Acquiring Argument Structure in French L2: the Case of Ditransitive Structures

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Abstract
Our study focuses on the acquisition of French dative clitics in ditransitive structures by adult English-speaking learners. More specifically, we are interested in the impact of cross-linguistic influence on the production of these clitics. While in English, two structures coexist (NP PP and NP NP), only the NP PP structure is acceptable in French. As such, dative clitics in ditransitive structures in French L2 offer an interesting point from which to measure the influence of the L1 on the L2.

The dative shift is governed by morphophonological and semantic restrictions, amongst others. Besides verbs that accept both structures, there are two other groups that only accept one of the alternation's forms: a group of verbs that only allows the double object structure and another group composed of verbs that only accept the NP PP structure.

We tested two groups of subjects with a test comprised of four exercises in which the three types of verbs appeared. One group was composed of English L1 speakers, while the members of the second group did not have English as their L1. Our results show that, for the English-speaking subjects, the performance varies significantly depending on the type of verb, which is not the case for the other group. The cliticisation of the arguments of the verbs that only have the double object structure in English are the most difficult ones for native English speakers. This influence of the L1 argument structure can be observed in intermediate level learners, as well as advanced ones. However, despite L1 influence, advanced learners still outperform intermediate ones overall due to their mastery of the clitic formation.

1. Introduction
This study seeks to measure and highlight the importance of the impact of the crosslinguistic influence (CLI) on the production of French clitics by English learners. Our study focuses specifically on the use of French dative clitics in ditransitive structures found in sentences like Marie donne le livre à Pierre → Marie lui donne le livre (Mary gave Peter the book / the book to Peter → Mary gave him the book / the book to him). This provides an interesting context in which to measure the influence of the L1, since in English, along with the Noun Phrase (NP) Preposition Phrase (PP) structure, which is also found in French, there is also a double object structure NP NP. This alternation, the dative shift, is not present in French.

Like White [12] pointed out, the lexical entries of the L1 correspond to a superset of the L2. She showed in [11] and [12] that the partial agreement between the structures of English and French misled learners, the argument structure of the L1 is thus transferred in the grammar of the interlanguage.

CLI is a linguistic phenomenon that has preoccupied researchers in second language acquisition since the 1980s. Although it was first referred to as "transfer", this term has been largely abandoned because of its behaviorist connotations ([4] [7] [8]). According to [4], in order to observe CLI, three factors should be present: intragroup homogeneity, intergroup heterogeneity and crosslinguistic performance congruity (p. 41). Moreover, this phenomenon should be clearly distinguished from typical errors that accompany second language acquisition, such as overgeneralization and avoidance.

After briefly presenting some of the features of the dative shift in English, we will outline the methodology adopted in our research. The presentation and discussion of results follow.

2. English Dative shift
In most studies on the dative shift, the two structures NP NP and NP PP are generally regarded as expressing different meanings ([1], [5], [6], [9]). Thus, in [9] for example, the sentence Ann gave Beth the car has the meaning in (1), while Ann gave the car to Beth, the one in (2):

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1 We would like to sincerely thank Denis Foucambert and Leslie Redmond for their help with various phases of the project.
In the first case, the agent causes a state (Beth (NP1) owns the car (NP2)). In the second, the agent causes another event, the movement of an object toward a goal, a recipient. Thus, the possession of the car (NP2) is transferred from Ann (NP0) to Beth (NP1), via a possessional path. We will use the terms in [5] and [6] and refer to the first as DO structure (Double Object) and the second one as PO (Prepositional Object).

For most authors ([2], [5], [6] and [1], among others), the choice of one or the other structure can also establish the following distinction: in the DO structure, at the end of the event it is assumed that the recipient has the theme, which is not necessarily the case with the PO structure. Thus, whereas in (3) we can assume that the students have acquired knowledge of French, it is possible that they have learned nothing in (4):

(3) Beth taught the students French. (Example (34b) in [6])

(4) Beth taught French to the students. (Example (34a) in [6])

According to [10], the conditions for successful transfer are not related to the structure, but to the semantic properties of the verb. Thus, for these authors, the use of a teach type verb in the DO structure does not allow the inference that the transfer is necessarily successful, as shown by the acceptability of (5). However, the verb to give, whether used in a DO or PO structure, necessarily implies that the recipient possesses the theme at the end of the event, which explains the oddness of examples (6a) and (6b):

(5) I taught them English for an entire year, but they don’t seem to have learned a thing. (Example (40a) in [10]).

(6a) #My aunt gave/lent/loaned my brother some money for new skis, but he never got it. (Example (36a) in [10]).

(6b) My aunt gave/lent/loaned some money to my brother for new skis, but he never got it. (Example (37a) in [10]).

The verbs mentioned so far accept both PO and DO structures (PO/DO verbs) in English. However, the problem is more complex, since apart from these verbs, there are two other sets that accept only one or the other forms of the alternation: a set of verbs that accept only the double object structure (DO verbs), e.g., verbs of non-possession (to refuse, to cost, etc.), and another set consisting of verbs for which only the NP PP structure is grammatical (PO verbs) (to pull, to donate, to demonstrate, etc.). Semantic and morphophonological constraints, as well as constraints related to the information structure and the constituent weight, account for verbs belonging to one or other of the three sets (see eg. [5], [6], [9] and [3]).

In the next section, we will explain how we measured L1 influence on the production of dative clitics in French ditransitive structures.

3. Methodology

Our sample consists of two groups. In the first one, there are 109 students with English as their first language. In the second, 22 allophone students who were educated, at least at the primary and secondary levels, in a language other than French or English. All of these students were enrolled in French courses in the Department of French studies at Concordia University in the fall of 2012 (Beginner: 30 Anglophones and 8 Allophones; intermediate: 50 Anglophones and 10 Allophones; advanced: 29 Anglophones and 4 Allophones). Our subjects completed a written test, which included 39 sentences divided into 4 different tasks: a pronominalization exercise (11 sentences) in which subjects had to cliticize the dative argument of a sentence in French; a translation task (8 sentences) in which they had to translate the pronominalized recipient in English by a French clitic; and two preference tasks. In the first one of the latter (13 sentences), French grammatical and ungrammatical sentences were proposed (with the dative argument adequately pronominalized or not). The subjects were asked if they thought the sentence to be correct or incorrect, and to propose a correction if necessary. In the second preference task (7 sentences), two versions of a sentence in French were proposed: a grammatical one with NP and PP arguments, the other with two NPs (the equivalent of the English structure). Students were given 3 choices: to tick the grammatical sentence, to tick the option saying that none of them is correct or to tick the option that both are acceptable in French.

In each exercise, the three types of verbs (DO, PO and PO/DO) were represented, mostly possession, non-possession or communication verbs. PO verbs in the four tasks are subject to a morphophonological constraint; they are, by and large, derived from Latin (to donate, to demonstrate,
etc. and their French counterparts). In the class of DO only verbs, we included words such as to give (somebody a headache), to spare, to deny, to tell (somebody that...), etc. and their French counterparts. The category of PO/DO verbs includes verbs such as to offer, to give, to sell, to teach, etc. and their French counterparts.

In MS Excel, after distinguishing overall correct answers and wrong answers, all wrong answers were coded. Many of the participants, especially beginners, both Anglophone and Allophone, did not complete the test; in these cases, their non-responses were not coded as errors.

The descriptive and inferential statistical analyses were performed using SPSS (version 21) software from the Excel file already created. The statistical test used is one-way ANOVA. We also calculated the effect size η² using SPSS. The results of these analyzes are presented in the following section.

4. Results

Firstly, we will focus on the group of English-L1 students. Of the 2847 responses, 1614 (56.7%) of them are wrong and 1233 (43.3%) are the expected answers. Significant differences between groups were observed. Beginners had 6.2% correct answers, intermediates 38.2% and advanced 84.1% (F (2, 2844) = 634.153 p <.001 n² = 0.308). Post-hoc tests (Bonferroni correction) showed significant differences between beginners and intermediates (p <0.001), between the intermediates and advanced (p <0.001), and finally between beginners and advanced (p <0.001).

Next, we will examine the performance of our English-L1 subjects in relation to each of the three types of verbs: verbs that accept only the PO structure, those which only accept the DO structure, and finally those who accept the dative shift (PO/DO).

Verbs in English that always accept the PO structure, that is to say NP PP, show the highest percentage of success (49.9%). They are followed by PO/DO verbs, those which accept the dative shift (43.4%). Finally, DO verbs pose the most problems for our Anglophone learners with a success rate of 40.5%.

The one-way ANOVA test showed a statistically significant relationship between the type of verbs and the performance of our subjects (F (2, 2844) = 6.959 p <.002 n² = 0.005). Post-hoc tests (Bonferroni correction) showed significant differences between the DO and PO verbs (p <0.002) and between PO and PO/DO verbs (p <0.042), but not between the DO and PO/DO ones.

We will now verify whether this relationship between performance and verb type is present for each of our three groups of learners.

For beginner subjects, regardless of the verb type, the percentage of correct answers is so small that it is difficult to establish a link between their performance and the verb type. The performance of intermediate and advanced subjects is more interesting to observe. Concerning PO verbs, intermediate learners respond correctly in 46.4% of cases and advanced ones in 89.4%. Concerning DO verbs, intermediates have a success rate of 34.4%; whereas for advanced learners it is 82.5%. Finally, concerning PO/DO verbs, which accept both structures, intermediates respond correctly in 38.8% of cases and in 83.5% for the advanced group.

For intermediates, the distribution of correct and incorrect answers by verb type is significant (F (2, 1462) = 6.283 p <.003 n² = 0.009). In contrast, the very slight differences depending on the type of verb in the performance of advanced learners is not significant. Thus, the English structure of English NP NP seems, at first glance, to only have a significant impact on the performance of intermediate learners.

However, a closer examination of the DO verbs reveals that CLI is also observable in the results of our advanced learners. Two types of verbs compose this class. On the one hand, there are verbs that are DO in a particular context and can thus accept the dative shift, and appear in both PO/DO and DO groups. One example is the verb to give, which is essentially PO/DO (to give somebody something, to give something to somebody), but becomes DO in a statement like to give somebody a headache. On the other hand, there are verbs that can only be used in a DO structure, mainly verbs of deprivation of possession (to spare, to cost, to refuse, etc.). We can observe that our Anglophone subjects are more easily misled with DO only verbs. Indeed, the percentage of correct answers is only 36.4% for these verbs, while it is 47.6% for verbs that are DO in a particular context.

Taking into account the performance of each of our groups, especially intermediate and advanced, we find that the correlation between their performance and the two types of DO verbs is significant for intermediate learners (F (1, 679) = 18.354 p <.001 n² = 0.026), but also for advanced ones (F (1, 352) = 1.729 p <.001 n² = 0.034). Regarding DO only verbs, the percentage of correct responses for the intermediates is 28.6% and is 77.1% for advanced. Concerning verbs that are DO in a specific

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context, the results are as follows: intermediates provide correct answers in 44.7% of cases and the advanced group, in 91.6%.
Thus, the influence of the structure of English is present for intermediates, but also for advanced learners, especially for verbs that are used exclusively in the double object structure (NP NP).
Finally, we will compare the results obtained by Anglophone subjects to those of our Allophone ones. The latter generally outperform subjects who have English as their L1: overall 50.4% of responses are correct. Differences related to the verb type are not significant, regardless of the level. Allophones had 50.9% of correct answers with PO verbs, 46.5% with DO verbs, and 55.5% with the PO/DO ones (F (2, 604) = 1.982 p = 0.139).
When examining more closely the class of DO verbs, the differences are still not significant (44.8% correct answers for DO only verbs and 49.5% for other group of DO verbs (F (1, 282) = 0.596 p <0.442).

5. Conclusion
This study of the acquisition of French dative clitics in ditransitive structures by Anglophone learners reveals the importance of the crosslinguistic influence in the production of these learners not only at the intermediate level, but also at the advanced one. The DO structure, which exists only in the L1 of our subjects, misled much more than PO structure, which is also present in the target language. However, a better control of cliticization by advanced learners ensures that their overall performance is superior to that of intermediate or beginner ones. This shows that it is necessary to distinguish CLI from other observable phenomena in second language acquisition, such as the gradual mastery of cliticization. We plan to administer other tests that will allow us to better evaluate the influence of both cliticization and CLI in the productions of our learners.

References