact on CLI (Mykhaylyk et al., 2015). This hypothesis was tested in a comparative study in which Norwegian-Russian bilinguals were compared with Norwegian and Russian monolinguals with respect to two particular syntactic constructions: the order of adverb-verb and subject-auxiliary inversion (Mykhaylyk et al., 2015).

3. Methodology

As the present paper intends to look into the role of CLI in the process of L3 acquisition, it also aims to illuminate the impact of the phenomenon in question on the L3 language acquisition as well as to bring out various factors that promote L3 learning. First and foremost, some related concepts are presented and discussed as they appear in the literature. Thereafter, L3 acquisition models are named and briefly deliberated over.

To this end, the literature on the topic of L2 and L3 acquisition was reviewed with the emphasis on the occurrence of CLI phenomenon along with its varied patterns. Multiple sources such as books and research articles were inspected in order to clarify terminology, commencing with Kellerman and Sharwood Smith's (1986) primary definition of the concept CLI in the context of L2 acquisition. It was followed by a comparison of diverse CLI occurrences and related factors that might affect transfer among languages (Ringbom, 2001) as were presented in the more recent publications (Mykhaylyk, Mitrofanova, Rodina, & Westergaard, 2015; Slabakova, 2016; Neuser, 2017, and others). Moreover, different literature sources were reviewed in order to establish which of the linguistic factors have a significant impact on L3 acquisition, either positive, negative or neutral (Flynn et al., 2004; Ringbom, 2001; Tremblay, 2006; and

others). In addition, different L3 acquisition models were examined in order to select the ones that are the most congruent with the purpose of the research this paper is part of.

4. Conclusion

In the light of the evidence presented within this paper, CLI might have facilitative, neutral and non-facilitative effect. The CLI impact on L3 acquisition has either facilitative or neutral effect as suggested by CEM (Flynn et al., 2004), whilst knowledge of a new language is collective and is acquired step-by-step while any one of the previously acquired languages might either positively influence L3 acquisition or remain neutral. In a case of competitive L1 and L2, typological proximity precedes other factors, therefore leading to either facilitative or non-facilitative impact of CLI as was defined by TPM (Rothman, 2011). Same holds true when a particular linguistic structure in L3 corresponds with the one from previously acquired languages, thus resulting in a facilitative effect that enhances L3 acquisitions was defined by LPM (Mykhaylyk et al., 2015). Yet, a false assumption of similarity between certain structures in L1/L2 and L3 might lead to production of incorrect structures in L3, resulting in a negative or non-facilitative impact (Mykhaylyk et al., 2015).

It becomes evident from the previous discussion that each of the above L3 acquisition models can be accurate for a particular L1/L2 combination yet might be incompatible in cases of a different L1/L2 pair. This notion will be used as an axiom in a future study of English as L3 efficient acquisition by simultaneous/sequential bilinguals living in Israel, who previously acquired Russian and Hebrew languages. In this study, all three models will be tested in order to establish the most compatible one. However, the necessity to define a completely new model might arise. On top of that, the future data will illustrate to what extent CLI affects L3 acquisition among young bilingual learners and provide some empirical evidence for facilitative as well as non-facilitative effects it might have on L3 acquisition. Moreover, the findings of the study might suggest a necessity of developing different pedagogic approaches while catering to bilingual learners who are proficient in Russian and Hebrew. Furthermore, the research insights might be universally applicable to varied contexts of L3 education, not only in Israel, but in any country with a bilingual population.

References

- Cenoz, J. (2000). Research on Multilingual Acquisition. In J. Cenoz, & U. Jessner, *English in Europe: The Acquisition of a Third Language* (pp. 39-51). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters LTD.
- Cenoz, J. (2001). The Effect of Linguistic Distance, L2 Status and Age on Cross-linguistic Influence in Third Language Acquisition. In J. Cenoz, B. Hufeisen, & U. Jessner, *Cross-linguistic Influence in Third Language Acquisition - Psychological Perspectives* (pp. 8-20). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters LTD.
- Cenoz, J. (2003). Cross-linguistic influence in third language acquisition: Implications for the organization of the multilingual mental lexicon. *Bulletin VALS-ASLA*, 78, 1-11
- Dewaele, J. (1998). Lexical inventions: French interlanguage as L2 versus L3. *Applied Linguistics*, 4, 471-490.
- Flynn, S., Foley, C., & Vinnitskaya, I. (2004). The cumulative-enhancement model for language acquisition: Comparing adults' and children's patterns of development in first, second and third language acquisition of relative clauses. *The International Journal of Multilingualism*, 1, 3-16.

- Hammarberg, B. (2001). Roles of L1 and L2 in L3 Production and Acquisition. In J. Cenoz, B. Hufeisen, & U. Jessner, *Cross-linguistic Influence in Third Language Acquisition - Psycholinguistic Perspectives* (pp. 21-41). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters LTD.
- Hammarberg, B. (2010). The Languages of the Multilingual: Some Conceptual and Terminological Issues. *International Review of Applied Linguistics in Language Teaching (IRAL)*, 48(2-3), 91-104.
- Jordens, P. & E. Kellerman. (1981). Investigations into the 'transfer strategy' in second language learning. In *Actes du 5e Congres de IAILA*, 195-215.
- Kellerman, E. (1995). Cross-linguistic influence: Transfer to nowhere? *Annual Review of Applied Linguistics*, 125-150.
- Kellerman, E., & Sharwood Smith, M. (1986). Crosslinguistic Influence in Second Language Acquisition. In E. Kellerman, & M. Sharwood Smith, *Crosslinguistic Influence in Second Language Acquisition* (pp. 1-9). New York: Pergamon Press.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. Ann Arbor: The University of Michigan.
- Mykhaylyk, R., Mitrofanova, N., Rodina, Y., & Westergaard, M. (2015). The Linguistic Proximity Model: The case of Verb-Second revisited. *BUCLD 39 Proceedings*. Cascadilla Press. Retrieved April 2018
- Neuser, H. (2017). *Source Language of Lexical Transfer in Multilingual Learners (Academic dissertation for the Degree of Doctor of Philosophy in English)*. Stockholm : Department of English, Stokcholm University.
- Oldin, T. (1989). *Language transfer: cross-linguistic influence in language learning*. Cambridge: Cambridge University Press.
- Ringbom, H. (2001). Lexical Transfer in L3 Production. In J. Cenoz, B. Hufeisen, & U. Jessner, *Cross-linguistic Influence in Third Language Acquisition* (pp. 59-67). Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters LTD.
- Rothman, J. (2011). L3 syntactic transfer selectivity and typological determinacy: The typological primacy model. *Second Language Research*, 27(1), 107-127.
- Schachter, J. (1983). A new account of language transfer. In S. M. Selinker, *Language Transfer in Language Learning* (pp. 32-47). Amsterdam, Philadelphia: John Benjamins.
- Schmidt, A. (2015). *Between Two Languages: Code-Switching in bilingual communication*. . Hamburg: Ancor Academic Publishing.
- Slabakova, R. (2016). The Scalpel model of third language acquisition. *International Journal of Bilingualism*, 21(6), 651-665.
- Tremblay, M. (2006). Cross-Linguistic Influence in Third Language Acquisition: The Role of L2 Proficiency and L2 Exposure. *CLO/OPL*, 34, 109-119.
- Weinreich, U. (1953). *Languages in Contact : Findings and Problems*. The Hague: Mouton Publishers.
- Westergaard, M., Mitrofanova, N., Mykhaylyk, R., & Rodina, Y. (2017). Cross Linguistic influence in the acquisition of a third language: The Linguistic Proximity Model. *International Journal of Bilingualism*, 21(6), 666-682.
- Williams, S., & Hammarberg, B. (1998). Language switches in L3 production: Implications for a polyglot speaking model. *Applied Linguistics*, 19(3), 295-333.