Cross-Linguistic Influence With Reference To The Role Of Cognates In L2 Words Comprehension And Vocabulary Acquisition

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Abstract

Purpose of the study: As the title suggests, this paper aims to focus on the contribution of cognates to L2 vocabulary development in the light of available literature.

Methodology: Given the said focus, this paper reports a range of studies which suggest that cognates are helpful and speed up L2 vocabulary learning. For this purpose, different theoretical positions have been referred to in support of the said notion, thereby drawing implications for L2 vocabulary teaching.

Main findings and applications: The specific point emphasised here is that how cognates enhance L2 words comprehension and can be manipulated for learning new words in L2 teaching. Further readings of the related next step are recommended to know more about L2 vocabulary acquisition based on cognates beyond comprehension.

Novelty/Originality of this study: This study provides an overview of the current trends in cross-linguistic transfer/influence with reference to cognates, thereby drawing attention to the crucial role played by cognates and so more use of them for vocabulary acquisition in L2 teaching.

Key words: Cognates, vocabulary acquisition, L2 vocabulary learning, words comprehension

Introduction
In case of second language (henceforth L2) acquisition of vocabulary, we certainly are not taught the vast majority of vocabulary that we possess, nor do we access dictionaries each time to look up for all these words (Ellis, 1995: 3). There are several theories that are suggestive of L2 vocabulary acquisition. Cross-linguistic similarities are also one of the factors which influence foreign words learning. The question as to what is more likely to be passed from the first to the second language and how this transfer mechanism works, has resulted in the formulation of different hypotheses over the last two decades (Kaushanskaya, 2012). But according to Maera (1997), this line of study has mostly been model-free and descriptive rather than explanatory and model driven (Jiang, 2004: 416). So very few specific claims may be made with respect to the psychological processes and mechanism involved in the acquisition of L2 vocabulary today (ibid).

The cross linguistic overlap of the L1 and L2 languages makes it more likely that learning of L2 will rely on knowledge of the L1 thus showing that the knowledge of the native language has an influence on foreign word learning (Kaushanskaya, 2012). Vocabulary acquisition in L2 is accompanied with minimal semantic or conceptual progress. Rather, the existing L1 conceptual and linguistic systems participate actively in the second language learning process (Jiang, 2004: 417). Given the important role of cognates (similar word forms) in L1 and L2 in influencing the L2 vocabulary acquisition positively, here I will discuss, by reviewing different theoretical and empirical studies on, how cognates across languages promotes vocabulary acquisition in L2. However, given the space limitations, review would be limited to few studies, the main purpose being to draw attention to the more use of cognates for vocabulary acquisition in L2 teaching.

**Literature Review**

The role of cross-linguistic influence or language transfer on L2 acquisition remained an area of extensive research in the past few decades (Isurin, 2005). Transfer is a psychological term of learning which means imposition of previously learned knowledge on a new learning situation (ibid), i.e., L1 influence on L2. The learners pass on their L1 properties to the L2 (Ghilzai, 2010: 1). Transfer is a crucial factor in the L2 acquisition process (Torrijos, 2009: 149).

However, L1 knowledge can have either facilitation or an inhibition influence upon the learner’s progress in acquiring a new language (Isurin, 2005). The facilitation effect is known as positive transfer (ibid). Positive transfer occurs when the learner acquires second language features which are similar to the features of the first language (Ghilzai, 2010: 1). Such common features may be used to the benefit of L2 learners when we recognise that most of the affects of L1 may be quite useful. For example, the number of Spanish-English cognates such as pblico and pubic is likely bigger than the number of Arabic-English cognates, giving Spanish native speakers an edge over Arabic native speakers in terms of English vocabulary acquisition (Torrijos, 2009: 149). Thus, similarities in linguistic structures of the two languages results in positive transfer. It has been strongly confirmed by research that L1 has a significant impact on how L2 is learned and utilised (Perdue, 1993).
L1 transfer from phonology, morphology, lexical, semantic, syntactic, and pragmatic etc. is quite well-documented. Studies have looked into lexical transfer (e.g. Zimmerman 2004; Singleton, 2004; Jiang, 2002), transfer in morphology (e.g. Herwig 2001; DE Angelis & Selinker, 2001), in Pragmatics (e.g. Yu, 2004; Tamanaha, 2003; Kwon, 2003) as well as in various linguistic structures e.g. causatives (Helms-Park, 2001), copular verbs (Helms-Park, 2003), lexis (Cenoz, 2001; Ringbom, 2001, 2004), grammatical gender (Sabourin, 2001), morphological awareness (Koda, 2000) and L1 orthographic effect upon the L2 (Wang coda & Perfetti, 2003; Ghilzai, 2010: 7, 8).

**Theoretical Framework (s)**
The research on transfer phenomenon has resulted into several different approaches on transfer which provide different and sometimes contradictory evidence about it and hence these approaches have been subjected to criticism. Therefore, the phenomenon of transfer is still in need of a rationalistic approach which could provide a logical answer to it (Ghilzai, 2010: 15).

However, previous work suggests that learning L2 when it is similar to L1 is less subject to critical period phenomena (De Keyser, 2000). Furthermore, the effect of cross-linguistic similarity for vocabulary development might be related to the use of long-term memory in the learning process. (Kaushanskaya, 2012). When the second language matches the first language, L2 information can be integrated into the existing memory system with greater ease (ibid).

The problem of linguistic expressions’ retention has been explained by Levels-of-processing theory which is a significant relevant theory. According to the theory, the deeper the mental processing level for an information (i.e., the more effortful and elaborate is the mental work exercised with an information), the greater the chances are that the information is committed to the long-term memory. With regard to lexis, deep processing is presumed to occur when learners actively perform a comparatively complicated mental exercise regarding lexical information. That is, mentally relating a new item to previously known ones and associating/embedding that with a mental image. For example, in a key word technique, L1 word is utilised as a key for retrieval of the target word since it sounds or spells like L2 word and can be semantically connected with it. (Boers, F & Lindstromberg, S. 2008: 12)

This “deep processing” which implies cognitive strategies (finding similarities between the first and second language) is represented by the Explicit Learning Hypothesis which emphasizes the learner's role as an active information processor who may improve vocabulary acquisition by employing vocabulary learning techniques (Ellis, 1995). According to Lado (1957: 2), “We assume that the student who comes in contact with a foreign language will find some features of it quite easy and others extremely difficult. Those elements that are similar to his native language will be simple for him, and those elements that are different will be difficult” e.g., most learners
will have little trouble grasping the Italian word attuale (= current, topical), which is particularly true for speakers of many European languages (aktual, actuel, aktuel etc mean the same)\(^1\)

Regarding the positive influence of cognates on L2 vocabulary acquisition, a theory of language transfer, Contrastive Analysis Hypothesis (CAH) postulates that differences and similarities are present between L2 and L1 and a learner will acquire those L2 structures easily that are similar to the L1 and will face difficulty in learning the structures which differs from their L1 structures (Ghilzai, 2010: 8, 9). According to Fries (1945: 9), “the most efficient materials are those that are carefully compared with a parallel description of the native language of the learner”.

Similarly, the connectionist models of SLA, which have often incorporated the ideas from the Cognitive Psychology, supports tremendous transfer of L1 knowledge to L2 clearly. Connectionists propose that the L2 learning is strongly parasitic on the L1 structures in both phonology and lexicon. The L2 learner has developed a well-organized nerolinguistic system during L1 acquisition. On learning the second language, the L2 learner does not have a separate conceptual system. Therefore, L2 learner relies on the L1 structure. The L2 learner manipulates the L1 structure and tries to build up a separate system for the L2 based on L1. (Ghilzai, 2010: 12).

Now the question arises, how do we actually process the new words. This is explained in the next section.

**How do we process new words?**
A learner while processing new words establish lexical inference strategies. Palmberg conducted a related investigation of a learner's 'feel' for new vocabulary by examining the interface between 'receptive' and 'potential' vocabulary in the learning process (Nation, 1989: 6). Here is an example of an empirical study which shows the approach adopted by Danish English learners in inferring the meaning of unfamiliar terms in a second language.

Two Danish students, A and B, were debating the meaning of the word affluence in the context, "In the rich world many diseases are caused by affluence". Their conversation in Danish was audio-recorded and transcribed to create a thinking aloud protocol; an excerpt of this think aloud verbalisation may be seen below;

A: “affluence influence
B: ignorance
A: well I think it is abundance - you know - Latin fluens
B: perhaps
A: yes what is fluid that * overflows - it could be abundance don't you think
B: affluence (hesitantly)
A: I'am sure that is it - you know heart diseases and the like - this is what I think

\(^1\) [http://www.mikeswan.co.uk/elt-applied-linguistics/influence-second-language.htm](http://www.mikeswan.co.uk/elt-applied-linguistics/influence-second-language.htm)
final agreement: abundance
* Danish has a noun, overflod, which means abundance”
  (ibid: 34)

This example shows that how the two learners are inferring the meaning of the word affluence by comparing it with the similar words “fluens” and “overflod” in their L1. This similarity regarding the word “affluence” from L2 with the words “fluens” and “overflod” from their L1 helped the students to acquire the meaning of the L2 word “affluence” as “abundance”.

The above-mentioned theoretical perspectives regarding positive impact of cognates in L2 vocabulary acquisition has also been established by empirical research. Many linguists are of the view that dissimilarities and similarities in word forms along with meanings are important factors in determining how quickly a specific foreign language can be learnt by the speakers of another language (Odlin, 1989: 77).

Such a stance can be supported by an empirical study where the Spanish students took a test on English words to be able to infer their meanings which they were not supposed to know. The results showed that students performed particularly well on those test questions (words) that had identical or almost identical spelling to the words found in Spanish forms. Whereas those words/terms that the learners did not know and whose spellings were not comparable to any word in their L1 were not responded or were answered incorrectly by the learners. For example, the students responded to the English terms telephone, public, important, electricity, emergency, idea, and insect with Teléfono, Publico, Importante, electricidad, Emergencia, Idea, and insecto respectively. The effects of positive transfer may possibly be seen while dealing with similar cognates as shown in the example. Thus, similar cognates aided positive transfer which resulted into correct guesses of the meanings and thus facilitated the L2 acquisition process accordingly. (Torrijos, 2009: 152,153)

Another study of Swedish-speaking students who had never studied English in school found that the students correctly identified 14 expressions and more than half of 40 everyday English words recorded on tape, with the solution percentages being particularly high for words that were similar or nearly similar in pronunciation to their Swedish translation equivalents (Palmberg, 1985). It was also demonstrated that Swedish-speaking students were able to identify and recognise words in texts that fully utilised formal similarities between words in the two languages (Palmberg, 1988).

Similarly, cross-linguistic similarities or overlap between two languages can result in positive transfer is also pointed out by Odlin (1989). That is, Chinese learners of L2 Japanese have an advantage over English learner. This is because Chinese and Japanese share some properties and have similar writing system. Therefore, it is easy for Chinese L1 learner to learn the Japanese as L2 as compared to the L1 English learner to learn Japanese as L2 as English is more different from Japanese in comparison to Chinese from Japanese (Ghilzai, 2010: 1). On the basis of these findings, the following implications can be drawn:
Positive Implications

According to Odlin (1989):

- The benefits of lexical similarity between L2 and L1 are so significant that they significantly shorten the time required to become literate in the L2.

A language sharing common lexicon with L1, along with the benefits of recognizing cognates in learning English, has another likely advantage of speakers having more time to focus on unknown vocabulary. In other words, the more semantically similar cognates are, the less time learners will spend comprehending them, allowing them to dedicate more time to understanding and learning of new information. If a language (L2) shows many lexical similarities with the L1, the learners will find the second language easier to learn.

However, despite the benefits of common vocabulary in the two languages, nevertheless, there are pitfalls with respect to lexical similarities in the form of false friends; there are certain pitfalls as explained next.

Pitfalls

So far, the discussion led to the understanding that word form similarities, e.g. between Spanish and English (public and público) may make vocabulary acquisition easier for Spanish students, but there are also some related problems with such words in the form of ‘false friends’ or ‘pitfalls’. False friends mean the words that look the same but have a completely different meaning. For example, English ‘actually’ and Spanish ‘actualmente’, where the Spanish word means ‘currently or presently’ and English word implies some kind of contradiction. This results in a negative transfer, as seen by the results of a vocabulary test in an empirical study by Torrijos (2009). In this study, English and Spanish words were misunderstood for each other, e.g. actually, *actualmente, sympathy * simpatía, library * librería, argument *argumento.

This happens because in an effort to guess a word’s meaning in a second language, learners usually utilise inter-lingual clues (Palmberg, 1987 & 1988). A word can be transparent (which can be interpreted based on inter/intra lingual clues) if it resembles its translation counterpart in a language the learner is acquainted with, for example, 'liberté', which is transparent to anyone having familiarity with the English word 'liberty'. However, there are certain words that seem to offer clues about their meaning but actually do not. They may be called deceptively transparent words e.g., false friends, that is, words which a learner thinks s/he knows but in fact does not. The learners’ erroneous assumption in such a situation is that if the word’s form in L2 is similar to that in LI, then the meaning is similar as well. (Nation, 1989: 11-13)

Like the study mentioned above by Torrijos (2009), the English forms “important” and Spanish “importante”, English form “actually” and Spanish “actualmente” also appear a reliable signal of a cognate relation. While the former pair is a true example of a cognate relation, the latter pair is not. “Actually” means “de hecho” in Spanish and not “actualmente”, as some Spanish students
may presume when encountering this term for the first time. So, the pairs “actually and actualmente” and “sympathy and simpatía” are pitfalls both for Spanish learners of English and vice versa. This kind of error shows evidence of negative transfer due to L1 influence. In the same case, American learners of Spanish made similar mistakes with pairings of ‘false friends’ e.g., Spanish; English: decepción *deception, carpeta *carpet, emocionante *emotional (ibid).

Having said that, transfer does not happen itself but there are certain conditions under which transfer is activated. According to Zobl (1980), “Learner must attain a certain level of development with respect to an L2 structure before transfer is activated”. The degree of transfer that occurs between languages, and hence the extent to which transfer can facilitate or impede learning, is obviously influenced by language distance. Related languages usually have an extensive cognate vocabulary, and if they do not, they usually have near translation equivalents: which may offer learners a great benefit. Where there is less common ground across languages, word forms tend to be quite different and necessitating the acquisition of additional information about word meaning from scratch. Research shows that Spanish- and Swedish-speaking English learners acquire vocabulary faster and more successfully than Arabic and Finnish-speaking learners (Odlin 1989: 77–80).

Kellerman suggested that the learner's ability to recognise cognate structures and forms in both L1 and L2 would be aided by the broad typological similarity of the two languages. Learner’s association between the two languages might lead to both interference and facilitation. If the learners’ L1 and L2 are dissimilar, they will be unable to form cross-linguistic connections which may function as a barrier to the transfer in the early stages. (Ghilzai, 2010: 4)

Also, it depends on learners’ perception of language distance. Language learners intuitively perceive the distance between French and English, for example, to be less than the barrier between Chinese and English (Ringbom, 1987). As a result, according to Ellis (1986), the learner's experience-based or intuitive sense of how closely his L1 is related to the second language will, unconsciously or consciously, effect his performance showing the tendency to transfer L1 forms into the L2 or to assign meaning to L2 words based on formal similarities with L1 words (Nation, 2010: 48,49). Similarly, regardless of their perception of language distance, learners must be willing to transfer (Nation, 1989:48, 49).

Other than learners’ perception of language distance, learner’s perception of cultural distance may also have effect on his/her readiness to transfer. As we saw that the chances of successful language transfer is more likely between closely related languages than between unrelated languages. Kasper (1992) presented evidence that Danes transfer L1 usages to German more readily than they do to English. Ringbom discovered that Swedish speakers show more tendencies than Finnish speakers to transfer L1 forms into English (though Finns who know Swedish can also do so with the Swedish). “Apparently Finnish learners are aware that their L1 is so different from the target language that they do not normally expect formal similarity between L1 words and L2 words, at
least not to an extent that would guide them very often when they make their approximations” (Ringbom 1978: 90).

Now the next question which arises is, that guessing the word based on similarities implies that the same word has been acquired as well. That is, has the word been stored in the learner’s memory? This is what I come next to.

**Is Comprehension/Guessing Acquisition?**

Inference/comprehension is the first stage in vocabulary acquisition which entails making educated guesses about a word’s meaning based on all available linguistic clues as well as the learners' general knowledge of the world, awareness of the co-text and relevant linguistic knowledge. This was mentioned briefly previously. However, the question of whether comprehension amount to acquisition, raises the issue of learners' long-term retention of the word afterwards. Just comprehension or guessing words cannot amount to acquisition. Retention is also crucial in vocabulary acquisition.

It is believed that words learnt in a low-predictable context, i.e., inference processes involving the use of linguistic clues are more likely to be retained better than those words whose meaning is inferred based on contextual cues. Psycholinguistic studies on L1 comprehension lend credence to this hypothesis. A word inferred through linguistic clues will have a more distinct representation and a higher degree of saliency in memory than words inferred from contextual clues in a high-predictable context (Cairns et al. 1981: 44).

Like many others (notably Gass, 1986, and Chaudron, 1985), intake is envisaged as a multi-phase process that begins with the existence of a specific input and progresses via the perception of that input to the internalization of new rules and structures resulting from that intake. Though, Chaudron reflected mainly on syntax (structures and rules), has little said about vocabulary learning. (Nation 1989: 35, 36).

Thus, it is difficult to determine the best technique to process a word as processing is task specific (Nation, 1989). Since there is not a single way to process a word, it is no surprise that learners have issues and as a result they fall into traps as have been witnessed in the above-mentioned case study. One characteristic feature of the learner processing can be that of learners usually seeing a word as a whole, i.e., "a word is a word", which means that they do not modify their processing based on word type but rather employ holistic processing for all sorts of words (ibid: 41). This leads to another but related discussion, that is, lexical processing/storage, which is beyond the scope of this review. Paul Nation’s publications may be helpful in this regard.

**Implication for L2 Vocabulary Pedagogy**
Making cross-linguistic comparison is usually typical of most people approaching language learning. According to Skehan (1989: 76), one technique common with good language learners is to “refer back to their L1 and make cross-linguistic comparisons effectively at different stages of language-learning”. We may assume that wherever possible the beginning second language learners try to use simpler translation equivalences between lexical items. In case of learning related languages, simplified equivalences operate well for developing receptive competence, even if these equivalences will need to be altered by subsequent learning (Ringbom 1986: 154). Also, it should be kept in mind that it is less likely that idiomatic uses of some native language words can also be carried over into the L2 so some knowledge of the limitations of translation equivalency is necessary.

Keeping in mind the role of cognates in positive transfer, the teachers may use cognates in L1 and L2 as a first step for facilitating vocabulary acquisition with beginner learners. However, the learners should have some basic knowledge of the L2 as stated above. This may enhance learners’ motivation accompanied by their sense of achievement. Though the teachers need to be aware of the pitfalls of cognates and use them meticulously. Also, where L1 and L2 are closely related, L1 will certainly provide support in most areas, resulting in fewer errors due to the inherent difficulty of what must be learned, however, at the same time, as more can be transferred, there are more chances for interference errors which may occur when items in the two languages are similar but not identical in form or use².

**Conclusion**

In 1980’s and 90’s a lot of research studies showed the effect of L1 transfer at all levels of linguistics; phonological, morphological, lexical, semantic, and syntactic etc. The research is still ongoing and there is more empirical evidence in favour of L1 transfer than in opposition (Ghilzai, 2010: 2). Coder views native language to be a cognitive factor which may influence the target language’s developmental order. The development of L2 relies on the similarities and differences of the L2 from the L1. The similarity will result in faster acquisition of the target language and differences will result in slower Progress towards L2. (ibid)

L1 influences the way L2 vocabulary is learned and recalled for use by the learner who makes up for the lack of knowledge by referring to L1 in an attempt to acquire new words in L2. Hence mapping L2 vocabulary on L1 is an inevitable and widely used strategy though may also lead to errors. Lexical transfer is mainly positive when L1 and L2 are closely linked. However, it is crucial to recognise that learner’s perceived similarity and perceived distance are equally relevant considerations (Kellerman, 1977). During the initial phases of L2 learning, equivalence hypothesis is to some extent required in L2 learning. Native language role and influence is not only limited to interference and errors, but also for most of what is right in an interlanguage. It is impossible or

² [http://www.mikeswan.co.uk/elt-applied-linguistics/influence-second-language.htm](http://www.mikeswan.co.uk/elt-applied-linguistics/influence-second-language.htm)
very hard to learn a new language if we do not make cross linguistic correspondences\(^3\). Though the strategy sometimes fails to work especially in case of unrelated languages, which makes learning of languages difficult, however, most of the time it enables us to learn a new language without having to start from scratch as almost half of the task (words already acquired in L1 e.g., cognates) is already accomplished.

**Limitation and Study Forward**
This study provided an overview of the research on cross linguistic influence, however, limited to the acquisition of vocabulary with the cognates playing a vital role in the positive transfer. Similar studies regarding other linguistic elements/features, such as, phonology, morphology, syntax, pragmatics, and others would be quite useful to provide a consolidated review of the research trends regarding these features and locate potential areas for future research. Moreover, while there have been many studies on the cross-linguistic influence of L1 on L2, more research is required on the cross-linguistic influence of L1 and L2 on L3 and more languages and vice-versa.

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**References**


\(^3\) “http://www.mikeswan.co.uk/elt-applied-linguistics/influence-second-language.htm”


