The Effect of L2 Onset on L2 and L3 learning: The Case of Native Speakers of Burkinabe languages

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Abstract

L1 Burkinabe speakers generally become nativelevel speakers of French by adulthood, as French is the official second language of their country and is used in their daily life, but learn English as a foreign language is later in their lives. However, as their L2 and L3 contain grammatical markings that are sometimes more similar to each other and sometimes more similar to the L1, such as with progressive/perfective constructions, it is unclear how this multi-lingual environment will influence the acquisition of such constructions. In the present paper, we examine a number of factors thought to influence L1 Burkinabe learners' ability to acquire progressive constructions in L2 French and L3 English to see if onset age (as proposed by the critical period hypothesis) or the number of years spent learning (often offered as an alternative explanation) influences acquisition, as well as if the acquisition of L2 French influences that of L3 English (as per L3 acquisition research). Multi-variate regression analyses showed that the number of years studying French was the best predictor of French progressive marking ability, but that onset age of L2 French was the best predictor of L3 English progressive marking ability, having a strong negative effect due to negative transfer from L2 French.

1 Introduction

The critical period hypothesis (CPH) has long been a point of controversy for second language acquisition (SLA) studies (Ellis, 1997; Johnson and Newport, 1989; Li and Shirai, 2000; etc.). According to many empirical studies that support the CPH, the onset age at which one begins to

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learn a language is the most influential factor for L2 learners to be able to acquire more difficult syntactic and phonetic features of an L2 that vary greatly from those of their L1 (Johnson and Newport, 1989; Schouten, 2009; etc.). However, other studies contest that the evidence for the CPH is not as exact as thought and suggest that, for example, the number of years that one studies an L2 is more influential on final acquisition (Strid, 2017; Birdsong and Molis, 2001; Marinova-Todd, 2003; etc.).

However, there is one further complication for language acquisition that many ofthe aforementioned studies do not take consideration - how the CPH or number of years of study affect language acquisition in a multilingual environment. Many researchers attest that language similarity, namely the similarity between an L1 or L2 and a target L3 can influence the acquisition of the target language (Cenoz, 2001; Leung, 2009; Li and Shirai 2000). For example, Leung (2009) and Cenoz (2001) found in their studies that positive transfer from the learners' L2 was the main source of influence on L3 learning. Studies such as Bayona (2009) and Chin (2009) have also made similar claims about transfer from an L2 to L3 when they are similar to each other, but different from the L1. However, it is not yet clear if factors such as onset age or number of years of study positively affect transfer from an L2 to an L3 in the case of learners acquiring multiple languages at once.

The present study attempts to provide a look at how much onset age and number of years of study can influence the acquisition of an L3 grammar construction that shows some degree of similarity to both the L2 and the L1. Specifically, it looks at

the acquisition of progressive constructions in the L2 French and L3 English of L1 Burkinabe language speakers. Though the perfective aspect is marked similarly in French and English, the progressive is marked more similarly in English and Burkinabe languages than in French and Burkinabe languages. In Burkina Faso, around 60 different Burkinabe languages are spoken as a first language, but French is the official national language of the country, and it is spoken in daily life, often as a lingua franca. French is also used in administration and content instruction at schools. As such, students in Burkina Faso start learning or speaking French as a second language from as early as 3 years old, and are generally considered to acquire native-speaker-like French proficiency by adulthood, despite the fact that some morphosyntactic idiosyncrasies remain in such speakers. However, as English is generally considered an important international language, children in Burkina Faso must also learn English as a foreign language (only used in the classroom) from junior high school, which can begin from various ages. Because of this complex and multi-lingual atmosphere, it provides an interesting opportunity to see if onset age or number of years spent studying will affect the acquisition of a grammatical construction shared by the L3 and L1, but not by the L2 and L3, even though the L2 and L3 are generally more similar than the L1. This study should help to shed light on the following research questions: does onset age or number of years spent studying an L2 or L3 influence (i) the ability of L1 Burkinabe learners to acquire L2 French progressive, and (ii) the ability of the same learners to acquire L3 English progressive?

2 Previous Studies

2.1 Factors Affecting Second and Third Language Acquisition.

The CPH is a controversial theory in SLA, with many researchers claiming that earlier exposure to an L2 (i.e. earlier onset age) helps to develop learners' intuition about its grammatical rules, syntax, phonology, and more (Schouten, 2009; Newport et al., 2001; Johnson and Newport, 1989; etc.). However, many researchers question it because there is a lack of consensus about the biological underpinnings of the theory, and much

of the supporting research is contradicted by other studies or can be explained by a number of other factors (see Strid, 2017 for an in depth review). For example, though Johnson and Newport (1989) showed that subjects who were exposed to an L2 earlier in life gained higher levels of acquisition, Strid (2017) noted that the number of years spent studying the L2 in their study was also correlated with higher levels of acquisition (i.e. the participants who began learning the language earlier had also been studying it longer), and thus it is not clear which has a greater influence on acquisition. Furthermore, data from studies such as White and Genesee (1996) and Birdsong and Molis (2001) contradict Johnson and Newport (1989) by showing that many subjects who were exposed to L2 late in their late could acquire extremely high levels of proficiency that are generally thought to be impossible according to the CPH. In addition, Marinova-Todd (2003) showed that older learners were faster and more precise in their L2 acquisition of morpho-syntax than younger learners, suggesting that "an L2-dominated environment is a better predictor of ultimate attainment" (p.67-68) than the age of exposure, and that the length of exposure and the quality of the L2 input determine the rate of performance rather than learners' age of exposure to the language.

While it seems that many factors can influence second language acquisition, when it comes to third language acquisition, the role of an L2 in L3 learning arises as another confounding factor. As pointed out by Bayona (2009), other previously acquired languages (i.e. an L2) are more important in the learning of an L3 than any other factor when there is similarity between the L2 and L3. Bayona (2009) also notes that the factors that most facilitate L3 learning are: typological similarity to previously acquired languages (L1 or L2), proficiency in the L2, and recency (how recently the L2 has been activated). It has also been argued, however, that L2 knowledge is not necessarily the main influence in an L3, as noted by Chin (2009) and Jin (2009). As they both pointed out, in the case that the L1 of a learner is more typologically similar to the L3 than the L2, more transfer seems to occur from the L1 than the L2. However, these studies do all point to the fact that transfer from a typologically similar language (whether L1 or L2) is one of the most influential factors for learning an L3.

Thus, there are multiple factors that could be thought to influence the acquisition of L2 French and L3 English by L1 Burkinabe language learners. However, based on the previous research introduced here, some factors that could potentially have a strong influence include (i) onset age of language study, (ii) the number of years of language study, and (iii) transfer between L2 French and L3 English. Though the degree to which the environment is L2 dominated was found to be important by Marinova-Todd (2003), residents of Burkina Faso would have the same L2 dominated, L3 deficient environment, and thus, while a potential factor influencing their acquisition, it is not one where we could hope to find a difference in this study.

2.2 Progressive Constructions in French, English, and Burkinabe Languages

Though Burkinabe Languages are different from each other in a number of ways (such as vocabulary and pronunciation), their grammatical structures are all very similar with regards to how they mark aspect. According to Delplanque (2009), these languages (Voltaic languages) exhibit several common characteristics, one of which being a binary aspectual system (i.e. with perfective and imperfective aspects).

Progressive constructions were examined in this study because the progressive/perfective aspectual system shares a certain degree of similarity between French, English, and Burkinabe languages. Specifically, the perfective aspect is marked in the same way in French and English, but differently in Burkinabe languages, but the progressive aspect is more similar between Burkinabe languages and English for present progressive marking.

The perfective marking system of French and English seem to be nearly identical (Ayoun and Salaberry, 2008). As shown in (1a), the present perfect tense in English expresses the perfective aspect. Similarly, the *passé composé* (present perfect) tense in (1b) is used to express the perfective aspect in French. Both languages thus share the same syntactic structure for this expression: *have* + *past particle*. However, it should be noted that the *passé composé* can also be used to express the simple past tense in French, which Ayoun and Salaberry (2008) claim can cause an overuse of the present perfect when L1 French speakers learn English.

(1) a. John has eaten the rice. b. Jean a mangé le riz. John has eaten the rice

On the other hand, perfective marking in Burkinabe languages differs greatly from that of both French and English. Though both French and English exhibit overt morphological marking of perfective aspect, as shown in (1), Burkinabe languages do not morphologically mark this aspect, illustrated by (2a-c), examples from languages Moore, representative Burkinabe Dioula, and Dagara, respectively. In these languages (and most other Voltaic Languages), verbs are used in their infinitive forms to express the perfective aspect (Some, 2013), and there is thus no grammatical marking to identify it.

- (2) a. a Jean ri muin. Part John eat.PERF rice.
 - b. Jean ye malo dvmv. John Part rice eat.PERF
 - c. Jean di na mvin. John eat.PERF Part rice 'John has eaten rice.'

The verbs in (2a-c) are in their infinitive forms, and are considered to semantically express the present tense when not in a sentence (i.e. with no context). However, they can also express perfective actions when used in sentences such as (2a-c).

Another typological difference observed among the three languages is how the present tense is expressed. While French and English can express the present tense with verbs alone, Burkinabe languages encode it by adding temporal adverbs (e.g. every day, always, etc.) to imperfective (i.e. progressive) sentences, as in (3)

(3) Jean di-re na muin bi-bir ha. John eat.IMPERF Part rice day all 'John eats rice every day.'

Were the temporal adverb *bi-bir ha* omitted in (3), it would cause the sentence to be interpreted as progressive.

As for the progressive aspect, both French and English generally mark it lexically (Li and Shirai,

2000; Ayoun and Salaberry, 2008), although this can be done in a number of ways. For example, both languages can mark the progressive aspect through words such as *être en train de* in French or *be in the middle of* in English, as illustrated by (4), and its English translation equivalent.

(4) J'étais en train de lire seul(e).

I was in middle of read alone
'I was in the middle of reading alone.'

(Ayoun and Salaberry, 2008:560)

French and English can both also mark the progressive aspect in the past tense by grammatical means, namely by adding *were/was* + -*ing* in English, or -*aient*, -*ait* in French. However, it should be noted here that the simple present tense can also be used to express the present progressive aspect in French, as in (5a-b).

(5) a. Jean joue au ballon.
John play.Prs football

'John is playing football'
b. Les enfants jouent dans la cour.
The children play.Prs in the compound.

'The children are playing in the compound.'

As shown in (5), the present tense can express the present progressive aspect in French. In contrast, the present tense cannot be used to encode the present progressive aspect in English, as illustrated by (6a). Instead, the present progressive aspect is usually overtly marked in English as in (6b).

(6) a.*The children play in the compound.b. The children are playing in the compound.

Though French can also encode the progressive aspect through overt marking (i.e. by morphological markers as in English), such a strategy is only valid with the past progressive aspect (Ayoun and Salaberry, 2008).

(7) Les enfants jouaient dans la cour. The children play.prog.Pst in the compound. 'The children were playing in the compound.'

In (7) the morpheme *-aient* in *jouaient* expresses a progressive aspect. This morpheme is also used to encode the past tense in French, and so (7) is

considered as expressing the past progressive aspect.

While the progressive aspect is sometimes marked differently in English and French (i.e. the present progressive aspect), Burkinabe languages exhibit similar morphological marking to English for the present progressive aspect (Some, 2013; Nurse et al., 2016), as shown in (8).

(8) a. Pierre gnou-da koom.

Peter drink-Prog water.
b. Jean ye ji mi-na
John be water drink-Prog.
c. Jean nv-ro na kvon.
John drink-Prog Part water
'John was drinking water.'

In (8a-c), from Moore, Dioula, and Dagara, respectively, the morphemes attached to the verbs (-da, -na, and -ro) are considered to be progressive markers (Dumestre, 2003; Some, 2013). For this reason, present progressive aspectual marking is more similar between Burkinabe languages and English than it is between English and French.

Thus, the progressive/perfective aspect systems in the three languages considered in this study all exhibit some degrees of difference. Though English and French have similar perfective markings and past progressive markings, present progressive is marked differently. In contrast, Burkinabe languages have an unmarked perfective system that is completely different from French or English, but do have present progressive morphological markings that could be considered closer to English than French. The Aspect Hypothesis (Shirai and Kurono, 1998) claims that the acquisition of the progressive aspect usually activity verbs. followed with accomplishment and achievement verbs, with state verbs being last. Since this study looks at younger learners and is focused on how a grammatical construct that differs between the L1, L2 and L3 and the degree to which L3 acquisition is influenced by the L2, it is limited to only activity verbs so as to not add further confounding factors to the data set.

2.3 Hypotheses

According to the previous studies concerning L2 acquisition, age of onset and number of years spent

studying a language are among the largest factors the acquisition of syntactical influencing components differing from the L1. Thus, it follows that for L1 Burkinabe speakers, age of onset and number of years spent studying both L2 French and L3 English could have respective effects on both languages. However, according to the studies concerning L3 acquisition, transfer from either the L1 or L2 is increased based on similarity to the L3, proficiency in the L2 and if the L2 was recently used. In the case of L1 Burkinabe speakers, L2 French is readily used and proficiency is high, so there is a high possibility of transfer from either the L1 or the L2 to L3 English. Though their L1 is more similar to the L3 in terms of progressive marking, the overall perfective/progressive system of L3 English is perhaps more similar to L2 French, and thus, L1 Burkinabe language learners may be able to transfer the most similar elements of this system from both their L1 and L2. For these reasons, it is possible that L1 Burkinabe speakers will be aided in their L3 English acquisition by their L2 French abilities. Thus, we summatively pose the following hypotheses:

- 1. Age of onset of L2 French and L3 English will be a significant factor influencing how accurately L1 Burkinabe learners use progressive marking in these languages, respectively.
- Length of time learning L2 French and L3
 English will be a significant factor influencing how accurately L1 Burkinabe learners use progressive marking in these languages, respectively.
- Length of time studying and/or age of onset of L2 French will influence how accurately L1 Burkinabe learners use progressive marking in L3 English

3 Methods

To test which factors would be most influential on L2 French and L3 English progressive performance for L1 Burkinabe speakers, a multivariate regression analysis was performed on progressive construction test scores of university students, with onset age, age and number of years studying set as factors. 72 university students between the ages of 20 and 29 years (M=24.86), who were living in Ouagadougou (the capital of Burkina Faso) and studying at the University of

Ouagadougou participated in our study. All participants had learned French as a second language L2 before learning English as a foreign language L3 later in life, and had a Burkinabe Language as their L1 (Moore, Dioula, Dagara, Bissa, Gourounsi, Gourmantchema, Fulfulde, Bwamou, Bobo, Dogon, Dafi, Lele, Yaana, Nakanna, or Nuni). Their onset age of French was between 3 and 11 years of age (M= 6.45) and their onset age of English was between 10 and 16 years of age (M= 13). None of them had lived in a foreign country or spent more than a week abroad.

Participants took a short survey, a test of the English progressive, and a test of the French progressive, separately. The survey was used to determine participants' linguistic background, age, gender, their onset age for learning the languages that they spoke, and the number of years they had spent studying French and English (in total, 20 questions were on the survey). As residents of Burkina Faso learn French as a second language, rather than a foreign language and use it as the language of instruction in school, they do not take general French proficiency tests as foreign language learners do and so data on their general French proficiency could not be obtained.

Participants' ability to accurately produce English progressive constructions was assessed with a picture description task, adopted from the standardized English test, Eiken¹. Participants were shown a picture in which five people were performing an action, and participants were asked to describe each action in one sentence (the verbs related to each were all activity verbs). Participants' ability to accurately produce French progressive constructions was assessed in the same manner, but with French sentences, using a different question from the same test. Both tests were scored based on how many of the descriptions were made with appropriate linguistic marking of the progressive aspect (e.g. be/was + ing in English, present tense or -ait in French), with a possible maximum score of 5 and a minimum possible score of 0. No points were subtracted for other grammatical errors, vocabulary errors, or other such errors that were not relevant to

¹ Eiken is a standardized English test created by the Eiken Foundation of Japan.

the current study². Data from participants with non-answers was removed.

SPSS 25 was used to perform two multi-variate regression analyses, with French progressive test score as the dependent variable, and one with English progressive test score as the dependent variable to see which factors would influence the participants' scores on both the test of the French progressive and the test of the English progressive. The factors included were: onset age of French, onset age of English, number of years studying French, number of years studying English, age, and score on the L2/L3 progressive test.

4 Results

The participants scored higher on the French progressive test (M=3.92, S=1.29) than the English progressive test (M=2.5, S=1.98). The descriptive statistics for participants, including their scores are summarized in Table 1.

Age	Onset FR	Onset EN	Years FR	Years EN	Score FR	Score EN
24.7	6.5	13	17	10.4	3.9	2.5
(2)	(1.5)	(1.3)	(3.1)	(2.4)	(1.3)	(2)

Table 1: Average and standard deviations of participant data, *M* (*SD*)

The model for predicting the French progressive test scores was able to account for 20% of the variance in French progressive scores, F [6, 71] = 2.78, p=0.018, $R^2=0.204$. The analysis showed, however, that the only significant predictor of French progressive scores was the number of years studying French. As expected, a positive correlation found. and progressive construction scores increased with the number of years spent studying French. Table 2 shows the descriptive statistics and regression coefficients for this model.

Model	В	Std	β	T	p
		Error	,		
Age	117	.091	182	-1.29	.201
Years FR	.266	.079	.639	3.38	.001
Onset FR	.263	.138	.316	1.90	.062

² Here we do not consider tense (i.e. whether participant can produce present progressive or past progressive) because the acquisition of tense is a separate issue from aspect and must be investigated separately.

Year EN	050	.081	093	62	.540
Onset EN	212	.123	209	-1.73	.088
Score EN	.006	.081	.009	.070	.944
(constant)	3.85	2.11		1.81	.073

Table 2: French progressive test scores related to potentially influential factors (*N*=72)

The model for predicting the English progressive test scores was able to account for 20% of the variance in English progressive scores, F [6, 71] = 2.81, p=0.017, R²=0.206. The analysis showed, however, that the only significant predictor of English progressive scores was the onset age of French. However, surprisingly, a positive correlation was found here, indicating that the older participants were when they began learning French, the higher their progressive construction test scores were. Table 3 shows the descriptive statistics and regression coefficients for this model.

Model	В	Std	β	t	p
		Error			
Age	218	.139	221	-1.57	.121
Years FR	.174	.129	.272	1.35	.183
Onset FR	.629	.204	.492	3.09	.003
Year EN	.161	.123	.196	1.31	.194
Onset EN	139	.192	089	73	.470
Score FR	.013	.191	.009	.07	.944
(constant)	.960	3.326		.29	.774

Table 3: English progressive test scores related to potentially influential factors (N=72)

5 Discussion

The results of the French progressive test score regression analysis show that the number of years spent studying French had the largest, and only significant, impact on French progressive acquisition. This result disagrees with the CPH, and instead shows congruency with works such as Strid (2017), Birdsong and Molis (2001), and Marinova-Todd (2003). This result suggests that in a multi-lingual environment in which learners acquire an L2 as a second language, the acquisition of highly differential grammatical markings, such as progressive aspect marking in this case, are influenced more by how long a learner studies the language rather than by the onset age of exposure to the L2.

The results of the English progressive test score regression analysis shows that the only significant predictor of English progressive construction test scores was the onset age of L2 French, which had a negative effect on English progressive acquisition (i.e. the earlier participants began learning French, the worse their English progressive scores). This result suggests that negative transfer occurred from L2 French to L3 English, which is supported by other studies and our own qualitative data, and that the onset age of L2 French was the most predictive factor for this transfer. While the first result is not necessarily surprising, the second result is somewhat contradictory, because though it agrees with L3 acquisition studies that suggest that the L2 will have the greatest influence on L3 acquisition, it suggests that the onset age of L2 French increased the chances of transfer, and not the number of years studying the L2. This second result could possibly be interpreted to support the CPH, which is contradictory to the results of the French progressive test score regression analysis, or it could indicate that onset age of the L2 and years spent studying the L2 affect L3 acquisition and L2 to L3 transfer differently.

The idea that transfer occurred from L2 French to L3 English for participants is supported by the types of errors and idiosyncrasies they made in their responses. For example, it is clear that some participants were relying on French knowledge during the English progressive test, as they used French words in their English responses, as in (9a-c).

- (9) a. The man *peints* the wall.
 - b. She *ballades* the dog.
 - c. She doing *promenade* with the dog.

Furthermore, Ayoun and Salaberry (2008) point out that L1 French learners of English tend to overuse the English simple past in place of the progressive due to negative transfer from their L1. This same negative transfer can also be seen in the participants of this study, particularly in the 15 participants with the earliest onset age of French, who often used the simple present in place of the progressive on their English progressive test, exemplified in their responses in (10a-c).

- (10) a. The painter paints the wall.
 - b. He plants the flowers.
 - c. The girl goes with her dog.

The use of this present tense can by no means be linked to any influence of the learners' L1 since the present tense in the learners' L1 is expressed with adverbs, and their L1 has progressive marking more similar to that of English. Furthermore, when we examined the 15 participants with the latest onset age of French, we found that none of them made the mistake of using the simple present tense, as in (10a-c). Instead, these participants made mistakes in forgetting to add the 'be' verb to the English progressive form, as in the actual responses taken from the data, repeated as (11a-c) below. This is much more likely due to transfer from the L1, as Burkinabe languages do exhibit progressive marking, but do so with one add-on to the verb, and do not require the addition of an auxiliary verb, as in English.

- (11) a. The man painting the wall.
 - b. The girl walking with her dog.
 - c. The child riding his bicycle.

The result that some learners transferred more from their L1 and more from their L2 is congruent with L3 acquisition studies such as Chin (2009) and Jin (2009) that suggest that L3 learners will transfer from either their L2 or L1, depending on proficiency in the language, recency, and typological similarity. As all participants are considered to be near-native French speakers that actively use French as an L2, it stands that their L2 had high recency and proficiency. Furthermore, since all learners had the same L2 and L3, it stands that there was the same amount of typological similarity between the L1, L2 and L3 of all participants in this study. This, however, leaves an important question: why did early onset learners of French exhibit more negative L2 transfer to their L3 English than late onset learners?

Cenoz (2001) argues that learners' age plays a crucial role in the success of positively transferring the aspect system of one language to another (L2, L3, etc.), specifically suggesting that older learners of an L2 tend to rely on grammar learning. Following this, learners who were exposed to French later in their lives may be more aware of which language (i.e. their L1 or L2) has an aspectual system that is more transferrable to the L3 (English). On the other hand, earlier learners of French may have over-relied on transfer from French, causing more errors because of the

differences in French and English progressive aspect marking. This result is also in line with Marinova-Todd (2003) who claims that older learners are usually more accurate in acquiring morpho-syntactic features than younger learners.

It could be argued that more negative transfer from the L2 to the L3 by early onset L2 learners supports the CPH. The idea would be that early learners would have higher proficiency in grammatical constructs, such as the progressive marking system, fossilize them, and then exhibit negative transfer. However, our French progressive score data does not support the idea that onset age is the most influential factor for acquiring French progressive marking, so this notion would be highly speculative at best.

The other possibility is that onset age of the L2 and the years spent studying the L2 affect transfer from an L2 to an L3 differently. Even if the CPH were used to explain negative L2 French transfer to L3 English, it would not explain why these learners would not instead transfer from their L1 Burkinabe language, which is typologically more similar to English in progressive marking. It could be that since English and French are both European languages and exhibit many more similarities in vocabulary, pronunciation, and other syntactic structures than they do with Burkinabe languages (Some, 2013, Nurse et. al, 2016; etc.), learners mistakenly felt that L2 French was closer to L3 English in progressive marking and thus used their L2 French knowledge to complete the English progressive test. This is especially understandable when we consider that the perfective aspect (as well as the past progressive) is marked similarly in French and English, but very differently in Burkinabe languages. This result is somewhat incongruent with other L3 acquisition studies such as Chin (2009) and Jin (2009), because it suggests that transfer will not always occur from the language that is most similar for some specific grammatical feature, but will perhaps occur from the language that is most similar overall.

6 Conclusion

The results of this study only partially agree with our hypotheses, but do answer our research questions. They show that the number of years studying French has a positive effect on the acquisition of L2 French progressive forms for L1

Burkinabe speakers, and that the onset age of French has a negative effect on the acquisition of L3 English progressive constructions. The results also suggest that L2 French to L3 transfer is indeed an influential factor in their L3 English acquisition, but that this often arises as negative transfer in the case of progressive aspect marking. Our findings also suggest that transfer to the L3 is likely to occur from the L2 when the L2 and L3 are more similar overall, even if the particular morphosyntactic form in question is more similar to the L1 than the L2, which is only somewhat congruent with previous studies. However, the fact that neither onset age nor years of studying the L3 were good predictors of L3 progressive marking indicates that transfer is the strongest influencer of L3 acquisition, which is congruent with the current body of L3 acquisition research. Finally, our results are inconclusive as to whether onset age of an L2 or years spent studying the L2 had a stronger overall impact on learners (i.e. on both their L2 and L3 acquisition) because though years studying French had a larger impact on participants' L2 French progressive marking acquisition, the onset age of French had the only impact on participants' L3 English progressive marking acquisition. However, it should be noted here that our study was only able to observe one grammatical construct and that the R-squared values found were somewhat small, which warrants further study. Future studies could be done with typologically different languages and syntactic markings to determine if onset age of an L2 will always have such an effect on the L3.

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