



<http://www.eab.org.tr>

Educational Research Association  
The International Journal of Research in Teacher Education  
2021, 12(1): 1-9  
ISSN: 1308-951X



<http://ijrte.eab.org.tr>

## Cross-linguistic transfer of L1 and L2 in learning L3: French word order

Mehrnoosh Hajjalili<sup>1</sup>, Amir Sabzevar<sup>2</sup> & Ehsan Namaziandost<sup>3</sup>

---

### Abstract

The present study was conducted to explore the cross-linguistic transfer of L1 and L2 in learning French word order as L3. In order to conduct the present study, 30 Iranian students studying French as their L3 in Iran language institute were selected. The participants were all native speakers of Persian, and they had previously learned English as their L2. A grammaticality judgement/correction task (GJCT) was administered to the learners studying at three elementary classes of this institute. This task was intended to assess the participants' word order recognition in sentence order and adjective-noun patterns. The data were analyzed using SPSS 21 statistical software. The findings revealed that Iranian French language learners were more affected by the word order of their L2 (English) rather than their L1 (Persian). These results confirm L2 Status Factor Model proposed by Hammarberg (2001). Based on this model, since an L3 structures are learned in the same way as an L2 structure (explicitly), and L1 is learned rather implicitly, transfer will be observed among the two languages that are learned and stored in same way.

**Keywords:** Cross-Linguistic Transfer, English, French, L2 Status Factor Model, Persian, Word Order.

---

---

<sup>1</sup> Lecturer, Department of English, Faculty of Humanities, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran.

**Correspondence:** 23.mehrnoosh@gmail.com

<sup>2</sup> Assist. Prof. Dr., Department of English, Faculty of Humanities, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran.

**Correspondence:** amir.sabzevari@yahoo.com

<sup>3</sup> Phd Candidate in Tefl, Department of English, Faculty of Humanities, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran. **Correspondence:** e.namazi75@yahoo.com ORCID ID: 0000-0002-8393-2537

## **Introduction**

The acquisition of the native language (L1) and or foreign/second language (L2) has been explored under the term ‘bilingualism’ for many years; however, third language acquisition is a field which has gained great importance in recent years (Abedi, Keshmirshekan, & Namaziandost, 2019; Cenoz, Hufeisen & Jessner, 2001, Schepens, Van der Slik & Van Hout, 2013). Therefore, there are many vague points in this area which need to be investigated.

Cross-linguistic transfer is among the factors which is inevitable to ignore during the process of learning a language other than native language. This phenomenon gets even more significant when L3 acquisition is going to be discussed (Rothman, 2011). While L1 is the only source of language transfer in the case of L2 acquisition, there is a great controversy on the privileged role of L1 and L2 in the case of L3 acquisition (Nasri, Biria, & Karimi, 2018; Foote, 2009; Hermas, 2014; Namaziandost, Nasri, & Keshmirshekan, 2019; Rothman & Cabrielli Amaro, 2010).

One of the possible approaches in L3 acquisition is the primary cross-linguistic transfer from L1. According to this approach, L3 learners’ mother tongue is the main source of transfer. There is no absolute model of L1 transfer in L3 acquisition; however, several studies have found evidence of L1 influence (Hermas, 2014; Jin, 2009; Nasri & Biria, 2017; Na Ranong & Leung, 2009). Hermas (2014), in his study, worked on native Arab speakers learning English as their L3. The findings showed that Arabic (L1) was the main cause of both facilitative and non-facilitative transfer for advanced L2 French participants who were in the initial stages of L3 English. In addition, Jin (2009) concluded that L1 can have a non-facilitative effect Chinese on L3 Norwegian.

On the other hand, other studies (Hashemifardnia, Namaziandost, & Sepehri, 2018; Lindqvist, 2010; Ringbom, 2007; Williams & Hammarberg, 1998) have found cross-linguistic transfer from L2 to L3 structures, which has led to a model named as L2 Status Factor model. According to this model, L2 is a privileged source of transfer to L3 acquisition, especially at elementary stages of learning (Bardel & Falk, 2012). This model is supported by experimental evidence that implicit linguistic competence and explicit metalinguistic knowledge are stored in different parts of the brain and they have different memory sources (Mirshekaran, Namaziandost, & Nazari, 2018; Paradis, 2009). It is believed that L1 is sustained by procedural memory and L2 by declarative memory (Azadi, Biria, & Nasri, 2018; Ullmann, 2001). Thus, while an L1 grammar is implicitly acquired and sustained by procedural memory, an L2 grammar is typically based on explicit knowledge and sustained by declarative memory. And since an L3 grammar is learned in the same way as an L2 grammar, transfer will occur between the two languages that are both stored in declarative memory.

The point worth considering, here, is that L3 acquisition is a rather new topic in Iranian language learning context. This is due to the fact that, until recently, Language learning (even at L2 levels) was considered as a prestigious activity and the significant role of it was always neglected (Namaziandost & Ahmadi, 2019). Therefore, there is a need to conduct some studies in this area to fill in the gaps and pave the way for language learners and teachers. Therefore, the present study was conducted to explore the cross-linguistic transfer of L1 and L2 in learning French word order as L3. In order to achieve this objective two research questions were proposed:

1. Does the native language of Iranian L3 learners have the privileged role on the Cross-linguistic transfer observed in their word order?
2. Does the second language of Iranian L3 learners have the privileged role on the Cross-linguistic transfer observed in their word order?

### **The Focus of the Present Study**

The present study aimed at exploring the cross-linguistic transfer of L1 and L2 in learning French word order as L3. As it is previously stated by Ringbom (2001), word order can be defined as “the order of the syntactic constituents of a language” (p.17). Constituent word order is defined in terms of a finite verb (V) in combination with two arguments, namely the subject (S), and object (O). Thus, according to the scholars (Hammarström, 2016; Montrul, Dias, & Santos, 2011; Namaziandost, Ahmadi, & Keshmirshakan, 2019; Rijkhoff, 2007), a transitive sentence has six logically possible basic word orders:

- about half of the world's languages deploy subject–object–verb (SOV) order;
- about one-third of the world's languages deploy subject–verb–object (SVO) order;
- a smaller fraction of languages deploy verb–subject–object (VSO) order;
- the remaining three arrangements are rarer: verb–object–subject (VOS) is slightly more common than object–verb–subject (OVS), and object–subject–verb (OSV) is the rarest by a significant margin.

French and English are among the one-third of the world's languages that use a subject–verb–object word order in their grammatical sentence structures. On the other hand, Persian, as most of Asian languages, considers subject–object–verb word order as the standard rule. Therefore, an Iranian French language learner, who has previously mastered English as his L2, has stored both SVO and SOV structures in his mind. Here, the possibility of application of the word order rules of both languages in L3 acquisition should be taken into account. Here are the examples of the same content in these three languages.

Persian:

من فرانسه صحبت می کنم.

English:

I speak French.

French:

Je parle français.

On the other hand, apart from the word order of transitive sentences, the word order of noun-adjective in noun phrases is of particular importance. There are two possible option in this regard, noun-adjective and adjective-noun word order. English is a language that always puts the adjectives before the noun, while this rule is completely reverse in Persian. The Persian speakers use adjectives after the described noun. However, French is the language of exceptions. In this language, both adjective-noun and noun-adjective structures are common. Some adjectives are located before the noun, while the other are placed after the noun which can result in some ambiguities on the part of non-native speakers of this language. Here are the examples of the same content in these three languages.

Persian:

یک متن خوب / یک متن دشوار

English:

a good text / a difficult text

French:

un bon texte / un texte difficile

The Iranian French language learners, who have previously mastered English as their L2, have

stored both SVO and SOV structures in their mind. Therefore, the possibility of application of the word order rules of both languages in L3 acquisition should be taken into account. Now, the present study was conducted to identify the potential cross-linguistic transfer of Persian and English in French language learning (L3).

### **Methodology**

#### **Participants**

The participants in this study were chosen out of about 47 French language learners studying at Iran Language Institute, Yazd branch. These students spent, at least, four hours a week studying different subskills of French. It was highly attempted to avoid any inequality in the selection process. Therefore, the participants were examined regarding their linguistic background such as their L1 and prior studies in English. Out of the candidates to be tested, 30 students were labeled as advanced L2 speakers of English and native speakers of Persian. In addition, the selected participants were aged from 17 to 43.

#### **Instruments**

First of all, a rather complex English interview was administered to the candidates in order to select the ones who had already learned English as their L2. This semi-structured interview was composed of ten questions on different topics such as favorite season, tourism, hobbies, etc. each candidate was supposed to talk about two of these topics selected by the researcher.

Furthermore, along with the interview, a grammaticality judgment / correction task (GJCT) was administered to the learners studying at three elementary classes of this institute to measure correct perception of word order in sentence order and adjective-noun patterns. The test consisted of two parts and 20 items. Ten items were supposed to check the sentence order recognition, and the rest of the items were designed to identify the correct order of adjectives in phrases. Each item was composed of a text providing the intended context. The participants were supposed to read the text and identify the sentences with some errors in their word order and correct them. By the way, three sentences were completely correct.

#### **Procedures**

As mentioned previously, in order to select the intended participants from the present candidates a semi-structured interview was administered. The ones obtaining the scores higher than 85, out of 100, were chosen as advanced English L2 speakers and the participants of this study.

Before doing the main research, a pilot test, consisting of three advanced French language learners, was conducted to find out the flaws and shortcomings of the designed test. Moreover, two French instructors of the institute helped the researcher overcoming the flaws of the test. Then, the test was presented to the students, and they were supposed to finish it in half an hour. The instructions of the test asked the students to identify the incorrect sentences, find, the errors, and correct them.

It is worth mentioning that the reliability of the test was also measured conducting Cronbach's alpha analysis. Cronbach's alpha formula is the most common measure of internal consistency. Cronbach's alpha value for the test was  $\alpha = 0.91$ . Finally, the number of right and wrong answer was calculated and analyzed statistically, which is described in details, in the next section.

### **Results**

This study was conducted to explore the cross-linguistic transfer of L1 and L2 on L3 word order acquisition of Iranian French language learners. The obtained data was analyzed using SPSS 21 software.

First of all, ten French sentences were presented to the students to assess their word order recognition in sentences. As mentioned before, French sentence order is like the one in English

*Cross-linguistic transfer of L1 and L2 in learning L3: French word order*

and different from Persian. The sentences were supposed to identify the sentences with wrong order (similar to the word order of Persian) and correct it. Then, some frequency analysis was conducted to identify the number of right and wrong answers.

**Table 4.1.** Frequency Results on the Sentence Order Answers of Iranian French Learners

		Frequency	Percent	Valid Percent	Cumulative Percent
1	right	28	93.3	93.3	93.3
1	wrong	2	6.7	6.7	100.0
2	right	25	83.3	83.3	83.3
2	wrong	5	16.7	16.7	100.0
3	right	30	100.0	100.0	100.0
3	wrong	0	0.0	0.0	0.0
4	right	29	96.7	96.7	96.7
4	wrong	1	3.3	3.3	100.0
5	right	27	90.0	90.0	90.0
5	wrong	3	10.0	10.0	100.0
6	right	27	90.0	90.0	90.0
6	wrong	3	10.0	10.0	100.0
7	right	28	93.3	93.3	93.3
7	wrong	2	6.7	6.7	100.0
8	right	29	96.7	96.7	96.7
8	wrong	1	3.3	3.3	100.0
9	right	27	90.0	90.0	90.0
9	wrong	3	10.0	10.0	100.0
10	right	29	96.7	96.7	96.7
10	wrong	1	3.3	3.3	100.0

As it is apparent, most of the French learners have provided correct answers to the items related to the word order of French sentences. Question number two was the only item with the most wrong answers (F = 5, P =16.7). On the other hand, all the students answered the third question, correctly (F = 30, P =100).

Table 4.1 represents the frequency of right and wrong answer of Iranian French learners. However, this table does not show the significance of the difference between right and wrong answers. Therefore, some chi-square analysis was conducted which is represented in table 4.2.

**Table 4.2.** Chi-Square Results on the Difference between Right and Wrong Answers

	one	two	four	five	six	seven	eight	nine	ten
Chi-Square	22.533	13.333	26.133	19.20	19.200	22.533	26.133	19.200	26.133
df	1	1	1	1	1	1	1	1	1
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000

*Cross-linguistic transfer of L1 and L2 in learning L3: French word order*

The chi-square results, represented in Table 4.2, reveal that there is a significant difference between right and wrong answers in all ten items. In fact, the participants could significantly identify the structures of French sentence order (which is like English) from the ones that were similar to the Persian structures. These results may show that the structures which are similar in L2 and L3 are learned easy and the number of errors is rare in such cases.

In addition, the order of adjectives in noun phrases was tested and the results were analyzed. Eight out of ten items needed an adjective after the noun (like the Persian structural word order). The students needed to identify and correct the errors. The frequency of the right and wrong answers is presented in Table 4.3.

**Table 4.3.** Frequency Results on the Adjective Order Answers of Iranian French Learners

		Frequency	Percent	Valid Percent	Cumulative Percent
1	right	13	43.3	43.3	43.3
1	wrong	17	56.7	56.7	100.0
2	right	19	63.3	63.3	63.3
2	wrong	11	36.7	36.7	100.0
3	right	15	50.0	50.0	50.0
3	wrong	15	50.0	50.0	100.0
4	right	11	36.7	36.7	36.7
4	wrong	19	63.3	63.3	100.0
5	right	15	50.0	50.0	50.0
5	wrong	15	50.0	50.0	100.0
6	right	11	36.7	36.7	36.7
6	wrong	19	63.3	63.3	100.0
7	right	11	36.7	36.7	36.7
7	wrong	19	63.3	63.3	100.0
8	right	9	30.0	30.0	30.0
8	wrong	21	70.0	70.0	100.0
9	right	18	60.0	60.0	60.0
9	wrong	12	40.0	40.0	100.0
10	right	12	40.0	40.0	40.0
10	wrong	18	60.0	60.0	100.0

According to the numerical findings of Table 4.3, French learners could not identify the correct word order of adjectives as easily as they did in sentence order items. Here, the frequency of wrong answers were higher, and in some cases such as items one (F = 17, P =56.7), four (F = 19, P =63.3), six (F = 19, P =63.3), seven (F = 19, P =63.3), eight (F = 21, P =70), and ten (F = 18, P =60), the number of wrong answers were more than correct ones.

Table 4.3 represents the frequency of right and wrong answer of Iranian French learners. However, this table does not show the significance of the difference between right and wrong answers. Therefore, some chi-square analysis was conducted which is represented in table 4.4.

**Table 4.4.** Chi-Square Results on the Difference between Right and Wrong Answers

	one	two	three	four	five	six	seven	eight	nine	ten
Chi-Square	1.350	12.150	3.750	.150	3.750	.150	.150	.150	9.600	.600
df	1	1	1	1	1	1	1	1	1	1
Asymp. Sig.	.245	.000	.053	.699	.053	.699	.699	.699	.002	.439

According to the numerical findings of chi-square results, represented in Table 4.4, in most of the items there is not a significant difference between right and wrong answers. In fact, the participants could not significantly identify the structures of French adjective order (which is like Persian). These results may show that the structures which are similar in L1 and L3 are learned later or more difficultly, and the number of errors is more in such cases.

### Discussion and Conclusion

As mentioned previously, the current study was conducted to explore the cross-linguistic transfer of L1 and L2 in learning French word order as L3. In order to achieve this objective two research questions were proposed. The first research question was concerned with the privileged effect of L1 on L3. The results obtained by adjective word order recognition test demonstrated that although the word order of adjectives in French were more similar to Persian structures than English ones, Iranian French learners obeyed the structural rules of English and even, in some cases, they would point the correct items as wrong.

On the other hand, the second research question was concerned with the privileged effect of L2 on L3 learning. The answers provided to the sentence order items. The grammaticality judgment/correction task (GJCT) on sentence order showed that L3 structures which are similar to L2 ones are learned easier and faster. These results are in line with L2 status factor model proposed by Hammarberg (2001). According to this model, L2 is a privileged source of transfer to L3 acquisition, especially at elementary stages of learning (Bardel & Falk, 2012; Hosseini, Nasri, & Afghari, 2017). This model is supported by experimental evidence that implicit linguistic competence and explicit metalinguistic knowledge are stored in different parts of the brain and they have different memory sources (Namaziandost, Abedi, & Nasri, 2019; Paradis, 2009). This study can have some implications for EFL teachers and learners studying in this area.

### References

- Abedi, P., Keshmirshakan, M. H., & Namaziandost, E. (2019). The comparative effect of flipped classroom instruction versus traditional instruction on Iranian intermediate EFL learners' English composition writing. *Journal of Applied Linguistics and Language Research*, 6(4), 43-56.
- Azadi, G., Biria, R., & Nasri, M. (2018). Operationalising the Concept of Mediation in L2 Teacher Education. *Journal of Language Teaching and Research*, 9(1), 132-140.
- Bardel, C., & Falk, Y. (2012). The L2 status factor and the declarative/procedural distinction. In J. C. Amaro, S. Flynn, & J. Rothman (Eds.), *Third language acquisition in adulthood* (pp. 61–78). Amsterdam: John Benjamins.
- Cenoz, J., Hufeisen, B., & Jessner, U. (Eds.). (2001). *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives*. Clevedon, UK: Multilingual Matters.
- Foote, R. (2009). Transfer in L3 acquisition: The role of typology. In Y-K. I. Leung (Ed.), *Third language acquisition and Universal Grammar* (pp. 89-114). Clevedon: Multilingual Matters.



### *Cross-linguistic transfer of L1 and L2 in learning L3: French word order*

- Hammarberg, B. (2001). Roles of L1 and L2 in L3 production and acquisition. In J. Cenoz, B. Hufeisen, & U. Jessner (Eds.), *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives* (pp. 21–41). Bristol, UK: Multilingual Matters.
- Hammarström, H. (2016). Linguistic diversity and language evolution. *Journal of Language Evolution*, 1(1), 19–29.
- Hashemifardnia, A., Namaziandost, E., & Sepehri, M. (2018). The effectiveness of giving grade, corrective feedback, and corrective feedback-plus-giving grade on grammatical accuracy. *International Journal of Research Studies in Language Learning*, 8 (1), 15-27.
- Hermas, A. (2014). Multilingual transfer: L1 morphosyntax in L3 English. *International Journal of Language Studies*, 8(2), 10-24.
- Hosseini, E. Z., Nasri, M., & Afghari, A. (2017). Looking beyond teachers' classroom behavior: novice and experienced EFL teachers' practice of pedagogical Knowledge to Improve Learners' Motivational Strategies. *Journal of Applied Linguistics and Language Research*, 4(8), 183-200.
- Jin, F. (2009). Third language acquisition of Norwegian objects: Interlanguage transfer or L1 influence? In Y-k. I. Leung (Ed.), *Third Language Acquisition and Universal Grammar* (pp. 144-161). Bristol, UK: Multilingual Matters.
- Lindqvist, C. (2010). Inter- and intralingual lexical influences in advanced learners' French L3 oral production. *International Review of Applied Linguistics in Language Teaching*, 48, 131–157.
- Mirshakaran, R., Namaziandost, E., & Nazari, M. (2018). The Effects of Topic Interest and L2 Proficiency on Writing Skill among Iranian EFL Learners. *Journal of Language Teaching and Research*, 9(6), 1270-1276.
- Montrul, S., Dias, R., & Santos, H. (2011). Clitics and object expression in the L3 acquisition of Brazilian Portuguese. Structural similarity matters for transfer. *Special issue of Second Language Research on L3 acquisition*, 27 (1), 21-58.
- Na Ranong, S., & Leung, Y-k. I. (2009). Null objects in L1 Thai-L2 English-L3 Chinese: An empirical take on a theoretical problem. In Y-K. I. Leung (Ed.), *Third Language Acquisition and Universal Grammar* (pp. 162-191). Bristol, UK: Multilingual Matters.
- Namaziandost, E., & Ahmadi, S. (2019). The Assessment of Oral Proficiency through Holistic and Analytic Techniques of Scoring: A Comparative Study. *Applied Linguistics Research Journal*, 3(2), 70–82.
- Namaziandost, E., & Ahmadi, S., Keshmirshakan, M. H. (2019). Listening comprehensions problems and strategies used by intermediate EFL learners. *Journal of English Literature and Cultural Studies (JELCS Journal)*, 2(3), 28-41.
- Namaziandost, E., Abedi, P., & Nasri, M. (2019). The Role of Gender in the Accuracy and Fluency of Iranian Upper-intermediate EFL Learners' L2 Oral Productions. *Journal of Applied Linguistics and Language Research*, 6(3), 110-123
- Namaziandost, E., Nasri, M., & Keshmirshakan, M. H. (2019). Cohesive conjunctions in applied linguistics research articles among Iranian and non-Iranian researchers: A comparative corpus-based study. *Journal of English Language Studies*, 4(2), 101 – 119.



### *Cross-linguistic transfer of L1 and L2 in learning L3: French word order*

- Nasri, M. & Biria, R. (2017). Integrating multiple and focused strategies for improving reading comprehension and L2 lexical development of Iranian intermediate EFL learners. *International Journal of Applied Linguistics & English Literature*, 6(1), 311-321.
- Nasri, M., Biria, R., & Karimi, M. (2018). Projecting Gender Identity in Argumentative Written Discourse. *International Journal of Applied Linguistics & English Literature*, 7(3), 201-205
- Paradis, M. (2009). *Declarative and procedural determinants of second languages*. Amsterdam: John Benjamins.
- Rijkhoff, J. (2007). Word Classes. *Language and Linguistics Compass*, 1 (6), 709–726.
- Ringbom, H. (2001) Lexical transfer in L3 production. In J. Cenoz, B. Hufeisen and U. Jessner (eds) *Cross-linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives* (pp. 59\_68). Clevedon: Multilingual Matters.
- Ringbom, H. (2007). *Cross-linguistic similarity in foreign language learning*. Clevedon, UK: Multilingual Matters.
- Rothman, J. & Cabrelli Amaro, J. (2010). What variables condition syntactic transfer?: A look at the L3 initial state. *Second Language Research*, 26(2), 189–218.
- Rothman, J. (2011). L3 syntactic transfer selectivity and typological determinacy: The typological primacy model. *Second Language Research*, 27, 107–127.
- Sakel, J. (2015). *Study Skills for Linguistics*. Routledge: Routledge Publication.
- Schepens, J., Van der Slik, F., & Van Hout, R. (2013b). The effect of linguistic distance across Indo-European mother tongues on learning Dutch as a second language. In L. Borin & A. Saxena (Eds.), *Approaches to measuring linguistic differences* (pp. 199–230). Berlin, Germany: De Gruyter.
- Ullman, M.T. 2001. The neural basis of lexicon and grammar in first and second language: The declarative/procedural model. *Bilingualism: Language and Cognition*, 4(2), 105–122.
- Williams, S., & Hammarberg, B. (1998). Language switches in L3 production: Implications for a polyglot speaking model. *Applied Linguistics*, 19, 295–333.