The Effects of L2 Instruction on the Reduction of Problematic Optionality in the Use of L2 Verbal Inflections*

Masoud Rahimi Domakani

University of Shahrekord

Current research in second language (L2) learning has attempted to account for the divergent forms of L2 learners born out of problematic optionality in the use of linguistic features. This study concerns two dominant paradigms (MSIH and FFFH) on the optionality in the suppliance of verbal inflections and investigates why L2 learners are inconsistent in the use of verbal inflections. Having fully discussed the postulations of the two paradigms, the study also aims to see if it is possible to circumvent the non-convergent forms by implementing L2 instruction and to assess the degree of the validity of the paradigms. On this account, this study seeks to achieve two different but commensurable objectives. One is to shed more light on the current paradigms concerning problematic optionality in the use of L2 verbal inflections; and the other is to investigate a pedagogical remedy to cope with the non-convergent forms born out of problematic optionality. The experimental subjects were selected from students who ostensibly ignored the verbal inflections in their oral and written production. They were equally and randomly assigned to three groups: control group (CG), input enhancement (IE) group and input enhancement plus practice (IE/P) group. The findings show that awareness, born out of explicit instruction, could develop more although this change seems to be short-lived and verbal inflections seem to be less amenable to L2 instruction.

Key words: L2 instruction, problematic optionality, second language, verbal inflections

1. Introduction

Current research in second language (L2) learning has attempted to account for L2 learners’ failure of native-like morpho-syntactic representations in spite of the compelling positive evidence in—and long exposure to—L2. Research has led to the development of several paradigms which provide possible explanation for the divergent forms, which appear persistently in the performance of L2 learners. The most pervasive optionality is the use of L2 verbal inflections among L2 learners (Schwartz 1993), and that is why it has been the chief concern of L2 acquisitionists. Researchers have tried to find out the etiology of this optionality, and to explain why L2 learners are inconsistent in the correct application of verbal inflections. For instance, L2 learners of English sometimes do not include -s as present tense and -ed as past tense markers in their speech, and even in their writing tasks. Two examples of divergent forms follow.

(1) He usually watch sports programs on TV on Fridays.

* I would like to express my gratitude to the reviewers who struggled with an earlier version of this paper and raised numerous problems of interpretation. I accept responsibility for any errors and oversights that remain.
Two recent views claim that a certain subcomponent of Universal Grammar (UG) could be the locus of the observed differences in mature native and non-native grammars. The first view, The Missing Surface Inflection Hypothesis (MSIH), posits this subcomponent to be the morphological module. It is a breakdown in the mapping between syntax and morphology, which causes divergent forms to be produced by non-native speakers. This view was proposed by Lardiere (1998a, b, 2000), Prevost and White (2000) and later supported by Ionin and Wexler (2002) and White (2004).

Lardiere (1998a) investigated the production of a Chinese speaker of L2 English called Patty who arrived in the United States as an adult, and who was first interviewed and recorded after ten years of immersion. Nine years later Lardiere interviewed Patty and collected recorded data on two additional occasions. Presumably, Patty’s academic achievements over this period (a BA and an MA degree from American universities) and her considerable exposure to English (exclusively in contact with native speakers of English, husband at home, friends/colleagues at work and elsewhere) implicate full native-like competence. Lardiere looked at the rate of production of L2 English past tense morphology, and compared it with the distribution of the pronominal case. She further examined the rate of verbal agreement marking in non-past contexts and the position of thematic verbs relative to negation (Neg) and clause-internal adverbials.

Lardiere found that Patty’s performance included a sharp contrast between past tense marking and pronoun case marking. While her case system marking was perfect (both nominative and accusative pronouns were perfectly distributed across the data), indicating that she had mastered the marking of case on English pronouns, she failed to mark past tense inflection (Infl) in a high percentage of cases. In fact, the rate of marking past tense in obligatory contexts did not exceed more than 34% in all three interviews. In other words, her production of past morphology showed a fossilized aspect of her English interlanguage.

Similarly, Patty perfectly placed verbs with respect to negation and adverbs in such a way that no verb-Neg or verb-Adverb pattern was found in her data, indicating that she had acquired a weak feature of Infl in English, and disallowed verb raising in her L2 grammar. On the other hand, for agreement marking on verbs in the simple present tense, Lardiere found that Patty scarcely marked verbs. Generally then, 3rd person -s was absent in her data, especially in the case of thematic verbs. In this case, Patty supplied this marking between 0% and 4.76% of the time in the three recordings. Thus, agreement marking seemed to be another fossilized aspect of Patty’s L2 English grammar.
As nominative case is associated with a finite Infl, and is assumed to be checked with the uninterpretive case feature of tense (a syntactic process), and lack of verb raising is associated with a weak value of tense (a syntactic feature prohibiting verb movement), Lardiere concluded that Patty’s mastery of these two aspects of English grammar indicated that her grammar had a fully and accurately specified Infl. By extension, she concluded that Patty had a complete native-like syntactic representation including past tense and agreement features. However, her poor performance in supplying the marking of these features, she claimed, could be due to a problem in mapping her syntactic knowledge onto morphology. This means that there is dissociation between knowledge of abstract syntactic features and knowledge of surface morpho-phonological rules in L2 grammars developed beyond childhood. Thus, the difference between L1 and L2 acquisition lies outside the scope of the computational system, with the implication that syntax is not subject to a critical period, and originates in phonological form (PF) which is a post syntactic stage.

Similar results were found by Prevost and White (2000) who investigated spontaneous oral production data from two adult learners of L2 French and two adult learners of L2 German, and examined the variability in the use of verbal inflection. Their specific predictions were:

(3) a. Nonfinite verbs will act as substitutes for finite forms but not vise versa.
   b. If a verb is finite, it appears before negation, and never follows a negator, a preposition or auxiliary, or modal verbs.
   c. Finite verbs will show appropriate agreement.

The two L2 French learners were first language (L1) Moroccan Arabic speakers. The L2 German learners were native speakers of Spanish and Portuguese. None of the subjects had had any contact with the L2 before their arrival in the country where it was spoken. The L2 learners of French were first recorded three months after their arrival in Germany, and then at regular intervals for almost two years. The L2 learners of French were first recorded one year after their arrival in France, and then at regular intervals for three years. The researchers found that the great majority of the verbs located in nonfinite contexts were nonfinite (more than 90%). In the finite contexts, there was variable overproduction of nonfinite forms (between 10 to 25%). The overuse of finite forms in nonfinite contexts was considerably low. In other words, while subjects had acquired that Infl in French/German is strong, and triggers finite verb-raising, they did not necessarily mark their finite verbs.

Thus, Prevost and White (2000) conclude that divergent forms in adult L2 performance do not reflect a deeper lack of functional categories or features
associated with tense and agreement. Rather, L2 learners have difficulties with the overt realization of morphology. This statement implies dissociation between knowledge of surface morphology, and knowledge of abstract syntactic features. In the Minimalist Program’s terms, surface morphology would presumably be computed in the domain of PF. Therefore, the authors propose that the mismatch between the two types of knowledge consists of a “mapping problem between surface forms and abstract features” (p.45).

The second view, the Failed Functional Feature Hypothesis (FFFH) (Hawkins and Chan 1997 and Hawkins 1998, 2001) claims that divergent forms in the performance of the L2 learners are due to an inability to acquire some subcomponent of grammatical knowledge, which seems to be neurological in nature. Hawkins (1998, 2001) analyzed the same findings presented in Lardiere (1998a, b) and Prevost and White (2000), and argued that both Chinese and English are claimed to lack thematic verb raising and thus Infl in both languages has a weak verb feature. One should not expect Chinese learners of English to raise thematic verbs to Infl in their English interlanguage. The acquisition process, then, would be easy because of the positive transfer of this feature from L1 to L2, and because there is no positive evidence in English indicating that verbs raise to Infl. This explains why Patty had no difficulty in the acquisition of no-verb-raising in English. As for case, Hawkins claimed that case is a universal (perhaps primitive) categorical feature of Infl. Every L2 learner, whose first language (here Chinese) has not selected this feature should, eventually get pronoun case right because universal features remain accessible in the course of post-childhood L2 acquisition. This analysis then accounts for perfect case assignment in the performance of Patty. However, Hawkins classified +/-past and 3rd person, singular features as imprinting features, which are subject to a critical period and inaccessible in post childhood language acquisition. An L2 learner, whose first language (here Chinese) has not selected these features might know their morphophonological exponents in the target language, but s/he may have underspecified syntactic representations, i.e. in her/his L2 mental grammar +/-past and person, number features will be absent permanently, and the learner will rely on her/his encyclopedic knowledge rather than syntactic knowledge to provide the correct form. And it is exactly this divergent syntactic knowledge that demonstrates the source of fossilized variability in L2 learners’ performance.

1.1 Verbal inflection in Persian and English

The grammatical feature specifications generated on a finite Infl usually include +/-past, 1st/2nd/3rd person, +/-singular number and nominative case. It is generally
assumed that the acquisition of finite Infl is complete only when all these associative features cluster together in production. As for morphological markers, in English finite verbs/auxiliaries are inflected only for the past -ed marker and for the 3rd person, +singular, -past -s marker. In Persian, like English, finite verbs are also selected, and marked for the +past, and they are regularly marked with -t and -d as follows.

(4) xor (eat) >>> xor-d (ate)
(5) koś (kill) >>> koś-t (killed)

All values of person and number are also overtly marked with -am, -i, -ad/Ø, -im, -id, -and.

(6) a. raf-t-am raf-t-im
    go-past-1st.SG go-past-1st.PL
b. raf-t-i raf-t-id
    go-past-2nd.SG go-past-2nd.PL
c. raf-t-Ø raf-t-and
    go-past-3rd.SG go-past-3rd.PL

Thus, the identical grammatical feature specifications between these two languages make the optionality in the use of English verbal inflections inexplicable in terms of UG assumptions. Obviously, the divergent forms born out of inconsistency of the use of English verbal inflections add to the complexity of the issue.

1.2 Explicit instruction and inflectional morphology

The acquisition of inflectional morphology is probably the area in which explicit instruction has its greatest practical appeal, since it has been found that L2 learners normally do not allocate required cognitive activation to grammatical items such as inflectional markings. The findings of a number of experimental studies dealing with morphological markings have found that L2 learner’s attentional activation can be primed via explicit instruction resulting in enhanced learning of these modular features (DeKeyser 1997 and Mellow 2004). While there is a consensus over this fact, there is abundant evidence indicating that L2 learners frequently miss the inflectional morphological markers. In other words, these specific language features do not receive any additional and substantial cognitive activation.

Even the scholars who do not see any effective roles for explicit instruction in the contribution of the acquisition of the target linguistic forms posit the efficacy only to
inflectional morphology. For instance, Truscott (1998) argues that the acquisition of inflectional morphology is the area in which the noticing hypothesis and explicit instruction can work. However, he poses the question that it is not clear what exactly the learners need to be aware of. This idea that there is nothing to be noticed or focused upon seems to be unacceptable since for the grammatical morphemes to be processed the learners should at least go through several rough stages. First, the word must be seen or heard, it must be recognized as an inflected form of a known word, and the inflection must be separated from the stem. Its grammatical function must be realized, and it must be inserted in the appropriate cell of a morphological paradigm. Perhaps this misunderstanding is borne out of the common belief that the grammatical morphemes are less complex than lexical forms. For instance, Krashen (1982) considers the 3rd person simple present -s marker in English as a formally simple structure because of its paradigmatic uniqueness while Ellis (1990) classifies it as formally complex because of the distance between the verb stem and the noun phrase with which it agrees. DeKeyser (1998) also considers -s to be functionally complex because of its highly synergetic nature, expressing several abstract grammatical functions simultaneously.

Regarding past tense -ed in L2 English, some variationists also argue that there are some various phonological factors influencing -ed affixation (Bayley 1994, 1996). It is argued that English -ed has three allomorphic variants, only one of which is syllabic, is perceptually salient, and thus is likely to be acquired. Thus, the learners have more difficulty with perceiving or producing non-syllabic allomorphs of past tense -ed. This account suggests that the differences in the salience of the variants of -ed can explain variability in L2 performance of regular past tense. Bayley found this variability among Chinese speaking English learners in a sense that they were likely to delete -t/d as the non-syllabic phonological variants of past tense -ed. According to Bayley’s finding, it can be concluded that Patty’s omission of English verbal inflections would be morphological rather than morphosyntactic.

However, as aforementioned, while the variability in the suppliance of inflectional morphology is now a known fact, there is a controversy over how to interpret these divergent forms. The FFFH paradigm claims that non-convergence in the L2 verbal inflections is due to impairments in syntactic knowledge (Hawkins and Chan 1997), and thus the variable use of inflectional morphology is regarded as a kind of systematic deficit rooted in functional categories within the learner’s syntax; the MSIH paradigm takes a different view, and claims that this optionality in the use of inflectional markers stays at the surface, and is disassociated with the deeper functional categories; thus, the problem is seen as mapping difficulties at the syntactic interfaces (Lardiere 2000). These two paradigms offer their own explanations, but no
direct pedagogical solutions to the problem. Thus, the attempt has been made here to give a pedagogical dress to the theoretical explanations, and to see if explicit instruction can be of any help to circumvent the non-convergent forms.

2. The study

The present study firstly attempts to investigate the efficacy of instruction on minimizing the high frequency of the divergent forms, and secondly aims to assess the two major paradigms presented for the explanation of why L2 learners do sometimes leave verbs naked and uninflected. The major assumption is that if this shortcoming and inadequacy are due to competence, then explicit instruction can have an impact, and improve case, but if it is due to a mismatching between morphological and syntactic levels resulting from a mapping problem in the morphological production of syntactic abstract features, then explicit instruction will have short and transient effects. Hence, this study presents the following research questions.

1. Do specific types of L2 instruction affect Iranian EFL (English as Foreign Language) learners’ awareness such that they apply verbal inflections more consistently?
2. Do Iranian EFL learners’ differential degrees of awareness of verbal inflections requested in the treatment input affect their learning of verbal inflections?
3. Do the treatments in the input lead to long lasting effects in the proper application of the verbal inflections where needed?

2.1 Subjects

The original pool of subjects consisted of 145 adult college students enrolled for a general English course at Shahrekord University. The subjects were given a standard placement test to ensure that they were homogeneous, and enjoyed the same level of proficiency. Then they were given the pretests on morphological tense markers. Finally, 90 subjects who demonstrated serious problems with the target linguistic features, and who performed below 50% became the favorable candidates for the study. Those who performed above 50% were excluded. Then, the subjects were randomly but equally assigned to the three groups, i.e. control group (CG), input enhancement (IE) group, and input enhancement plus practice (IE/P) group.
2.2 Materials and instruments

This study utilized 12 reading passages chosen to provide the written input, which presented the target linguistic features to the students. These features were highlighted in the two instructional conditions. All reading passages contained comprehension questions, writing activities, and vocabulary practice exercises, however, for the class receiving explicit instruction, the reading passages were followed by awareness activities, and in the tasks, the emphasis was on the target linguistic features both through on spot explicit correction, and by drawing the attention of the students to the missed inflectional morphological markings of verbs in their oral or written reproduction. The aim was to impart their understanding of the message encoded in the texts.

Two modes of testing instruments, i.e. grammatical judgment tasks (GJTs) and translation tasks (TrTs), were used to measure the improvement of the students after being exposed to the input for the target linguistic features in the reading passages. It is worth noting that all the items in the pretests, posttests and delayed posttests were almost the same. However, to eschew any washback effects, efforts were made to add both correct and incorrect items observed for verbal inflections with different fillers in the GJTs. Unlike the GJTs, the TrTs included only correct test items observed for both the verbal inflections and other extraneous ones (fillers).

2.3 Procedures

As mentioned above, the students were first given the pretests. The reading passages were language-related texts (LRTS) in the sense that they were seeded with the targeted linguistic forms and all the three classes received the same reading passages texts, but the way that these texts were dealt with was due to the nature of the research conditions. That is to say that CG class received the reading passages as their input and the focus was on message. No attempt was made to prime their attentional activation to the targeted forms with the assumption that the students would unconsciously acquire the forms and thus these targeted forms were not exceptions (Krashen 1985). The IE class also received the same texts as their input, but the targeted linguistic forms were orthographically made salient and the attempt was to make the targeted forms salient to the students by manipulating characteristics of the input (Sharwood-Smith 1991, 1993). For the IE/P class the reading comprehension texts were not only made salient, they were also accompanied with some tasks to promote meta-linguistic awareness of the target linguistic features.

Having received twelve treatment sessions, the subjects were given the immediate
posttests, and 4 weeks later, they were given the delayed posttests. Then their performance on the pretests and immediate/delayed posttests were computed. To eschew any practice effects the tests were mingled with both correct and incorrect fillers to divert the attention of the students and to determine if the correct outcomes on the target linguistic features were indicators of correct true automatic knowledge of these linguistic forms (DeKeyser 1998).

After the administration of the post and delayed posttests, they were corrected and scored. The scoring for GJTs was in a way that one point was given to the correct form, or when the students selected the incorrect form and could correctly detect and modify the incorrect part in the sentence, and zero points were given when the students failed to find the correct sentence or failed to identify and modify the error in the sentence. For the TrTs the same scoring procedure was applied (one point for the correct translation of the given sentence and zero points for the wrong one). It is worth mentioning that the correctness only observed the incorrect aspect of the sentence translation and the other types of errors were not included.

3. Results

One-way ANOVA was performed on the pretests, posttests and delayed posttests for both the research conditions and the linguistic features under the two different modes of tests, i.e. TrTs and GJTs. The statistical findings performed for each target linguistic feature are as follows.

3.1 -s as present tense marker

The target linguistic feature -s was tested both on GJTs and TrTs. Significant statistical differences, F=59.643, p<.0001, F=60.406, p<.0001 were found for -s on both TrT posttest and the delayed posttest (see Figure 1 and Table 1). This means that both IE and IE/P treatments were effective in helping the learners to improve their correct use of -s as a present tense marker. To determine the exact location of the differences, the post hoc Scheffe procedure was also applied. It showed that there were significant differences among these three research groups among which are the following: the superiority of the IE/P treatment over the IE treatment, and the long efficacy of the treatments regardless of the types of instruction since the learners could retain their gains on the TrT delayed posttest. However, a similar case was not observed for -s on the GJT. The significant statistical difference was found only on the posttest, F=11.51, p<.0001, and not on the delayed posttest, F=1.293, p=.279 (see Figure 2 and Table 2). Apparently, the learners could not retain what they had learned
during instruction.

Table 1. Mean scores for accuracy on the translation task for -s

<table>
<thead>
<tr>
<th>Group</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squared</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Between Groups</td>
<td>129.293</td>
<td>2</td>
<td>64.646</td>
<td>.126</td>
<td>p=.882</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>49381.818</td>
<td>96</td>
<td>514.394</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49511.111</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Between Groups</td>
<td>49220.202</td>
<td>2</td>
<td>24610.101</td>
<td>59.643</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>39612.121</td>
<td>96</td>
<td>412.626</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>88832.323</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>Between Groups</td>
<td>40606.061</td>
<td>2</td>
<td>20303.030</td>
<td>60.406</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>32266.667</td>
<td>96</td>
<td>336.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>72872.727</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. A comparison of group means for -s on the translation task

Table 2. Mean scores for accuracy on the grammatical judgment task for -s

<table>
<thead>
<tr>
<th>Group</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squared</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Between Groups</td>
<td>273.438</td>
<td>2</td>
<td>136.719</td>
<td>.247</td>
<td>p=.781</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>51386.719</td>
<td>93</td>
<td>552.545</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>51660.156</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Between Groups</td>
<td>10013.021</td>
<td>2</td>
<td>5006.510</td>
<td>11.511</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>40499.219</td>
<td>93</td>
<td>434.938</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50462.240</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>Between Groups</td>
<td>1250.882</td>
<td>2</td>
<td>625.441</td>
<td>1.293</td>
<td>p=.279</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>44499.118</td>
<td>92</td>
<td>483.686</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45750.000</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The second target linguistic feature -ed was also tested on both the TrT and the GJT. Performance was significantly different on both the TrT posttest, and the TrT delayed posttest: F=35.264, p<.0001, and F=19.432, p<.0001 respectively (see Figure 3 and Table 3). To observe the exact location of these significances, the post hoc Scheffe procedure was performed, and in the case of TrT, a significant difference was not observed between the IE and IE/P treatments on the posttest. The findings here are almost similar to those of -s indicating that IE and IE/P were effective. However, the performance for -ed was observed only on the GJT posttest, F=54.691, p<.0001, and not on the GJT delayed posttest, F=1.118, p<.331 (see Figure 4 and Table 4). The findings here are also similar to those of -s on the GJT, indicating that the learners could not maintain their gains acquired by the treatments in the input. These unequal gains are themselves due to different modes of evaluation; therefore, naïve satisfaction with L2 instruction in the case of verbal inflections will be fully discussed in the subsequent section.

Table 3. Mean scores for accuracy on the translation task for -ed

<table>
<thead>
<tr>
<th>Group</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squared</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Between Groups</td>
<td>298.990</td>
<td>2</td>
<td>149.495</td>
<td>.495</td>
<td>p=.611</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>28969.697</td>
<td>96</td>
<td>301.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29268.687</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Between Groups</td>
<td>17026.263</td>
<td>2</td>
<td>8513.131</td>
<td>35.264</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>23175.758</td>
<td>96</td>
<td>241.414</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40202.020</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>Between Groups</td>
<td>12517.172</td>
<td>2</td>
<td>6258.586</td>
<td>19.423</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>30933.333</td>
<td>96</td>
<td>322.222</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>43450.505</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3. A comparison of group means for -ed on the translation task

Table 4. Mean scores for accuracy on the grammatical judgment task for -ed

<table>
<thead>
<tr>
<th>Group</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squared</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>Between Groups</td>
<td>247.396</td>
<td>2</td>
<td>123.698</td>
<td>.197</td>
<td>p=.822</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>58496.094</td>
<td>93</td>
<td>628.990</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>58743.490</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Between Groups</td>
<td>14882.813</td>
<td>2</td>
<td>7441.406</td>
<td>16.627</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>41621.094</td>
<td>93</td>
<td>447.539</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56503.906</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed posttest</td>
<td>Between Groups</td>
<td>1419.271</td>
<td>2</td>
<td>709.635</td>
<td>1.118</td>
<td>p=.322</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>59042.969</td>
<td>93</td>
<td>634.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60462.240</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Discussion

The results of the pretests indicate that there were no differences in scores among the research groups assigned to the three classes. Any differences between pretests, posttests, and delayed posttests must then be attributed to the types of instruction. The findings of this study indicate an important role for IE/P. More importantly, the findings show the role of explicit instruction as it can maximize the learner’s attention to the target linguistic forms (Schmidt 1995, 2001) in a variety of ways such as conscious language tasks and practice which, in turn, lead to the automatic use of that form since tasks of this sort can prompt a learner’s awareness of the target linguistic forms. The positive effect of explicit instruction on L2 learning of the English inflectional system is of great importance, since the inflectional system is considered to involve functionally and semantically complex rules. The findings have also indicated that both implicit instruction and explicit instruction were effective. Robinson (2002) sees no fundamental difference between implicit and explicit learning processes. He considers them of the same continuum contributing to the efficiency of long-term learning. The findings of this study seem to support Robinson’s notion that when the maximal attentional activation is exerted on a particular form, that form is more likely to be learned. However, the mixed results complicate the above conclusion on the efficacy of the explicit instruction since the performance by the participants on the GJT delayed posttest was not significant, and in the case of the TrT delayed posttest was not at ceiling. How can the significant results on the TrT delayed posttest be interpreted? A translation process is a good way to test the knowledge of the learner on grammar and vocabulary. Presumably, the better performance of the participants on the TrT delayed posttest rather than the GJT delayed posttest is due to task variability. For the TrTs, the learners were supposed to translate simple sentences observing present and past tenses into English, and this tremendous amount of attention to the forms led to higher performance. However, for the GJTs, the learners were exposed to both correct and incorrect test items concerning the verbal inflections and other grammatical issues. Therefore, it was very difficult for the participants to make the decision on the right selection and correct production. On the other hand, for the TrTs, the participants developed a strong connection among the test items, and perhaps the fillers could not assuage the connection. The aim of this study was to investigate the variant production of the verbal inflections, or at least to reduce them to an optimal rate.

Therefore, a close examination of the findings of the study reveals some facts that are worthy of consideration. The quick and sudden decline on the delayed posttests is indicative of the fact that the learners are still inconsistent with the use of verbal
inflections, and the results from the GJT delayed posttest, particularly, do not support the long lasting effects of the instructional treatments. This evidence can suggest that optionality in overt morphological marking does not indicate a lack of functional categories, but it is due to a mapping problem (Lardiere 2000).

As clearly indicated in the research questions, the first aim was to see if types of L2 instruction would be any assistance in helping the learners to use verbal inflections consistently; the second one was to investigate the differential degrees of awareness the subjects provided for the target linguistic features they were supposed to acquire; and the last one was to find out if different input treatments can have long lasting effects. The findings show that the two instructional treatments were to some extent effective since the learners demonstrated improvement both on the TrT posttests, and on the delayed posttests for the two target verbal inflections, but they did not perform at a significant level on the GJT delayed posttests. This means that the efficacy of L2 instruction was not as effective as was expected, and might depend largely on the nature of the target forms. The evidence offered by this study is more likely to reinforce the assumption that learners receiving both IE and IE/P treatments can exert better performance on the target linguistic features in comparison to the learners whose attention to the target linguistic forms is not activated (CG). The subjects’ turning back to the inconsistent use of the verbal inflections is not due to the absence of underlying grammatical properties. Thus, the omission of overt inflectional morphology requires a different kind of explanation.

As indicated for both -s and -ed markers, IE and IE/P classes outperformed CG, and in most cases, IE/P also outperformed IE, although these significant differences did not occur on GJT delayed posttests for both -s and -ed. These low levels of performance are thought to be an important issue in L2 acquisition, and are also helpful in the assessment of the FFFH and MSIH paradigms stated at the outset of the paper. An examination of the statistical findings of this study reveals that even though the two classes with the manipulated and enhanced input outperformed the other class with no enhanced input, these improvements cannot be considered a success. For example, in the case of -s for the IE/P class the learners could choose 23% of the correct answers from the test items on the pretest, while they only chose 58% of the correct answers on the posttest. Finally, on the delayed posttest, they could only respond correctly to 42% of the test items. Thus there are two alarming points here demanding more elaboration or explanation: one is that the experimental groups could not reach a satisfactory level of correct attainment of the target linguistic features, and the other is that they showed a considerable decline on the delayed posttest. Thus the 16% decline between the posttest and the delayed posttest shows that the subjects lost some of their sensitivity to the use of the verbal inflections.
The shortcoming of IE/P as an explicit form of instruction to reduce the inconsistent use of verbal inflections is presumably a contribution to the assumption that variability in the suppliance of the verbal inflections does not reflect the difficulties at the level of syntax. As Prevost and White (2000) argue these problems are due to L2 learners’ lack of overt realization of morphology rather than a deeper lack of functional categories. On this account, Salaberry (2000) also argues that the inflectional markings are among the most difficult linguistic items for L2 learners. That is to say that they demonstrate a large amount of variability and lowest degree of success (Schwartz 1993). While the fact of variation is an uncontroversial issue between these two paradigms, there is relatively little consensus over what this variability implies and, particularly, whether this impairment is associated with interlanguage grammar of L2 learners or it is the outcome of some superficial problems. So, as the findings of this study indicate, in the case -s and -ed, the problem of inflectional markings is unlikely to be solved by the use of explicit instruction since it cannot exert long lasting effects. This, in fact, supports the MSIH paradigm which sees the problem more at the superficial level. It seems that the position taken by advocates of the FFFH paradigm or those who do their best to justify the problem by resorting to UG principles is not as convincing. They believe that verbal inflections mirror a deep structural difficulty indicating that these functional linguistic features are not instantiated in the L1 of the learners (Hawkins and Liszka 2003 and Hawkins and Chan 1997). In a similar vein, Franceschina (2001, 2002) argues that formal features like gender or tense belong to the functional module, and their morphological forms appear as results of checking. Hence, the presence or absence of the morphemes like -ed and -s indicate whether the grammatical features of tense are correctly checked, or whether the correct presence of such morphemes is directly related to syntactic computation, and if they are related to syntax and UG. If that is to be the case then, the correct use of verbal inflections should be persistently difficult only for L2 speakers whose L1 does not have these morphemes checking for tense (Hawkins 1998, 2001, 2002 and Franceschina 2001). However, the L2 background of the subjects of this study is the Persian language which is not different from English as far as, at least, past tense inflectional markers such as -ed and -t in the verbs -did (saw) and -raft (went) are concerned. So as already mentioned, although L2 instruction, and particularly explicit instruction (IE/P) can help L2 learners to circumvent their problems with the inflectional markings, the efficacy of L2 instruction is not strong enough to help consistent use of verbal inflections. This evidence contributes to the claim that the difficulty with the morphological markers is a post spell out problem (Lardiere 1998a, 2000 and Prevost and White 2000).

The pedagogical implication of this study would be also as remarkable as its
theoretical one. The implication would be that the efficacy of explicit instruction to generate long-term learning largely depends on the nature of the target forms. Thus, the idea that verbal inflections are the only linguistic features which can be easily learned through explicit instruction seems to be unrealistic. Although the verbal inflections represent complexity, they are not likely to be fully acquired since they do not reflect a genuine grammatical deficit. The problems are with the surface realization, and are not attributed to syntax or to the L1. As this study has shown, based on the UG assumption, the participants should not have expected variability in the suppliance of the verbal inflections due to their L1 and the instruction received.

5. Conclusion

IE/P seems to play its role well to draw the attention of L2 learners to the target linguistic forms. Thus, the present study supports the current proposals emphasizing that explicit instruction can assist L2 learners to promote their interlanguage development and accuracy. The efficacy of explicit instruction is perhaps due to a provision of priming which appears to occur in the tasks and awareness-raising activities (Mellow 2004). From a pedagogical perspective, the suggestion would be that instruction can help L2 learners to attain the complex linguistic features of which L2 learners have no consciousness. Thus the nature of the linguistic feature is a decisive matter in L2 instruction appraisal.

However, as already discussed, it seems that the nature of target linguistic features is a matter of deep concern. One of the main concerns of this study was to assess the recent paradigms in L2 acquisition while attempting to explain the L2 learners’ variability in suppliance of verbal inflections. As was argued, explicit instruction can be very effective in providing sufficient awareness for learners to overcome grammatical problems. However, as indicated, both implicit and explicit instruction do not work for -s and -ed on the delayed posttests. These findings thus reinforce the assumption that the verbal inflections do not reflect any kind of grammatical deficiency to be eradicated by the use of L2 instruction. Therefore, this kind of optionality is unlikely to be the outcome of a deficit in the component of language faculty. The findings of this study are, consequently, more on the side of the MSIH paradigm concerning the optionality of verbal inflections as a post spell problem.
Domakani: On the Optionality of Verbal Inflections

References


[Received 18 September 2006; revised 31 January 2007; accepted 31 January 2007]

English Department
University of Shahrekord
Shahrekord, IRAN
Masoud Rahimi Domakani: rahimi@lit.sku.ac.ir
第二語言教學對第二語言動詞形態上
減少問題選擇之影響

Masoud Rahimi Domakani

University of Shahrekord

當前第二語言學習的研究致力於解釋不同類型的第二語言學習者在使用語言特徵時所造成的選擇困難。本研究著重於兩種主要的詞形變化表（MSIH 以及 FFFH）在動詞形態上的可選擇性，並探討第二語言學習者在使用動詞形態上不一致的原因。除了針對兩種詞形變化表的假設加以討論外，此研究也著眼於檢視第二語言教學的實施能否减免學習者類型的歧異性，並評估詞形變化表的有效性程度。基於上述理由，此研究試圖達成兩個不同卻同等重要的目的：其一，對於現行有關使用第二語言動詞形態的問題選擇之詞形變化表提供更多解釋；其二，探究在教學上的補救方法，以處理造成選擇困難的歧異類型。

本研究的實驗對象選取自表面上在使用口語與書面語忽略動詞形態的學生，並將他們平均且隨機地分入三類組別：控制組、強化輸入組、強化輸入暨練習組。研究結果發現，儘管這樣的改變可能是短暫的，且動詞形態的使用似乎較不受第二語言教學的影響，明確的指導或教學的確能使提高學習者的意識。

關鍵詞：第二語言教學、問題選擇、第二語言、動詞形態