# These Constructions Don't Acquire Easily: Middle Constructions and Multicompetence ${ }^{1}$ 

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#### Abstract

The multicompetence hypothesis (Cook, 1991, 1992, 1993) raises two related questions: (1) whether very advanced L2 learners have the same intuitions of grammaticality as native speakers; and (2) whether differences between these learners and native speakers are due to the two grammars influencing each other. Middle constructions in English and French provide a useful probe for exploring these issues since they are much more limited in English than they are in French. I developed two grammaticality judgement tasks, one in English and one in French, based on differences between the two languages vis-à-vis middle constructions. They were administered to Anglophones and Francophones who were advanced and very advanced learners of their L2, as well as to unilingual groups with the same L1s. The results showed that the advanced and very advanced learners' judgements differed from those of the unilinguals. The differences between their responses suggest that knowledge of two languages affected their judgements, although transfer cannot account for all of the differences. The results lend further support to a previous research finding that L2 learners are conservative in their judgements of grammaticality.


L'hypothèse de Cook $(1991,1992,1993)$ au sujet de la «multicompétence» soulève deux questions reliées, à savoir : (1) si les apprenants avancés d'une L2 possèdent les mêmes intuitions de grammaticalité que les locuteurs natifs; et (2) si les différences entre ces apprenants et les locuteurs natifs sont dues au fait que les deux grammaires s'influencent mutuellement. Les constructions moyennes en anglais et en français offrent une bonne façon d'explorer ces questions parce que les constructions moyennes sont beaucoup plus restreintes en anglais qu'en français. En me basant sur des différences entre les constructions moyennes dans les deux langues, j 'ai développé une évaluation de grammaticalité en anglais et en français. J'ai administré les deux instruments à des anglophones et à des francophones, apprenants avancés et très avancés de leur L2. Je les ai également administrés à des unilingues avec les mêmes L1. Les résultats démontrent que les apprenants avancés et très avancés avaient des évaluations de grammaticalité qui étaient différentes de celles des unilingues. Les différences entre les réponses suggèrent que les évaluations des premiers ont été affectées par leur connaissance de deux langues, bien que le transfert n'explique pas toutes les différences. Les résultats offrent un appui additionnel à une conclusion de recherches antérieures, à savoir que les apprenants d'une L2 sont conservateurs dans leurs évaluations de grammaticalité.

Cook $(1991,1992,1993)$ discussed the question of ultimate attainment in second language acquisition under the rubric of what he called multicompetence, that is, "the compound state of a mind with two grammars" (1991, p. 112). He proposed that the internalized L2 grammars of very advanced (native-like) learners are not the same as those of unilingual native speakers, although their performance is similar, since the L1 and L2 grammars may influence each other (1992, p. 62).

Although few studies have been conducted with seemingly native-like learners, many of those which have been done confirmed Cook's proposal (Coppieters, 1987; Johnson and Newport, 1989; Sorace, 1993; Connors and Ouellette, 1993; Balcom, 1995; see Long, 1990, for a review of earlier studies). Participants' linguistic performance was similar to that of native speakers; however, their linguistic competence, measured (indirectly) by a grammaticality judgement task, was different. On the other hand, in White and Genesee's (1996) study, there were no significant differences between near-native learners and native speakers on a question formation and grammaticality judgement task involving syntactic phenomena subject to parametric variation. They suggested that previous studies may not have been stringent enough in their criteria for native-like performance. Similarly, Juffs (1996) showed that advanced learners of English whose L1 was Chinese had the same judgements of grammaticality as native speakers for $p s y c h$-verbs and container verbs.

The second part of the multicompetence hypothesis deals with whether lack of ultimate attainment is due to the L 1 and L 2 influencing each other. The influence of the L1 on L2 acquisition has a long tradition in L2 acquisition research, and what follows can only skim the surface. Contrastive analysis viewed interference from the L1 as the prime cause of errors in the L2, and a major obstacle to successful mastery (Lado, 1957, for example). Under the "creative construction" hypothesis (Dulay and Burt, 1975, and subsequent work) the influence of the L1 was viewed as insignificant in L2 acquisition: it was only one of many cognitive strategies in L2 learning. Influence of the L1 re-emerged as a significant factor in L2 acquisition under "principles and parameters" theory: there is some evidence that the first-language setting of a parameter is transferred in the initial stages of L2 acquisition although it may subsequently be reset (see White, 1994, 1996, for an overview). And finally, researchers have asked whether functional categories (and phrases projected from them) are available at the beginning of L2 acquisition and whether they are available through the L1 (see Lardiere, 1995, for a summary). ${ }^{2}$

In this paper I will explore the questions raised by Cook - whether bilinguals have the same intuitions of grammaticality as unilinguals and whether differences are due to the L1 and the L2 influencing each other - by comparing the intuitions of grammaticality for middle constructions in French and English of bilingual Anglophones and Francophones with those of unilingual
speakers of the two languages. I chose to study middle constructions for several reasons. First of all, while some very advanced Anglophone learners of French in Birdsong's (1992) study performed within the same range as Francophones in their judgements of various linguistic phenomena, the variable where there was the greatest divergence between the groups was middle constructions. This was also the case in Balcom's (1995) study of very advanced Francophone learners of English and native speakers of English. Similarly, Connors and Ouellette $(1993,1994)$ showed that very advanced Anglophone learners of French had difficulties with what they call "passive" (1994, p. 5) constructions, which include middle constructions. Second, as is demonstrated below, middle constructions in English and French differ in a variety of ways, with English having a much more constrained grammar, allowing the issue of L1 and L2 influence to be addressed.

## On certain differences between French and English middles

Fellbaum and Zribi-Hertz (1989; henceforth F \& ZH) delineated a number of differences between French and English middle constructions. First of all, French middle constructions have a clitic pronoun (se), as in (1), while English middles do not have its equivalent (-self), as in (2):
(1) Le grec se traduit facilement.
(F \& ZH, 1989, p. 4, 8(a))
(2) a. Greek translates easily.
(F \& ZH, 1989, p. 4, 7(a))
b. *Greek translates itself easily.

A second difference between the two languages is that middles in French can occur with a wide variety of adverbials while English middles can only occur with adverbials of facility. Thus the French sentences 3(a) and 3(b) are grammatical, while the English equivalents 4(a) and 4(b) are not.
(3) a. Le grec se traduit mieux le matin.
b. Le grec se traduit avec un dictionnaire. (F \& ZH, 1989, p. 10, 34)
(4) a. *Greek translates better in the morning.
b. *Greek translates with a dictionary. (F \& ZH, 1989, p. 10, 34)

Another difference is that French, unlike English, allows impersonal subjects with middle constructions, so that (5) is grammatical, while the English equivalent (6) is not.
(5) Il se traduit facilement beaucoup de textes grecs dans cette université.
(6) *There translate easily many Greek texts at this university.
( $\mathrm{F} \& \mathrm{ZH}, 1989, \mathrm{p} .12,40$ and 41)

A fourth characteristic distinguishing the two languages is that the grammatical subject in French middles does not have to be affected - changed or modified by the action of the verb, as is the case in English. Thus the French sentences 7(a) and 7(b) are grammatical, while the English equivalents 8(a) and 8(b) are not, since the grammatical subject, the Eiffel Tower or the poem, is not affected.
(7) a. La Tour Eiffel se voit facilement de ma fenêtre.
b. Ce genre de poème s'écrit facilement. (F \& ZH, 1989, p. 10, 35)
(8) a. *The Eiffel Tower sees easily from my window.
b. *This kind of poem writes easily.
(F \& ZH, 1989, p. 11, 36)
Although F \& ZH asserted that neither language allows middle constructions with an overt Agent in a by-phrase, Authier and Reed (1996) provided data which show that some varieties of Canadian French do allow such constructions.
(9) a. Ce costume traditionnel se porte surtout par les femmes.
b. En général, ces débats s'enregistrent par Anne, qui est notre téchnicienne la plus qualifiée.
(Authier and Reed, 1996, p. 4, 5(a, b))
The English translations are not.
(10) a. *This traditional costume wears mostly by women.
b. *In general, these debates record by Anne, who is our most qualified technician. ${ }^{3}$

Balcom (1996) presented the results of a study with very advanced Francophone learners based on these differences between English and French middle constructions. I found that the learners were more conservative than unilingual native speakers of either language, and suggested that the more constrained grammar of English had affected their judgements. I hypothesized that bilingual Anglophones would be influenced by the less-constrained grammar of French in regard to middle constructions and hence be more liberal in their judgements than unilinguals. Based on previous research, I predict that both Francophone and Anglophone learners will have different intuitions of grammaticality than unilingual native speakers. I also expected transfer to play a role in the results, since, as I have just shown, the grammar of French middle constructions allows many possibilities which are ungrammatical in English.

## The study

## Experimental tasks

There were a total of 28 sentences on the French judgement task, all of which are grammatical according to the description of middle constructions given
above, with the exception of six sentences with no clitic se-moyen. Because English has the more constrained grammar in regard to middle constructions, all sentences from the French task are ungrammatical in English. For this reason, five grammatical English sentences containing middle constructions were distributed randomly in the English task, which otherwise consisted of the same sentences as the French task, translated into English. Examples of each type are shown in (11) below. The number in parentheses beside each sentence type indicates how many sentences of that type occurred in the task. The asterisks indicating ungrammatical sentences did not appear in the judgment tasks.
(11) Examples of sentences in the grammaticality judgement tasks
A. Sentences with no clitic in French or with -self in English (6)
a. *Les barbecues vendent bien pendant l'été.
b. *Barbecues sell themselves well during the summer months.
B. No adverb of facility (8)
a. Un tricot de laine se lave à l'eau froide.
b. *A wool sweater washes in cold water.
C. Impersonal subject (4)
a. L'année prochaine, il se traduira beaucoup de textes acadiens à l'Université de Moncton.
b. *Next year, there will translate many Acadian texts at l’Université de Moncton.
D. Grammatical subject not affected (4)
a. La musique de Mozart s'entend merveilleusement bien au théâtre Capitol.
b. *Mozart's music hears marvellously well at the Capitol Theatre.
E. By/Par-phrase (6)
a. Les livres illustrés se lisent facilement par les enfants.
b. *Books with many illustrations read easily by young children.

In order to alleviate some of the problems inherent in grammaticality judgement tasks, participants were asked to mark stimulus sentences as grammatical or ungrammatical, or to put a question mark (?) if they were uncertain, and to correct those sentences they considered ungrammatical. "Grammatical" was defined for the participants in terms of whether it "sounded right", and they were encouraged to make their judgments quickly, without trying to think of the rules. According to Birdsong (1989), subjects will often mark sentences as ungrammatical if they are uncertain: giving the "not sure" option allows participants to make finer discriminations. Similarly, because subjects may reject
sentences for a variety of reasons, asking them to correct those they considered ungrammatical gives a clear indication of basis of their judgements.

Language-use questionnaires were also administered to all participants. These questionnaires consisted of 12 questions about language use in a variety of contexts (at home, during social, cultural and sports activities for example) and activities (such as assembling an item or expressing their feelings). Since there is some evidence that performance in the L1 can decline if the L2 is used constantly (Thomas, 1990; Klein, 1995, for example), advanced learners who used the L2 more than the L1 were excluded from the study, as were unilinguals who used the second language more than "seldom".

Both the English and French grammaticality judgement task were administered to advanced L2 learners with at least one week between tasks, while the English task and the French task were administered to unilingual Anglophones and unilingual Francophones respectively.

## Participants

In what follows, I will use the term bilingual to refer to Francophones and Anglophones who are advanced or very advanced learners of their L2, and unilingual to refer to Anglophones and Francophones who have had little exposure to their L2.

The bilingual Anglophones were university students at a Francophone university, 8 females and 6 males with a mean age of 21.6. English was their primary language in the home and during social, cultural and athletic activities. For those who were studying full-time (12/14 or $86 \%$ ), most their courses (an average of $85 \%$ ) were in French. Their level of proficiency in French was determined by the French placement test administered to all students upon arrival at the Francophone university. The majority ( $8 / 14$ or $57 \%$ ) had been placed in French courses designed for native speakers of French, while the rest had been placed in an advanced French second-language course (groupe-pont; an intensive course of 15 hours per week designed to prepare students for full-time study in French). ${ }^{4}$ The bilingual Francophones were students at the same Francophone university, 7 females and 5 males with a mean age of 21.3. Both parents were Francophones, and the primary language in the home, at university and during social, cultural and athletic activities was French. They were students in Translation or Education (Secondary English) who had been placed in an advanced English course on the basis of near-native fluency of expression in an oral interview, their Grade 12 English marks (A or B+ in the bilingual track ${ }^{5}$ ), and a writing sample, which had to be nearly error-free.

The 13 unilingual Francophones were students at the same Francophone university as the bilinguals. Their first language was French, both parents were Francophones, and their primary language was French. There were 8 females and 5 males, with a mean age of 19 , who were high-beginner or
low-intermediate learners of ESL. They are the closest to unilingual as one is likely to find in Canada. The 15 unilingual Anglophones were students at an Anglophone university, 10 females and 5 males with a mean age of 23.6. None had been enrolled in early French immersion: roughly $65 \%$ had taken Core French, $20 \%$ late immersion, and $15 \%$ no French at all at school. Like the unilingual Francophones, they are as close to unilingual as one is likely to find in Canada.

## Results

## Preliminary analysis

Participants had been asked to mark stimulus sentences as grammatical or ungrammatical, or to put a question mark (?) if they were uncertain, and to correct those sentences they considered ungrammatical. A preliminary analysis of the responses indicated that looking only at these judgements would obscure the matter under study, since participants marked sentences as ungrammatical and made a variety of changes while maintaining the structure under study. For example the stimulus in (12) below was marked ungrammatical and the adverb changed, but the par-phrase of the original was maintained. (The original and amended adverbs are in italics.)
(12) Stimulus Ce costume traditionnel se porte surtout par les femmes. Correction Ce costume traditionnel se porte généralement par les femmes.

Another common type of correction was to change a pronoun or determiner, as in (13).
(13) Stimulus Boxes like these do not transfer themselves easily.

Correction Boxes like those do not transfer themselves easily.
The underlined pronoun these was changed, but the ungrammatical pronoun themselves was not deleted. In such cases, the response was tabulated as grammatical, since the phenomenon under study was preserved.

## French grammaticality judgement task

Table 1 gives the judgements of the three groups of participants on the French task. Recall that in the French task all sentences except those with no semoyen are grammatical according to the analysis of middle constructions presented above.

## Bilingual and unilingual Francophones

Bilingual Francophones were significantly less likely to judge a sentence as grammatical than their unilingual counterparts. Looking at the various sentence types, there are significant differences between the groups in their judgements

Table 1: Judgements on the French Task by Sentence Type

| Type | Group | Grammatical |  | Ungrammat. |  | Not sure |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | (\%) | N | (\%) | N | (\%) | N | (\%) |
| No se (6 sentences) | U franco | 6 | (8) | 71 | (91) | 1 | (1) | 78 | (100) |
|  | B anglo | 21 | (26) | 57 | (69) | 4 | (5) | 82 | (100) |
|  | B franco | 2 | (3) | 69 | (96) | 1 | (1) | 72 | (100) |
| No adv. facility ( 8 sentences) | U franco | 69 | (66) | 22 | (21) | 13 | (13) | 104 | (100) |
|  | B anglo | 76 | (68) | 32 | (29) | - | (3) | 112 | (100) |
|  | B franco | 61 | (64) | 34 | (35) | 1 | (1) | 96 | (100) |
| Impersonal Sub. (4 sentences) | U franco | 30 | (58) | 18 | (35) | 4 | (7) | 52 | (100) |
|  | B anglo | 16 | (29) | 38 | (68) | 2 | (3) | 56 | (100) |
|  | B franco | 23 | (48) | 25 | (52) | , | (0) | 48 | (100) |
| Unaffected (4 sentences) | U franco | 46 | (88) | 3 | (6) |  | (6) | 52 | (100) |
|  | B anglo | 34 | (61) | 20 | (36) | 2 | (3) | 56 | (100) |
|  | B franco | 35 | (73) | 11 | (23) |  | (4) | 48 | (100) |
| Par-phrase (6 sentences) | U franco | 40 | (51) | 36 | (46) |  | (3) | 78 | (100) |
|  | B anglo | 23 | (27) | 59 | (70) |  | (3) | 84 | (100) |
|  | B franco | 25 | (35) | 47 | (65) | 0 | (0) | 72 | (100) |
| Total <br> (28 sentences) | U franco | 191 | (52) | 150 | (41) | 23 | (7) | 364 | (100) |
|  | $B$ anglo | 170 | (43) | 206 | (53) | 16 | (4) | 392 | (100) |
|  | $B$ franco | 146 | (44) | 186 | (55) | 4 | (1) | 336 | (100) |

U franco $=$ Unilingual francophone; $\mathrm{N}=13$
$B$ anglo $=$ Bilingual anglophone; $\mathrm{N}=14$
B franco $=$ Bilingual francophone; $\mathrm{N}=12$
of sentences with a par-phrase ( $\mathrm{p}<0.025$ ), sentences with an unaffected grammatical subject ( $\mathrm{p}<0.025$ ) and sentences with an impersonal subject ( $\mathrm{p}<0.05$ ), with unilinguals being more likely to judge such sentences as grammatical than the bilinguals. There were no significant differences between the groups in their judgements of sentences with no se-moyen or no adverb of facility.

## Bilingual Anglophones and unilingual Francophones

Bilingual Anglophones were also significantly less likely to judge sentences as grammatical than the unilingual Francophones. With only one sentence type those with no adverb of facility - were there no significant differences between the groups. There were significant differences in the responses of the two groups on all other sentence types: those with an impersonal subject, those in which the grammatical subject was unaffected and those with a par-phrase. (Using the Yates correction factor for a two-way $2 \times 2$ table, $\chi^{2}=10.47,9.41$ and 8.72 respectively, $p<0.005$.) In all of these cases, the bilingual Anglophones, like the bilingual Francophones, were less likely to judge a sentence as grammatical
than were the unilinguals. On the other hand, the bilingual Anglophones were significantly more likely to judge sentences with no se-moyen, as in (14) below, to be grammatical than were the unilinguals ( $\chi^{2}=10.01, \mathrm{p}<0.005$ ). The ${ }^{\wedge}$ indicates where se should appear.
(14) *La viande ^congèle bien, mais la laitue ^congèle mal.
'Meat freezes well, but lettuce freezes poorly.'
Acceptance of sentences with missing se may be due to transfer, since such sentences are grammatical in English.

## Bilingual Francophones and bilingual Anglophones

There are significant differences between the two groups in their judgements of only two sentence types. Bilingual Anglophones judged sentences with an impersonal subject as grammatical significantly less frequently than did the bilingual Francophones, $29 \%$ vs. $48 \%$ ( $\chi^{2}=4.99,1 \mathrm{df}, \mathrm{p}<0.05$ ). On the other hand, they were significantly more likely to judge sentences with no se-moyen to be grammatical, $25 \%$ vs $3 \%$ ( $\chi^{2}=13.5,1 \mathrm{df}$, $\mathrm{p}<0.001$ ). The bilingual Anglophones were thus significantly more likely to judge sentences without se-moyen to be grammatical than either the unilingual or bilingual Francophones. As I noted above, this may be a result of their knowledge of English, where middle constructions without a pronoun are grammatical. Alternatively, Connors and Ouellette (1994) concluded that bilingual Anglophones performed poorly on middle constructions in a judgement and paraphrase/translation task because they preferred to interpret se as reflexive and reciprocal due to "a bias in favour of (referential) argument readings" (p. 20). Because se is non-referential in middle constructions, and possibly because it is not perceptually salient, participants in the present study may have ignored it.

## English grammaticality judgement task

Table 2 gives the judgements of unilingual Anglophones and bilingual Anglophones and Francophones on the English task. In this task, all sentences translations of the sentences in the French task - are ungrammatical according to the description of middle constructions presented above, although half included verbs which otherwise occur in middle constructions in English. (There were also five grammatical middle constructions as fillers.)

## Bilingual Anglophones and unilingual Anglophones

There are significant differences between the responses of the bilingual Anglophones and the unilingual Anglophones on only two sentence types, those with ungrammatical $-\operatorname{self}\left(\chi^{2}=5.01, p<0.05\right)$ and those with no adverb of facility $\left(\chi^{2}=14.55, p<0.001\right)$. In both cases unilinguals were significantly more likely

Table 2: Judgements on the English Task by Sentence Type

| Type | Group | Grammatical |  | Ungrammat. |  | Not sure |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | (\%) | N | (\%) | N | (\%) | N | (\%) |
| -self <br> (6 sentences) | U anglo | 21 | (24) | 66 | (73) | 3 | (3) | 90 | (100) |
|  | B anglo | 8 | (9) | 75 | (90) | 1 | (1) | 82 | (100) |
|  | B franco | 21 | (19) | 48 | (67) | 3 | (4) | 72 | (100) |
| No adv. facility (8 sentences) | U anglo | 46 | (38) | 61 | (51) | 13 | (11) | 120 | (100) |
|  | B anglo | 17 | (15) | 93 | (83) | 2 | (2) | 112 | (100) |
|  | B franco | 18 | (19) | 70 | (73) | 0 | (8) | 96 | (100) |
| Impersonal Sub. (4 sentences) | U anglo | 0 | (0) | 60 | (100) | 0 | (0) | 60 | (100) |
|  | B anglo | 0 | (0) | 56 | (100) | 0 | (0) | 56 | (100) |
|  | B franco | 0 | (0) | 48 | (100) | 0 | (0) | 48 | (100) |
| Unaffected (4 sentences) | U anglo | 6 | (10) | 53 | (88) | 1 | (2) | 60 | (100) |
|  | B anglo | 2 | (4) | 54 | (96) | 0 | (0) | 56 | (100) |
|  | B franco | 2 | (4) | 45 | (94) | 1 | (2) | 48 | (100) |
| By-phrase (6 sentences) | U anglo | 4 | (5) | 84 | (93) | 2 | (2) | 90 | (100) |
|  | B anglo | 0 | (0) | 83 | (99) | 1 | (1) | 84 | (100) |
|  | B franco | 1 | (.5) | 71 | (99) | 1 | (.5) | 72 | (100) |
| Total <br> (28 sentences) | $\mathbf{U}$ anglo | 77 | (18) | 324 | (77) | 19 | (5) | 420 | (100) |
|  | B anglo | 27 | (7) | 361 | (92) | 4 | (1) | 392 | (100) |
|  | $B$ franco | 42 | (12) | 282 | (84) | 12 | (4) | 336 | (100) |

U anglo $=$ Unilingual anglophone; $\mathrm{N}=15$
B anglo $=$ Bilingual anglophone; $\mathrm{N}=14$
B franco $=$ Bilingual francophone; $\mathrm{N}=12$
to judge the sentences as grammatical than the bilinguals ( $21 \%$ and $38 \%$ for the unilinguals and $9 \%$ and $15 \%$ for the bilinguals). This is a rather surprising result, since these sentences are ungrammatical in English and grammatical in French. If transfer was a factor, bilingual participants should have accepted them more readily than the unilingual Anglophones.

## Bilingual Francophones and unilingual Anglophones

There are significant differences between the unilingual Anglophones and the bilingual Francophones on only one sentence type, those with no adverb of facility ( $\chi^{2}=15.21,2 \mathrm{df}, \mathrm{p}<0.001$ ). Anglophones judged such sentences as grammatical more frequently than the bilinguals - $40 \%$ and $18 \%$ respectively. Differences between the two groups with other types of sentences were not significant.

## Bilingual Anglophones and bilingual Francophones

If "not sure" responses are factored out, the two groups of bilinguals differed in their judgements of only one sentence type on the English task - those with
-self as in (16) below. These differences are highly significant ( $\chi^{2}=11.8$, $2 d f, p<0.005$ ), with bilingual Francophones judging sentences with ungrammatical -self to be grammatical significantly more frequently than bilingual Anglophones ( $29 \%$ vs. $9 \%$ ).
(15) *Messages transmit themselves rapidly by satellite.

This again is probably due to cross-linguistic influence from the L1; learners have replaced se with its English equivalent -self. Moreover, in a few of their corrections to sentences they judged ungrammatical - as in (16) belowbilingual Francophones added itself:
(16) a. This type of food digests itself poorly by invalids.
b. Mozart's music hears itself well at the Capitol Theatre.
c. An Audi will handle itself well ...

With sentences with no adverb of facility, the differences are modest, at . 05 ( $\chi^{2}=6.25,2 \mathrm{df}$ ), due to the higher frequency of "not sure" responses on the part of the bilingual Francophones. If "not sure" responses are combined with ungrammatical judgements, there are no significant differences between the two groups ( $\chi^{2}=.46$ ).

## Discussion

On the French task, both groups of bilinguals were significantly less likely to judge sentences as grammatical than the unilingual Francophones. In fact, the performance of the two groups of bilinguals was quite similar, with the exception of two sentence types. The differences are less striking, but follow the same trend, in the English task. These results lend further support to the first part of Cook's multicompetence hypothesis - that the internalized L2 grammars of advanced and very advanced learners are not the same as those of unilingual native speakers. On both tasks, bilingual Anglophones and bilingual Francophones were more conservative in their judgements than unilingual speakers, with two exceptions which will be discussed below.

As I mentioned above, Balcom (1996) suggested that the more constrained grammar of English had affected bilingual Francophones' judgements, since they were more conservative in their judgements than unilingual native speakers of either language. I hypothesized that bilingual Anglophones would be influenced by the less-constrained grammar of French, and be more liberal in their judgements than unilinguals. ${ }^{6}$ However, this hypothesis was not borne out by the data: the bilingual Anglophones were also more constrained in their judgements than unilinguals of either language. This suggests that knowledge of two languages - at least two languages which are not distant from each other typologically - may be enough to cause bilinguals to become more conservative in their judgements than unilingual speakers of either language. Thomas
(1990) discussed Zobl's (1989) study in which it was found that participants learning a second language were more constrained in their judgements than those learning a third language, who had an "inappropriately permissive grammar of the target language" (p. 705). ${ }^{7}$ Similarly, Klein (1995) proposed that one reason L3 learners outperform L2 learners is that they are less conservative in their learning. It is possible, therefore, that multilingual participants learning English and French as an L3 would have more liberal judgements than the bilingual participants in the present study. The more conservative judgements may therefore be due to a more general mental state of bilingualism rather than to the specific grammar of English middle constructions. ${ }^{8}$

Although knowledge of two languages appears to have influenced the bilinguals' judgements on both tasks, whether there is a direct transfer of rules and representations for middle constructions from L1 to L2 is not clear, due to several rather surprising results. As noted above, on the English task unilingual Anglophones were significantly more likely to accept sentences with no adverb of facility and sentences with an unaffected subject than either group of bilinguals, suggesting that knowledge of French - either as a L2 or L1 - did not influence the bilingual participants' judgements. Moreover, the unilingual Anglophones accepted sentences with -self significantly more frequently than bilingual Anglophones, and almost as frequently as bilingual Francophones. If knowledge of the L2 had influenced participants' judgements, bilingual Anglophones should have accepted sentences more frequently than unilingual Anglophones, but this was not the case.

The unilingual native speakers did not always perform as expected: they judged sentences which were ungrammatical to be grammatical more frequently than the bilinguals. However, this is by no means the only study to get less than perfect responses from native speaker controls. For example, Schachter (1990) found that naive native speakers judged grammatical sentences such as (17) below to be ungrammatical. ${ }^{9}$
(17) Who do you think Bill said Mary expected to go to the dance with Mark? (Schachter, 1990, p. 107, Wh-movement c ${ }^{\prime}$.)

She noted that the sentences had been pre-tested with a pilot group of graduate students in Linguistics, whose judgements were what she had expected, and concluded that the latter's "linguistic sensitivity was clearly greater than that of the undergraduates [students in introductory linguistics or Freshman English courses] who constituted the control group" (p. 111, note 19). Similarly, in White's (1989) study, in more than $25 \%$ of their responses, controls incorrectly judged sentences in English which violated strict adjacency to be grammatical. Using an elicited imitation task, Balcom (1990) found that native speakers repeated ungrammatical sentences and did not repeat grammatical sentences verbatim in a study of multiple embedded clauses with *that-trace violations
and complementizer deletion. Such results raise an interesting empirical question: Do L2 researchers expect L2 learners to have the intuitions of naive native speakers or of linguists?

There are a number of limitations to this study. First of all, ideally another test — preferably a production task - should have been administered, and the results compared with those of the judgement task. I attempted to do this, but was unsuccessful due to the restricted grammar of English middle constructions compared to French (see note 6). As I noted above, participants were asked to correct sentences they judged to be ungrammatical, so the reason for their judgements was clear. Moreover, corrections also provide another source of data. Second, the level of proficiency of some of the Anglophones was not as high as I had hoped. Despite two semesters of active recruitment via posters, word of mouth, professors and "friend-of-a-friend", some participants ( $40 \%$ ) were not as advanced as the others. Had all bilingual Anglophone participants been placed in courses for Francophones, this group's results might have been different. And finally, some of the control groups' responses were not what would be predicted, and unfortunately I was not able to control for intragroup homogeneity. An analysis of individual subjects' responses might help address this question.

To conclude, this study supports multicompetence in the broad sense: knowing two languages affects judgements in both the L1 and the L2 and there appears to be a "mutual interaction" (Cook, 1992, p. 580) between advanced and very advanced learners' knowledge of their two languages, particularly in constructions with -self and se-moyen. Cook's (1993, p. 4) statement that "multicompetent minds are different from monolingual ones" is borne out by this study, even if direct transfer is not involved in all of the bilinguals' judgements. It is clear from these results that bilingual speakers are more constrained in their judgements than unilinguals; whether multilingual speakers would be more or less constrained, as were the participants in Zobl's and Klein's studies, still needs to be explored.

## Notes

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${ }^{2}$ Cook (1993) noted that the enhanced metalinguistic awareness possessed by bilinguals may influence knowledge of both the L1 and L2; to the best of my knowledge there has been little research on the issue of influence of the L2 on the L1. Several of

Cook's graduate students are studying the question (Cook, p.c.), and Arcay-Hands (1998) showed the influence of English L2 on the L1 writing of Hispanophones.
${ }^{3}$ An anonymous reviewer pointed out that these sentences are ungrammatical due to the affectedness constraint mentioned above. While this is true of the example sentences in (10), in the experimental task, half of the verbs in the sentences with by-phrases otherwise formed grammatical middles in English (e.g., digest).
${ }^{4}$ This in-house instrument, which was used until September 1998, consists of two subtests: (1) a one-hour multiple-choice test of 120 items of grammar (e.g., tenses, agreement of participles), vocabulary, syntax and anglicisms; and (2) a composition of 200-300 words. Students are given two hours for this part, and can use dictionaries and other reference books. Generally speaking, even among the Anglophones, there was a good correspondence between results on the two subtests. I would like to thank Bernadette Bérubé for describing the tests to me.
5 In recognition of the sociolinguistic situation in New Brunswick, the Department of Education offers two programmes in ESL for Francophone students: the A track, for students who have had no experience with English before starting school; and the B track, for students who have had considerable contact with Anglophones and are already fluent in spoken English before starting school (Ministère de l'Éducation, 1992)

6 As demonstrated in the section entitled "On certain differences between French and English middles", middle constructions are highly productive in French and much more limited in English (See also Hale and Keyser, 1988 and Klaiman, 1992, for example). To summarize briefly, French middles occur with a wide variety of adverbials, are not subject to an affectedness constraint, may have impersonal subjects and in some varieties may have a by-phrase. English does not permit any of these possibilities.
7 However, her study did not confirm Zobl's findings. She attributed this to the fact that the multilingual subjects were in fact native speakers of their L2 (English), since they had been schooled in that language and used their L1 only in the home.
8 An anonymous reviewer mentioned several SLA studies in which learners had less conservative grammars than native speakers. My purpose here is only to point out that mine was not the only study to find that learners were more conservative than controls. A number of variables, including proficiency in the L2, age, dominant language, task requirements and the linguistic phenomenon under study may all play a role in differences in judgements between controls and learners.
${ }^{9}$ It is possible that the controls judged the sentence to be ungrammatical due to the case of the Wh-word, which should be whom since expect assigns accusative Case to the subject of the infinitive (Exceptional Case Marking). Since they were not asked to correct sentences they judged to be ungrammatical, there is no way of knowing if this is the case.

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