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Awareness of L1/L2 differences: does it matter?

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Awareness of L1/L2 differences: does it matter?

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This study is an investigation of the extent to which francophone learners of English as a second language (ESL) are aware of the differences between French and English question formation and how such awareness relates to their L2 performance. Three tasks were administered to 58 grades 5 and 6 francophone ESL learners. In a grammaticality judgement task, learners were asked to judge the grammaticality of English Wh– and yes/no questions. In a scrambled questions task, participants were instructed to create questions with sets of words written on individual cards. Some of the participants were also interviewed. Students’ own grammaticality judgement and scrambled questions tasks were used as stimuli for the interviews. On the grammaticality judgement task, questions in which the subject was a pronoun were judged more accurately than questions in which the subject was a noun. The most frequent non-target question forms that learners produced on the scrambled questions task were those in which a word (e.g. auxiliary do) was ‘fronted’ (placed at the beginning of a declarative sentence). The interview indicated that most students had a poor understanding of differences between English and French questions. Correlation analyses showed a positive relationship between students’ awareness of L1–L2 differences and their ability to correctly judge and form questions in English.

Keywords: metalinguistic awareness; awareness; L1 influence

Introduction

The study reported in this paper is an investigation of the extent to which young French-speaking learners of English as a second language (ESL) are aware of the influence of their first language (L1) on their processing of a second language (L2). Most research that has examined learners’ awareness of their L1 on L2 processing has been carried out with adolescent and adult learners. This is partly based on the belief that young learners’ metalinguistic abilities do not permit them to reflect on how their L1 contributes to their L2 knowledge and performance. However, some research has indicated that children can and do reflect on the role that their L1 plays in their L2 development. This is evident in studies carried out with young children learning second languages in Europe (Bengtsson, 1980; Hawkins, 1984) and with children learning French in immersion programmes (e.g. Harley, 1998) and English in intensive ESL programs in Canada (White & Ranta, 2002). Researchers have also shown that young children develop metalinguistic awareness at an early age and are able to express it (Bialystok, 1988; Gaux & Gombert, 1999; Gleitman, Gleitman, & Shipley, 1972).

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Metalinguistic knowledge (defined as explicit and verbalisable knowledge about language) is sometimes seen as unnecessary or peripheral in second language acquisition. According to Krashen (1982, 1994), this knowledge has no effect on ‘acquisition’ – the primary mode for L2 development – which operates without the learner’s awareness. In fact, according to this view, explicit metalinguistic knowledge can only serve the secondary function of a monitor that can be activated when the learner is focused on using the language accurately and has enough knowledge of the L2 rules and both the time and the motivation to apply them. This view has become known as the ‘no interface’ position and has been challenged by researchers who argue in support of both strong and weak interface positions that emerged as a reaction to it. Proponents of the strong interface position contend that explicit metalinguistic knowledge can, through practice, be automatised to the point that learners no longer remember the explicit knowledge that started the process (DeKeyser, 2003). Those holding the weak interface position argue that explicit metalinguistic knowledge can facilitate the acquisition of implicit knowledge by focusing learners’ attention on linguistic features in the input (Ellis, 1994). Continuing differences among those holding the interface and no interface views suggest a need for continued research to examine the role of metalinguistic knowledge in the second language acquisition process.

In this study, we examined learners’ production and their judgements of the grammaticality of L2 sentences. We also investigated the extent to which they were aware of the reasons behind these aspects of their language performance. The language feature we investigated is the interrogative sentence, both yes/no and Wh– questions. In the sections that follow we discuss some of the theoretical and empirical work related to the role of the L1 in L2 learning and learners’ awareness of it. We then describe the differences between question formation in French and English and report on previous research carried out with francophone learners acquiring questions in English. Next, we describe the methodology used in the present study and present the results and conclusions.

Relationships between first and second languages
Research in second language acquisition has shown that there is a complex relationship between a speaker’s L1 (or other previously learned languages) and a subsequently learned language. On the one hand, it has long been understood that differences between the L1 and L2 can lead to difficulty that can manifest itself in errors (Odlin, 1989), gaps in the L2 grammar (L. White, 1991) and as avoidance of certain grammatical features (Schachter, 1974). Research has also shown, however, that a similarity between the L1 and L2 can also cause learning problems when learners assume that the similarity is greater than it actually is (Han & Selinker, 1999; J. White, 1998; Zobl, 1980, 1985). The influence of the L1 may be especially great in classrooms where learners share the same L1. Given that these students tend to have comparable representations of the L2 system, interactions between them do not often lead to the need for what Long (1996) and others have referred to as ‘negotiation for meaning’ in which learners discover errors or gaps in their interlanguage as they seek to make their meaning clear. Not only do they understand each other when they produce sentences using interlanguage patterns that are influenced by their shared L1, they may also reinforce each other’s interlanguage forms by providing input containing those forms.

In the literature on instructed SLA, there has been some recent interest in providing L1/L2 contrastive instruction to L2 learners who share a first language. Unlike earlier classroom studies in which contrastive analysis (CA) formed the basis of L2 teaching within traditional structure-based classrooms, contemporary versions of CA embed contrastive information within communicative practice. In one study, Kupferbergl and
Olshtain (1996) investigated two linguistic features known to be problematic for Hebrew learners of English (relative clauses and compound nouns). Learners who participated in communicative tasks within which L1/L2 contrastive information was provided outperformed learners in a control group on grammaticality judgement, recognition and production tasks. In a subsequent study investigating the pluperfect, Kupferbeg (1999) report similar benefits for L1/L2 contrastive information integrated in communicative tasks.2

Question formation, a language feature that has been the focus of substantial research in Canadian ESL classrooms, is an example of a structure containing a misleading similarity between L1 French and L2 English (see e.g. Spada & Lightbown, 1999; Zobl, 1980). This feature has also been studied in research with learners from other L1 backgrounds, and there is a well-documented developmental sequence for L2 learners’ acquisition of English interrogatives (Pienemann, Johnston, & Brindley, 1988). Learners – including French L1 learners – typically begin by forming questions without inversion, then gradually acquire the ability to use inversion, first in yes/no questions and then in Wh– questions. English questions are formed by inverting the subject and the auxiliary verb regardless of whether the subject is a noun or a pronoun (e.g. Can he play hockey? and Can the boy play hockey?).3

One difference between French and English appears to lead French L1 learners to impose constraints on English questions, even after they have begun to use inversion. In French, inversion can occur when the subject of the sentence is a pronoun as in Peut-il jouer au hockey? but not when the subject is a noun or noun phrase (*Peut le garçon jouer au hockey? *Peut Pierre jouer au hockey?). Even with pronoun subjects inversion is not always used because a question can also be formed by placing the question formula est-ce que (literally ‘is it that’) at the front of a declarative sentence to indicate that what follows is a question. The rest of the sentence remains unchanged from the declarative form. When the subject is a full noun, French does not ordinarily allow inversion and the use of the invariant form est-ce que is required as in Est-ce que le garçon peut jouer au hockey?

French and English differ in the extent to which the general rules described here are used in informal spoken language. In informal spoken French, questions typically retain declarative word order (i.e. subject-verb-object, SVO) using rising intonation to indicate the interrogative nature of the utterance. Furthermore, Quebec French has another invariant question marker – tu (not to be confused with the second person pronoun tu which has the same form) that comes after the finite verb, preserving the basic SVO order, e.g. Ils aiment-tu des bonbons? Finally, spoken French sometimes allows inversion in some Wh– questions with full nouns in subject position as in Où travaille ton père? and Où va le professeur?, although it is more common to hear Où il travaille, ton père? and Où il va, le professeur?4

Informal spoken English also permits questions with declarative word order. However, the use of these SVO questions is constrained by discourse conditions in which, for example, the speaker asking the question is expressing surprise or requesting confirmation of something previously mentioned, e.g. Your children like broccoli? While this is possible with yes/no questions, SVO order is not permissible with Wh– questions. Sentences such as *Why your children like broccoli? are ungrammatical except in reported speech in a sentence such as I asked why your children like broccoli.5

Questions with a declarative SVO order are heard in informal spoken French and English, and one may also hear such questions in a classroom context. However, questions without inversion are not found in written or more formal spoken French and English or in
school textbooks, nor would we expect it to be typical of teacher output in second language classrooms. Nevertheless, the shared properties — both real and perceived — of French and English interrogative systems may mislead francophone ESL learners into thinking that both languages form questions in exactly the same way. This may encourage them to assume that their L1 rules are sufficient for forming and judging English interrogatives, slowing down their progress in acquiring some aspects of that structure.

Previous research
In our previous research with French-speaking learners of English we have seen how difficult it is for francophone ESL learners to recognise and use correct English questions. In some of our instructional intervention studies, learners were provided with high-frequency exposure to English questions, without explicit or contrastive (L1/L2) information about how English questions are formed and how they compare with French questions (e.g. Spada & Lightbown, 1999). Other studies involved explicit instruction on English question patterns, as well as opportunities for practice (e.g. L. White, Spada, Lightbown, & Ranta, 1991). In another study, we sought to compare the effects of explicit instruction that focused on L2 patterns with instruction that included a contrastive component (Spada, Lightbown, & White, 2005). In speaking and writing samples and grammaticality judgements, students produced and accepted questions both with and without inversion. A common thread in all these studies was the consistency in the way learners produced or judged the grammaticality of questions. In conformity with their L1, they tended to reject inversion with noun subjects but accept it with pronoun subjects. More importantly, the students showed little evidence of awareness of the patterns their usage and their judgements conformed to. That is, when asked to provide an explanation for a grammaticality judgement, they were rarely willing or able to do so.

In a study that was designed specifically to investigate learners’ awareness of the systematic nature of their interlanguage patterns (Lightbown & Spada, 2000), students were asked to explain (in either English or in French) what was wrong with questions they had judged to be incorrect on a grammaticality judgement task. Altogether, the 150 student participants judged 570 of 1500 question items (each student judged 10 questions) to be incorrect. However, they provided a metalinguistic explanation for less than 10% ($n = 56$) of them. Of these, only 15 had anything to do with question formation.

Lightbown and Spada concluded that, ‘there is little evidence that the students were consciously aware of an interlanguage rule related to subject-auxiliary inversion in questions’ (2000, p. 209). It is also possible, however, that the students’ failure to offer explanations was due to the data collection tools used in the research. Although the study used verbal reporting, a task considered to be a reliable way to elicit explicit metalinguistic information in the second language acquisition literature (Bialystok & Ryan, 1985; Cromdal, 1999; Ellis, 1991), the modality of the reporting might have affected the outcomes. That is, requiring students to write down their explanations could have limited their willingness or their ability to communicate their thoughts. Different findings might have emerged had a different measure been used. In much of the research in which L2 learners of different age groups have provided metalinguistic explanations, including those related to L1/L2 differences, oral elicitation tasks have been used (e.g. Bengtsson, 1980; Han & Ellis, 1998; Hawkins, 1984; Hu, 2002; Seliger, 1979; Spada, Lightbown, & White, 2005). The fact that oral measures of learner awareness were absent in our previous research on question formation led us to design the current study in which we investigated the following research questions:
(1) What evidence is there of French L1 influence on students’ ability to judge and to form questions in L2 English?
(2) Are students aware of differences between the formation of English and French questions?
(3) What is the relationship between learners’ awareness of L1–L2 differences and their success in judging or constructing L2 English questions?

Methodology

Research context

The study was conducted in intensive ESL classes in French-language elementary schools in Montreal. In these schools, French-speaking students studied English for most of every school day for five months of one school year. The remaining five months were devoted to the regular curriculum subjects (e.g. maths, science) that were taught in French. The research reported here was conducted during the first half of the school year, while students were participating in the intensive English component of their academic year. Prior to their entry into the intensive classes, students’ education had been entirely in French except for a total of 60–120 hours of ESL classes in grade 4 and/or grade 5. The pedagogical approach to teaching ESL in these classes was one in which communication is emphasised and there is little attention to language form and accuracy via either instruction or corrective feedback (see Lightbown & Spada, 1990).

Participants

Fifty-eight students who came from three different classes – one grade 6 and two grade 5 – in two different primary schools participated in the study. Twenty participants were in grade 6 (about 11 years old) and 38 were in grade 5 (about 10 years old). French was the only language spoken at home by nearly all the students.

Measures

Three tasks were used to measure students’ knowledge of English questions. A paper and pencil grammaticality judgement task was administered to all students, working individually at their own desks in their classrooms. A scrambled questions task was carried out by all students working in pairs. Finally, oral interviews were conducted with half of the students in an attempt to further explore their awareness of the patterns in their interlanguage questions and of how English questions are similar to or different from French questions.

Grammaticality judgement

The grammaticality judgement task is similar to one used in our previous research (e.g. Lightbown & Spada, 2000). The task comprised 26 question items that were presented in pairs; 25 items contained grammatical and ungrammatical versions of the same question and one item included two grammatical questions. Students were asked to choose one of five options regarding the grammaticality (‘correctness’) of the questions in each item. Appendix 1 provides a complete list of the items and the instructions given to students. An example of an item in the grammaticality judgement task is presented below.
(A) Why fish can live in water?  (B) Why can fish live in water?

(1) Only A is correct.
(2) Only B is correct.
(3) A and B are correct.
(4) A and B are incorrect.
(5) I don’t know.

Thirteen items were Wh– questions and 13 were yes/no questions. As explained above, inversion in French may be ungrammatical (if the subject is a noun) or optional (if the subject is a pronoun). In order to investigate the effects of this pattern on learners’ ability to judge English questions, each question category included a comparable number of items with a full noun or a pronoun in subject position. Care was taken not to include question forms that were likely to have been learned as formulaic chunks, e.g. ‘Can I . . . ’ or ‘Do you . . . ’. To further limit the effect of highly familiar questions, all items used third-person subjects, which are far less frequent than first- and second-person questions that were typical of the classroom discourse.

Scrambled questions
The scrambled questions task was done in pairs. Each pair of students was given eight envelopes containing words on individual cards (see Appendix 2). Four sets of cards contained words that could be used to form yes/no questions and four included Wh– words. The words were written in capital letters to avoid giving clues about word order. Each envelope contained extra auxiliary verbs in order to see if students would produce questions with more than one auxiliary (e.g. Do the children can . . . ). However, students were told that they did not need to use all the words in the envelope to form a question. They were asked to perform the following: (1) form as many questions as they could with the words in each envelope; (2) discuss and explain their answers to each other while working and (3) write down the questions they formed. Each student wrote the questions on a separate sheet. Students’ conversation was tape-recorded and transcribed. Again, all items used third-person subjects.

Interviews
Twenty-nine of the participants were interviewed individually. The interview comprised four different parts. In the first part, the interviewer asked the students to give a definition or French translation of isolated words presented one at a time. Eight of these words were related to question formation, e.g. what, do and does. The remaining four served as distracters (e.g. pronouns he and she). In the second part, the interviewer selected a few items from each student’s own grammaticality judgement task and asked for an explanation of his/her judgements. In the third part, students were asked if there were any differences between French and English with respect to question formation. If they answered that there were differences, they were asked to explain those differences. Finally, the interviewer chose some of the questions each student had written on the scrambled questions task and asked him/her to translate them into French. The interview was audio-recorded and transcribed. In an attempt to get as many details as possible about students’ interlanguage question system and their awareness of it in relation to their L1, participants were encouraged to respond to the bilingual interviewer in English but were also told to switch to French whenever they needed to. This was done to control for the possible effects of skill in speaking English or timidity about expressing themselves in English on students’ ability to verbalise their thoughts.
Chronology

After about 5 weeks in the intensive ESL program, all 58 students did the grammaticality judgement task and the scrambled questions task. One week later, 29 participants were randomly selected to be interviewed. Three to four weeks later the grade 6 students and one grade 5 class did the grammaticality judgement task a second time. The other grade 5 class was unavailable for the second administration of this task. We did not ask teachers to provide instruction on question forms during the course of this study. Instead, they were expected to continue with their regular program between the two administrations of the grammaticality judgement task. The overall approach remained one in which the focus was on interaction and the exchange of meaning rather than on language form and accuracy.

Results

Grammaticality judgement

An initial analysis of the responses on the grammaticality judgement task confirmed that students used all response options. This suggests that their choices reflected interlanguage patterns rather than a response bias and thus served to validate the use of a grammaticality judgement tool with these young learners. The results from one question item are shown below in terms of the percentage of students who chose each response. This distribution is typical of students’ responses. That is, students tended to prefer ‘only A’ or ‘only B’, but also used the ‘both’, ‘neither and ‘I don’t know’ options.

(A) Can the children go to the movies?  (B) The children can go to the movies?

- Only A is correct. 24%
- Only B is correct. 59%
- A and B are correct. 9%
- A and B are incorrect. 5%
- I don’t know. 3%

Data from the grammaticality judgement task were analysed in two ways. First, the combined percentage of students’ correct judgements of both yes/no and Wh– questions with noun and pronoun subjects was compared. Results from this analysis indicated that the participants were more accurate in judging the grammaticality of a question when the subject was a pronoun than when the subject was a noun (see Figure 1).

![Figure 1. Grammaticality judgement task. Accuracy in judging questions with pronoun subjects versus noun subjects.](image-url)
A t-test indicated a significant difference between students’ performance on questions with pronoun and noun subjects the first time the grammaticality judgement task was administered, \( t(56) = 2.78, p < .01 \), as well as the second time, \( t(42) = 3.77, p < .001 \). These findings are consistent with our previous research (Lightbown & Spada, 2000), providing evidence that the students rely on their L1 French pattern that usually allows inversion with pronouns but not with nouns. Further confirmation that the students were using French patterns was that, when they did accept inversion with noun subjects, it was not necessarily in grammatical sentences, and it was usually in cases where a word-for-word equivalent of the question, e.g. Where goes the teacher? (Où [il] va le professeur?), would be acceptable in spoken French.

In the second analysis, students’ judgements of questions with nouns and pronouns in subject position in yes/no versus Wh– questions were compared to determine if there was an order of difficulty for the two question types. The results indicated a similar order of difficulty at both Time 1 and Time 2. Students were found to be most accurate in their judgements of yes/no questions with pronoun subjects and least accurate in their judgements of Wh– questions with full nouns as subjects. Repeated measures analysis of variance (ANOVA) indicated a significant difference between students’ performance on the four-question subtypes (i.e. yes/no with pronoun, yes/no with noun, Wh– with pronoun and Wh– with noun) at both administrations of the grammaticality judgement task: \( F(3, 168) = 15.9, p < .001; F(3, 126) = 20.60, p < .001 \). The pattern of results is illustrated in Figure 2.

Post hoc pair-wise comparisons indicated that at Time 1 there were significant differences \( (p < .001) \) between the following: (1) yes/no questions with pronoun subjects and yes/no questions with noun subjects, (2) Wh– questions with pronoun subjects and Wh– questions with noun subjects and (3) yes/no questions with pronoun subjects and Wh– questions with noun subjects. The difference between yes/no questions with pronoun subjects and Wh– questions with pronoun subjects was not significant \( (p = .43) \). Similarly, the difference between Wh– questions with pronoun subjects and yes/no questions with noun subjects was not significant \( (p = .55) \), nor was the difference between yes/no and Wh– questions with noun subjects \( (p = .10) \). At Time 2 the following differences were significant: (1) yes/no questions with pronoun subjects versus Wh– questions with noun subjects \( (p < .001) \), (2) Wh– questions with pronoun subjects versus Wh– with noun subjects \( (p < .001) \) and yes/no questions with noun subjects versus Wh– questions with noun subjects \( (p < .001) \). These findings are illustrated in Tables 1 and 2.

Overall, the results indicate that students tended to reject inversion with noun subjects even after they had begun to accept it more with pronoun subjects. Students were most
Table 1. Differences in accuracy in judging different question types: pair-wise comparisons at Time 1.

<table>
<thead>
<tr>
<th></th>
<th>Yes/no pronoun</th>
<th>Yes/no noun</th>
<th>Wh– pronoun</th>
<th>Wh– noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/no pronoun</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes/no noun</td>
<td>$p &lt; .001$</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wh– pronoun</td>
<td>n.s.</td>
<td>n.s.</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Wh– noun</td>
<td>$p &lt; .001$</td>
<td>n.s.</td>
<td>$p &lt; .001$</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: n.s. means not significant.

Table 2. Differences in accuracy in judging different question types: pair-wise comparisons at Time 2.

<table>
<thead>
<tr>
<th></th>
<th>Yes/no pronoun</th>
<th>Yes/no noun</th>
<th>Wh– pronoun</th>
<th>Wh– noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/no pronoun</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes/no noun</td>
<td>n.s.</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wh– pronoun</td>
<td>n.s.</td>
<td>n.s.</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Wh– noun</td>
<td>$p &lt; .001$</td>
<td>$p &lt; .001$</td>
<td>$p &lt; .001$</td>
<td>–</td>
</tr>
</tbody>
</table>

likely to reject inversion of questions with noun subjects in Wh– questions. The exception to this was that students accepted inversion with nouns when the questions appeared to be possible word-for-word equivalents of spoken French questions (e.g. 75% of the students accepted ‘Where goes the teacher?’).

Scrambled questions

Each pair of students successfully completed the task, usually forming several questions from the words in each envelope. The word order in more than two thirds of the questions the students created reflected two main patterns: declarative word order or ‘fronting’ (placing a Wh– word or auxiliary [usually ‘do’ or ‘does’] at the beginning of a declarative sentence). These patterns correspond to Pienemann, Johnston, and Brindley’s (1988) stages 2 and 3 in question formation. Figure 3 illustrates the percentage of different word order patterns in the questions constructed by the students.

Figure 3. Response pattern in the scrambled questions task.
Figure 4. Percentage of students providing different meanings of ‘do’ and ‘does’ out of context.

**Interview**

Given the students’ tendency to place the auxiliaries ‘do’ and ‘does’ at the beginning of declarative sentences to form questions in the scrambled questions task, we chose to focus on these two auxiliaries while analysing the interview data. In the first part of the interview, where students were asked to provide the meaning or French translation of some words out of context, students often provided the lexical verb meaning of the auxiliaries ‘do’ and ‘does’ (i.e. faire). However, a substantial number treated ‘do’ and ‘does’ as question words, equivalents of the invariant French question form ‘est-ce que’. It is noteworthy that even though participants varied the use of ‘do’ and ‘does’ on the scrambled questions task, suggesting that they were not making a strict equivalence between them and the invariant est-ce que in French, this variation did not seem to be guided by the verb phrase properties, e.g. grammatical person and number or the presence of a modal verb. This rather random variation yielded incorrect questions such as Does the children want to play? and Does fish can live in water? Figure 4 illustrates the results.

When students were shown some of their own questions from the scrambled questions task and asked about the meaning of the fronted ‘do’ and ‘does’ forms, nearly 60% said that est-ce que, the invariant French question form, was the translation of both these auxiliaries (see Figure 5).

Students’ responses to the question ‘Are there differences between French and English question forms and, if so, what are those differences?’ were analysed in terms of three main
categories: (1) no difference and/or no explanation; (2) yes + partial explanation; (3) yes++ correct explanation. Two independent coders coded 20% of the interview data. Interrater reliability for these data was 89% based on simple agreement.

(4) No difference: Students who were assigned to this category either said that there were no differences between English and French question rules or said that the two systems were different without being able to provide any explanations as to what those differences were.

(5) Yes + partial explanation: Students in this category acknowledged the presence of a difference between the two question systems but could not fully explain it. The following example from the data illustrates this category.
S: ... un peu je pense. (... a little I think)
I: C’est quoi? (What is it?)
S: En anglais on peut inverser les mots un peu le verbe avec le pronom et en français on le fait pas souvent. (In English it’s possible to invert words a little, the verb with the pronoun and this is not often done in French)
I: Okay. Est-ce qu’il y a des choses qu’on peut faire en français mais on ne peut pas faire en anglais? (Are there things we can do in French but not in English?)
S: I don’t know. Mais moi je trouve que ça se ressemble bien. Comme avec l’intonation on peut faire des questions mais dans le fond ça s’écrit comme une phrase affirmative. (But I find that they are very similar. Like with intonation we can make questions but basically they’re written as declarative sentences.)
I: Dans quelle langue peut-on faire ça? (In what language can we do that?)
S: Français. (French)
I: Est-ce qu’on peut le faire en anglais? (Can we do it in English?)
S: Je pense oui. (I think so)

Two things are noteworthy in this response. First, the student specifies that one can invert the verb and the pronoun, rather than the subject. Second, he was totally justified in saying that intonation could be used in French and English to ask questions, suggesting an understanding of similarities between the two languages at the informal level. Given that we were in a formal context – i.e. in an evaluation mode that was mostly based on written input in the grammaticality judgement task or the scrambled questions task, this final comment is further evidence that he had only partial knowledge of the differences between French and English questions. This student’s explanation would have been assigned to category three had he clearly said that questions in English were different from questions in French. In that case, the comment about intonation could have been interpreted differently, i.e. the differences between French and English fade in informal oral production. However, when asked directly if there were things that we could do in French but not in English he reverted to the view that there were no differences.

(6) Yes + correct explanation: In this category students acknowledged the presence of a difference and explained it either through rules and/or through examples.
S: En français on ne change pas le verbe puis le sujet. C’est ça. (In French we don’t change the verb and the subject. That’s it.)
I: Et qu’est-ce qu’on fait en anglais? (And what do we do in English?)
S: On change ehhh le sujet et le verbe. (We change ahh the subject and the verb)
Table 3. The relationship between awareness and task performance.

<table>
<thead>
<tr>
<th>Awareness</th>
<th>Percentage of students</th>
<th>Grammaticality judgement (mean correct)</th>
<th>rs(29)</th>
<th>Scrambled questions (mean correct)</th>
<th>rs(29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difference</td>
<td>31</td>
<td>7.2</td>
<td>.40&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1</td>
<td>.52&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Yes + partial explanation</td>
<td>48</td>
<td>9</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Yes + full explanation</td>
<td>21</td>
<td>11.8</td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Note: Maximum score on the grammaticality judgement task = 26; maximum score on the scrambled questions task = 8

<sup>a</sup>: rs: Spearman r. A non-parametric test was used because the awareness variable data are ordinal.
<sup>b</sup>: p < .05

This student provided an explanation, showing sensitivity to the relative frequency of inversion in the two languages, even though his characterisation of French as a language in which there is no subject–verb inversion is not strictly correct since written or more formal spoken French does require subject–verb inversion or the use of *est-ce que*.

Analyses according to these three categories showed that 31% of the students believed that there were no differences between French and English or that the two question systems were different but could not explain the differences. Forty-eight percent said that the two systems were different and provided partial explanations. Only 21% of the students both acknowledged the presence of a difference and explained what those differences were. Non-parametric analyses of correlation were undertaken to explore the relationship between learners’ metalinguistic awareness – operationalised as their ability to acknowledge and explain differences between French and English questions – and their success in judging or constructing correct questions.

There was a significant positive correlation between students’ awareness of and ability to explain differences between L1 and L2 question patterns and their performance on the grammaticality judgement task and the scrambled questions task (see Table 3). Although it is not possible to conclude that awareness led to more accurate performance, it is clear that the ability to explain the contrast between the L2 and L1 systems was related to greater accuracy in judging the grammaticality of questions and forming grammatical questions.

**Discussion**

In this study, we set out to investigate the extent to which young francophone ESL learners’ L1 influenced their judgement and construction of yes–no and Wh– questions in English and to determine if these learners were aware of this influence. The first research question was answered by the results from the grammaticality judgement task and the scrambled questions task, which are consistent with previous research: the participants’ performance was highly constrained by their L1 rules. In conformity with their L1, intensive ESL students tended to do the following: (1) reject inversion with noun subjects but accept it with pronoun subjects; (2) translate *do/does* as the invariant French question form *est-ce que*; (3) treat inversion as optional. Results from the interview task provided an answer to the second research question in that the majority of students were not able to verbalise the rules, influenced by their L1, that seemed to underlie their performance on the grammaticality judgement and scrambled questions tasks. In fact, only 21% of the students were able to provide fairly accurate descriptions of differences between French and English question
formation. The other students either thought that French and English interrogative systems were the same or acknowledged the presence of a difference without being able to explain what it was.

The apparent inability to identify and explain the similarities and differences between French and English questions suggests a lack of metalinguistic reflection that is typical of the communicative ESL program where the study was undertaken. As discussed above, teachers in these classes tended to focus almost exclusively on meaning, only rarely paying attention to the formal properties of the language. Nevertheless, and somewhat surprisingly, at the conclusion of the study, all three teachers informed the researchers that they had, in fact, taught questions in class, and traces of that teaching could be seen on posters about English questions that were hanging on the classroom walls. However, teachers did not mention having provided L1/L2 contrastive information during that instruction, and the classroom posters did not include contrastive information. If the students benefited from the instruction provided by the teachers, this may imply that the inability to provide metalinguistic explanations for English may also be related to the students’ lack of knowledge of L1 rules. The lack of explicit L1 rule knowledge might have prevented the participants from identifying the differences between the two language systems. Thus, students in this study appeared to behave according to their L1 rules without necessarily being aware of them. This possibility cannot be ruled out because the participants were not directly asked to provide the rules of question formation in their first language. Thus, incomplete knowledge of question formation rules in their first language and/or their second language might have been the cause of the apparent inability to explain the interlanguage rules that shaped their use and judgement of English questions. Future research should control for this by exploring students’ knowledge of their L1 rules before analysing their awareness of the differences between French and English questions.

The third research question focused on the relationship between metalinguistic awareness and L2 performance on the tasks. The results suggest that the two variables tended to operate in tandem. That is, students who were aware of the difference between their L1 and L2 interrogative systems were better able to correctly judge and construct yes–no and Wh– English questions than students who did not possess such knowledge. This finding corroborates previous research reporting a positive association between metalinguistic knowledge and L2 performance (Hu, 1999; Hultstijn & Hultstijn, 1984; Sorace, 1985) and contrasts with other research reporting no such relationship (Green & Hecht, 1992; Seliger, 1979). These contradictory findings may be interpreted in terms of the frequently invoked argument that different tasks tap different types of knowledge (Bialystok, 1982). That is, it could be argued that the positive correlation reported in this study was due to the nature of the two tasks used to measure students’ performance. The grammaticality judgement and the scrambled questions tasks were both measures that allowed and probably encouraged students to draw on their explicit knowledge. This may have contributed to the correlation between learners’ performance on these tasks and their ability to express their metalinguistic knowledge. Different results might emerge if we were to use measures of implicit knowledge (e.g. oral production in more meaning-focused tasks and even in natural classroom environments) (see Y. Sheen, 2006). However, research has shown that task type is not the only constraint on the utility of metalinguistic knowledge (Hu, 2002).

The specific content of one of the tasks and the order in which the tasks were administered may also have contributed to the results. Eight out of the 26 question pairs in the grammaticality judgement task were of the declarative word order type and should have been judged as incorrect. Because, as we acknowledge above, informal French and English allow declarative word order in questions, these items might have been misleading and
more difficult to judge, particularly given that seven of them were yes–no questions that might in some contexts be appropriate in informal English. Future tasks should control for this, perhaps by replacing SVO questions with fronted questions since students in this study frequently produced questions with fronted elements in the scrambled questions task. One might also argue that the learners may have equated *do* and *does* with *est-ce que* because the interviews took place after they completed the grammaticality judgement task (twice) and the scrambled questions task. By the time they came to the interview, they had carried out two tasks that focused on questions — a context for the use of *est-ce que* in French and *do* and *does* in English. It might have been more revealing to have conducted the interviews in two parts: first to ask students about the meaning of the decontextualised words before administering the grammaticality judgement and scrambled questions task.

In the present study, students who were not able to explain the relevant L1/L2 contrasts did not perform as well as their counterparts who showed more awareness and this was the case even though the tasks provided sufficient time to think about form and may be said to have emphasised form and accuracy. That is, learners who did not know the difference between the L1 and L2 rules either because they were unable to figure it out on their own or because no one had directed their attention to it, failed to recognise or produce correct questions even in the most structured contexts. If students who are aware of L1/L2 differences perform better than those who do not, we may infer that this knowledge may help to prevent the fossilisation of incorrect interlanguage patterns.

The results of this study suggest that two things should be done if teaching is to facilitate L2 performance and acquisition. First, students should be helped to identify problematic relationships between L2 and L1 linguistic features. Such instructional guidance is not necessary for all grammatical features, and the number of such features will no doubt vary greatly according to the relative similarity of the L1 and L2. What is needed is to determine which L2 rules call for such contrastive form-focused instruction. Second, attempts should be made to provide the conditions that are likely to allow students to benefit from the explicit knowledge when their focus is primarily on meaning. It has been hypothesised that practice can promote the desired transition (DeKeyser, 1998, 2005), on condition that learners understand what they are practising and that they practise what has been learned explicitly to express their own meanings. The intensive ESL context in which the current study was undertaken is likely to favour such a transition because learners are constantly exposed to comprehensible input and, more importantly, required to produce language in interaction with each other and with the teacher. The high frequency of opportunities to hear and use structures previously targeted with explicit L1/L2 contrastive information during interaction tasks would be expected to promote the transition from explicit to automatised use.

Despite the teachers’ reported attempts to teach question formation, these francophone ESL learners still showed major limitations in their ability to correctly judge and construct English questions, at least in part because of the implicit rules they brought over from their first language. This pattern of results is what led Spada, Lightbown, and White (2005) to investigate the effects of providing explicit contrastive L1/L2 information on the development of question formation (and third person possessive determiners) with francophone ESL learners. Their findings do not provide clear support for the benefits of L1/L2 contrasts, perhaps because the contrastive instruction provided in their study may not have been sufficiently explicit. Information was provided through example sentences that were typographically enhanced to highlight subject–verb inversion in questions in English and French rather than through explanations of the L1/L2 contrasts. Based on the findings obtained in the present study, it would appear that there is crucial information students need.
to know and that this information may best be provided through explicit instruction. For example, students should know that, unlike French, English questions require subject–verb inversion whether the subject is a noun or a pronoun. They should also know that do and does are not invariant forms, equivalent to the question formula est-ce que, for example do is not used if the equivalent declarative sentence already includes a modal verb (*Do the children can watch television?) or an auxiliary (*Does the boy is watching TV?). While it is true that the auxiliary resembles est-ce que in that it is placed at the beginning of a declarative sentence to ask a question, it is not an invariant form and English sentences are not left intact once the correct form of do is used.

While this information could be provided to students directly by the teacher, it might be more effective for the teacher to work with the students to help them come up with the rules governing English question formation themselves and discover how these differ from their L1 rules. Information discovered by the students with the teacher’s help when it is needed may be easier to remember than information that is simply presented to them.

All of this calls for further experimental research to investigate the effects of contrastive instruction on the acquisition of L2 morphosyntax. A variety of measurement tools – both measures of explicit knowledge and measures of meaning focused language use – need to be used in this research to take account of the often invoked claim that such instruction is likely to affect explicit knowledge only.

Acknowledgements

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Notes

1. For the sake of simplicity, we will refer here to previously learned languages as L1 and the current target language as L2. Such a shorthand is not meant to deny the complexity of language acquisition that can involve many languages (See e.g. Odlin & Jarvis, 2004).
2. There are also some recent studies in which a contrastive component has been provided within more traditional L2 instruction (R. Sheen, 1996, 2005).
3. Where no auxiliary is present in the declarative SVO version of the question, the auxiliary ‘do’ is placed before the subject and is marked for person, number and tense, while the main verb in the sentence reverts to the infinitive form, e.g. Mary wants to go with us becomes Does Mary want to go with us?
4. Picard (2002) argues that Canadian French ‘does not allow inversion in wh– questions’ (p. 61). While this appears to be true in informal spoken language, literate French speakers are aware of the inversion rule for more formal speech and certainly recognise its grammaticality in the written language.
5. To measure students’ metalinguistic knowledge, Hu (2002) used a verbal explanation task in which participants had to orally explain the rules underlying target structure uses.
6. It should be noted that, in spoken English, the salience of auxiliaries in both yes/no and wh– questions may be so reduced that a learner could fail to hear them in the stream of normal speech. Proficient speakers (especially those who are literate) know that these non-salient auxiliaries are there, as illustrated by the fact that, in responding to a request for clarification of a question that was not clearly heard, native speakers will often pronounce the auxiliary more clearly. Nevertheless, in the stream of informal speech, the auxiliary in questions such as Where are you going? or Do you want to have lunch now? are extremely difficult to hear. This no doubt contributes to the perception by learners that English, like French, allows SVO order for both yes/no and wh– questions.
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References


Appendix 1. The grammaticality judgement task

Correct or incorrect? That is the question!

Each item below shows two questions. Read each item carefully and decide which questions are correct in English. Draw an X beside the answer you choose.

Example: (A) What is your name? (B) Your name is what?

- Only A is correct
- Only B is correct
- A and B are correct
- A and B are incorrect
- I don’t know.

For this item, you would draw an X beside ‘Only A is correct’. Remember: the sentence must be a ‘Question’.

(1) (A) Do they like pepperoni pizza? (B) Like they pepperoni pizza?
(2) (A) Where she’s going for Easter? (B) Where is she going for Easter?
(3) (A) What his name is? (B) What is his name?
(4) (A) He can drive a car? (B) Can he drive a car?
(5) (A) Where does your father work? (B) Where works your father?
(6) (A) What the chef likes to cook? (B) What does the chef like to cook?
(7) (A) Do you want some candy? (B) You want some candy?
(8) (A) Can they work on the computer? (B) Do they can work on the computer?
(9) (A) Where the teacher is going? (B) Where goes the teacher?
(10) (A) What we can watch on TV? (B) What can we watch on TV?
(11) (A) The Simpsons are your friends? (B) Are the Simpsons your friends?
(12) (A) Do the children want to play? (B) The children want to play?
(13) (A) Can the children speak Spanish? (B) The children can speak Spanish?
(14) (A) Does he play hockey with you? (B) Do he play hockey with you?
(15) (A) John is your brother? (B) Is John is your brother?
(16) (A) Why fish can live in water? (B) Why can fish live in water?
(17) (A) Where are your parents working? (B) Where your parents working?
(18) (A) Why do children like McDonald’s? (B) Why children like McDonald’s?
(19) (A) When is my mother coming home? (B) When my mother’s coming home?
(20) (A) Why he’s at home today? (B) Why is he at home today?
(21) (A) When are you going to eat breakfast? (B) When you are going to eat breakfast?
(22) (A) Is she in your class? (B) She is in your class?
(23) (A) Susan does talk on the phone? (B) Does Susan talk on the phone?
(24) (A) What your brother’s doing? (B) What is your brother doing?
(25) (A) Can the children go to the movies? (B) The children can go to the movies?
(26) (A) Does the boy speak French? (B) Does that boy speak French?

[Note: For reasons of space, only the items are shown here. On the original task, all items had the format shown in the example.]

Appendix 2. Items on cards for the scrambled questions task

(1) WHERE IS SHE GOING FOR EASTER? DOES IS
(2) ARE THEY YOUR FRIENDS? DOES ARE
(3) WHY IS HE AT HOME TODAY? IS DOES
(4) DO THE CHILDREN WANT TO PLAY? DOES
(5) CAN THE CHILDREN SPEAK SPANISH? DOES CAN
(6) THAT IS YOUR BROTHER? IS DOES
(7) WHERE THE TEACHER IS GOING? IS DOES
(8) WHY FISH CAN LIVE IN WATER? DOES CAN